

Troubleshooting Guide

- mechanical -



*Xperia™ Z5
Premium
E6853*

*Xperia™ Z5
Premium Dual
E6833, E6883*

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

Always finally connect the Battery FPC BtB connector before the Panel Rear Sub Assy is reassembled.

Note: Proximity Calibration always must be performed when Display Frame Assy and Main PBA reassembly, or Display Frame Assy replacement, or Board Swap, or proximity malfunctions; 1289-2983 Sony Mobile Repair Application-mechanical.

Note: Noise Cancelling Calibration always must be performed when FPC Jack Module replacement or Board Swap; 1289-2983 Sony Mobile Repair Application-mechanical.

Note: Gyroscope and Accelerometer Calibration always must be performed when Main PBA reassembly, or Board Swap, or wrong Gyroscope or Accelerometer readouts; 1289-2983 Sony Mobile Repair Application-mechanical.

Note: Color ID Flashing always must be performed when Board Swap; 1289-2983 Sony Mobile Repair Application-mechanical.

If there are no special indications of 'E6853', 'E6833' or 'E6883', E6853, E6833 and E6883 share the same trouble shooting guide as common sections, whose pictures are used with E6853. 'E6833' or 'E6883' chapters or sections use E6833 pictures.

1 Problem Areas

1.1 Power

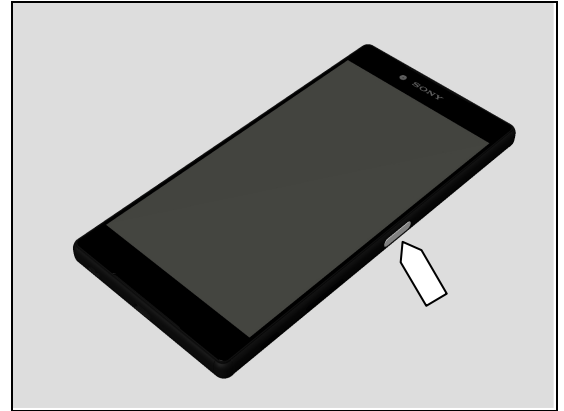
1.1.1 Will not power on or will switch off randomly

Check:

Check whether the Notification LED blinks by pressing the on/off key.

Action:

If NO Notification LED blink is detected, perform a force shut down, press power key and volume up key for 10 seconds and then power on the unit again.

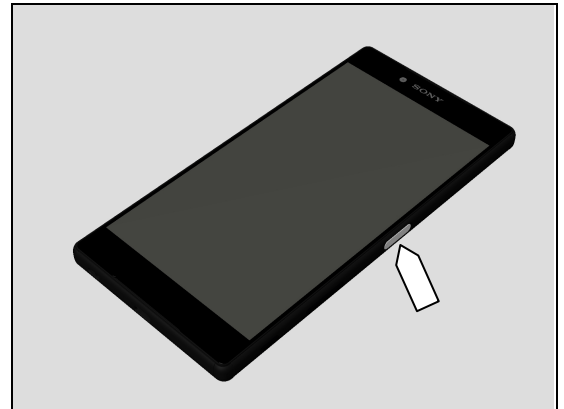


Check:

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 and the Notification LED blinks by pressing the on/off key, check that the battery is charging when connected to a charger.

Follow Test Instruction - mechanical chapter 2.4.5 (Charging via Charger or Computer), Diagnostic Battery / Charging status.

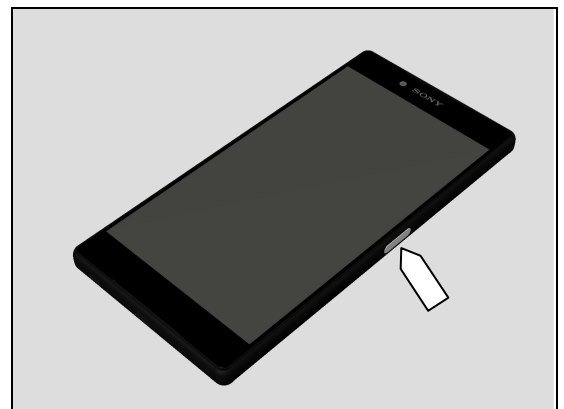


Check:

Inspect the on/off key.

Action:

Refer to section 1.2.3 'On/Off Key'.



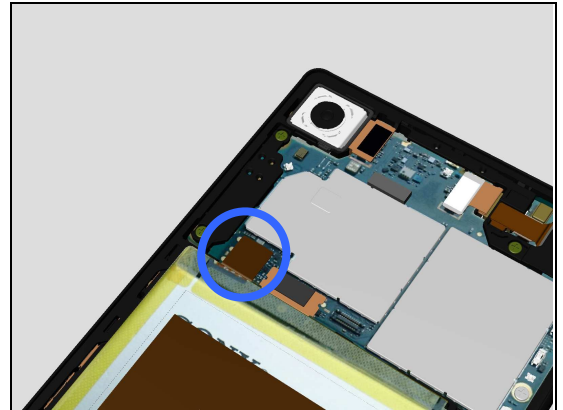
Problem Areas: Power

Check:

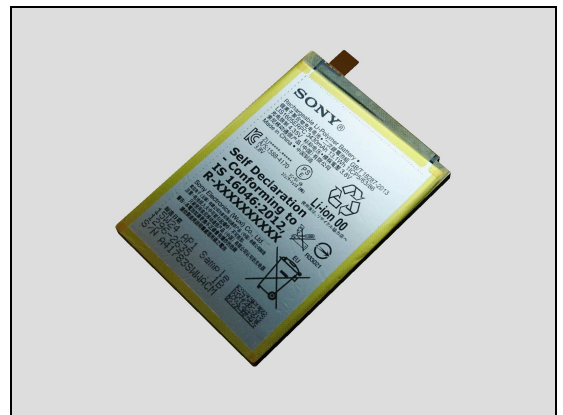
Inspect the BtB connector of the Battery to Main PBA.

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 FPC or the Battery is damaged – replace the Battery.
4. Replace Main PBA.



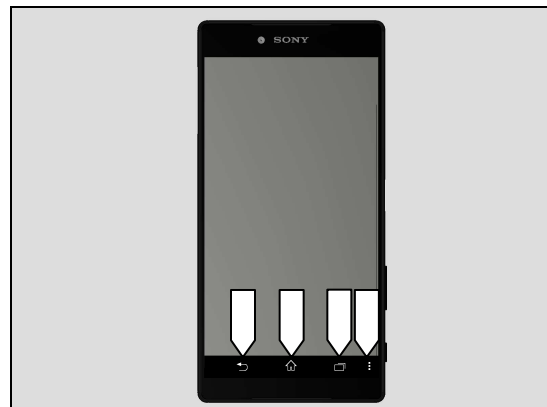
Problem Areas

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.



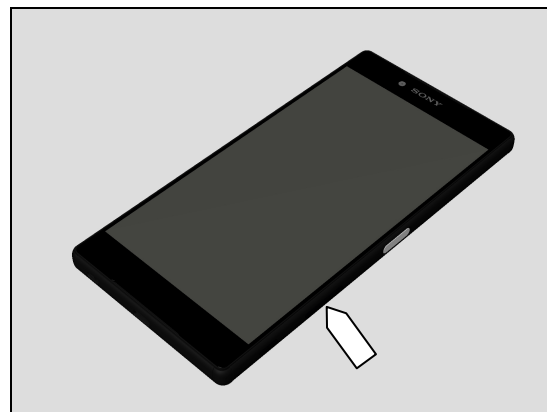
1.2.2 Volume Key

Check:

Inspect the external area of the Volume Key.

Action:

1. If dirty – clean it.
2. If damaged – replace the Display Frame Assy.

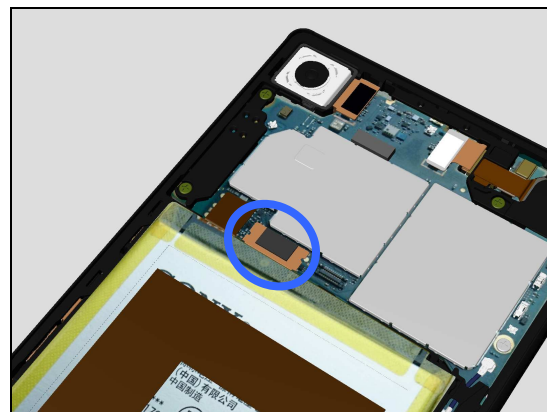


Check:

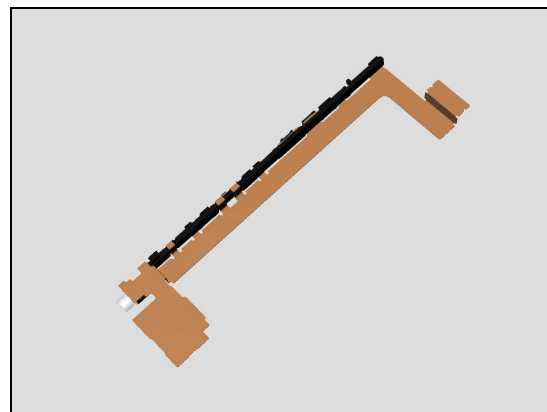
Inspect the BtB connector of FPC Key Module to Main PBA.

Action:

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



3. If the FPC Key Module is damaged – replace it.
4. Replace Main PBA.



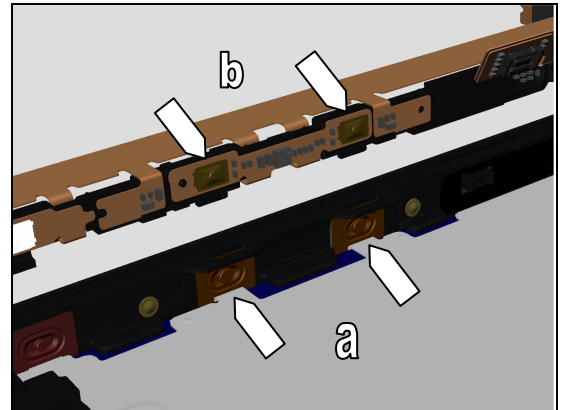
Problem Areas: Keys

Check:

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

Action:

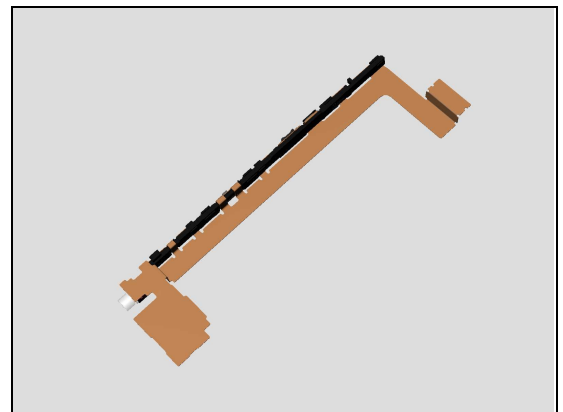
1. If dirty – clean them.



2. If the Volume Key or its rubber is damaged – replace the Display Frame Assy.



3. If the volume key switch is damaged – replace the FPC Key Module.



1.2.3 On/Off Key

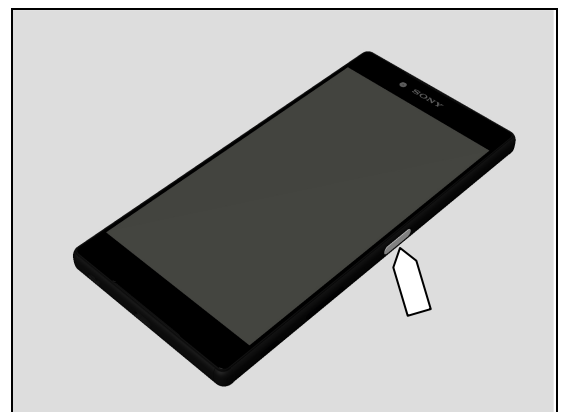
Check:

Inspect the external area of the On/Off Key.

Action:

1. If dirty – clean it.

2. If damaged – replace the Fingerprint Sensor Module.



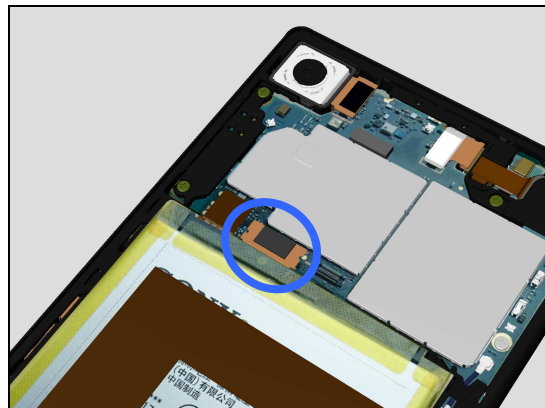
Problem Areas: Keys

Check:

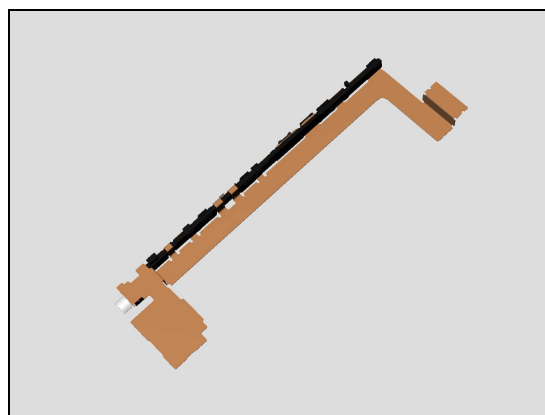
Inspect the BtB connector of FPC Key Module to Main PBA.

Action:

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



3. If the FPC Key Module is damaged – replace it.
4. Replace Main PBA.

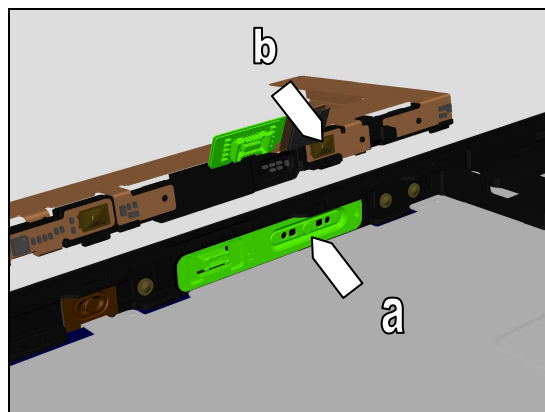


Check:

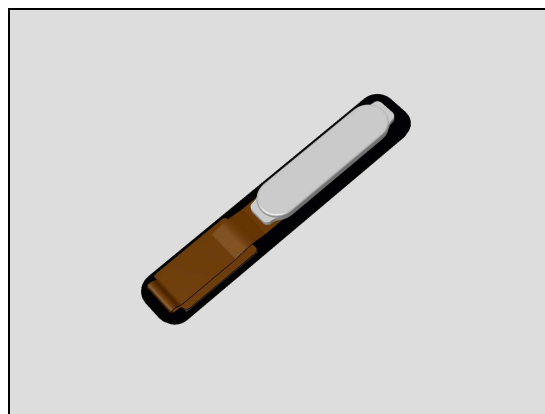
Inspect the condition of the On/Off Key rubber (a) and On/Off Key switch (b).

Action:

1. If dirty – clean them.



2. If the On/Off Key or its rubber is damaged – replace the Fingerprint Sensor Module.



Problem Areas: Keys

3. If the On/Off key switch is damaged – replace the FPC Key Module.

1.2.4 Camera Key

Check:

Inspect the external area of the Camera Key.

Action:

1. If dirty – clean it.
2. If damaged – replace the Display Frame Assy.

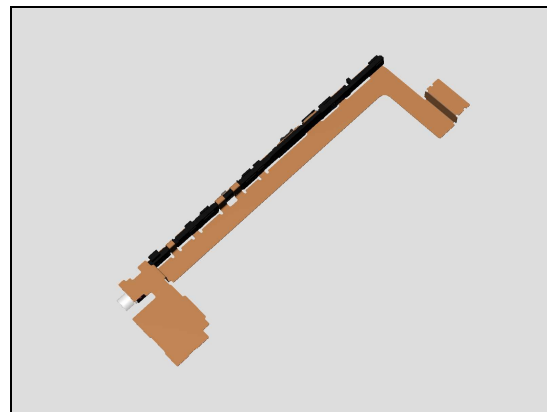
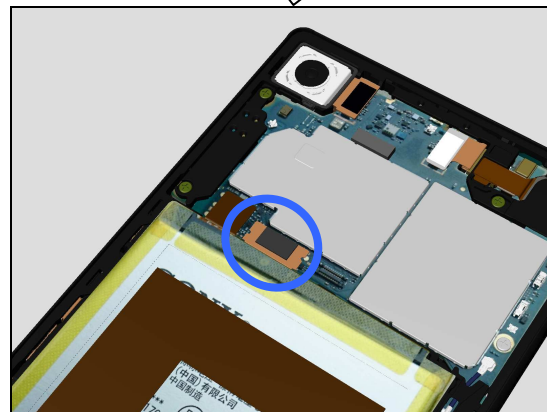
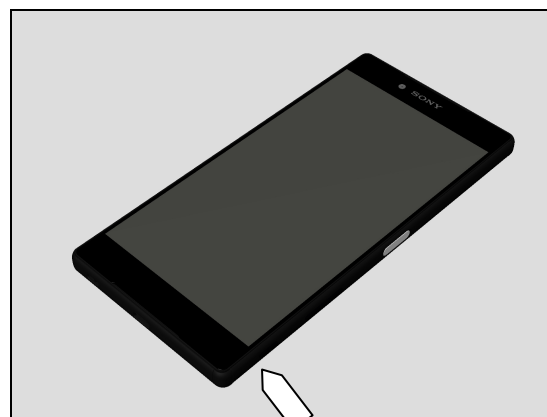
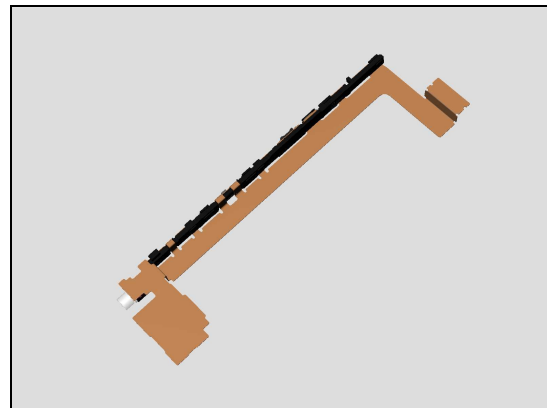
Check:

Inspect the BtB connector of FPC Key Module to Main PBA.

Action:

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

3. If the FPC Key Module is damaged – replace it.
4. Replace Main PBA.



Problem Areas: Keys

Check:

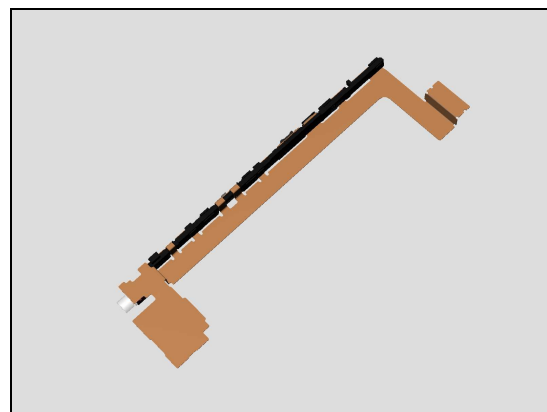
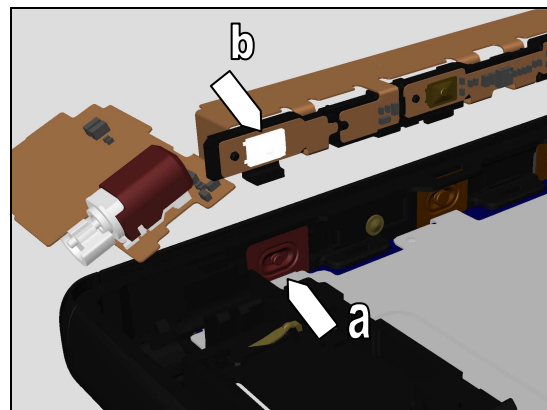
Inspect the condition of the Camera Key rubber (a) and Camera Key switch (b).

Action:

1. If dirty – clean them.

2. If the Camera Key or its rubber is damaged – replace the Display Frame Assy.

3. If the On/Off key switch is damaged – replace the FPC Key Module.



Problem Areas

1.3 Touch Screen

1.3.1 Touch Screen malfunction

Check:

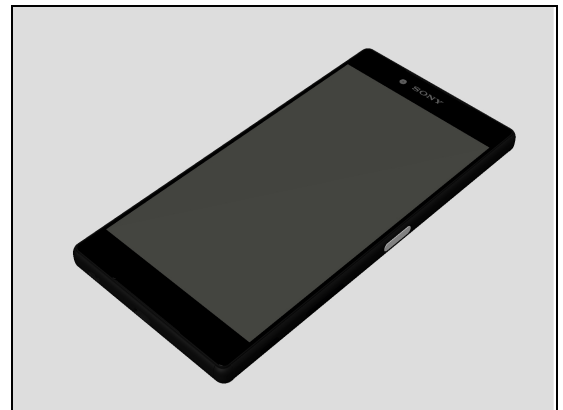
Inspect the touch screen of the Display Frame Assy.

Action:

1. If dirty – clean it.



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



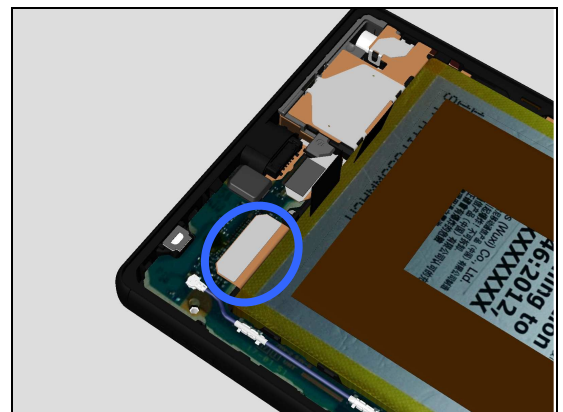
Check:

Inspect the BtB connector of Display FPC to Main PBA.

Action:

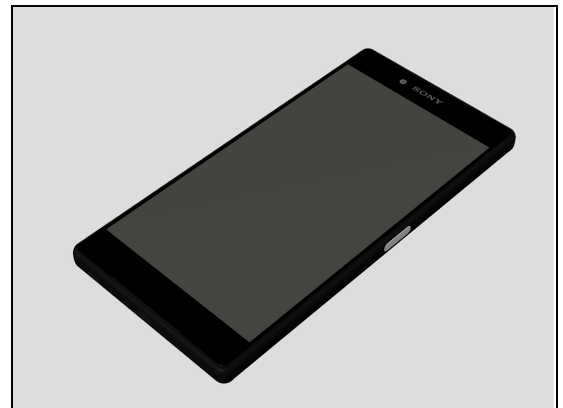
1. If not properly connected – disconnect and reconnect it.

2. If dirty or oxidized – clean it.



3. If the Display FPC is damaged – replace Display Frame 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:

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

2. If the Display Frame Assy is damaged – replace it.

Check:

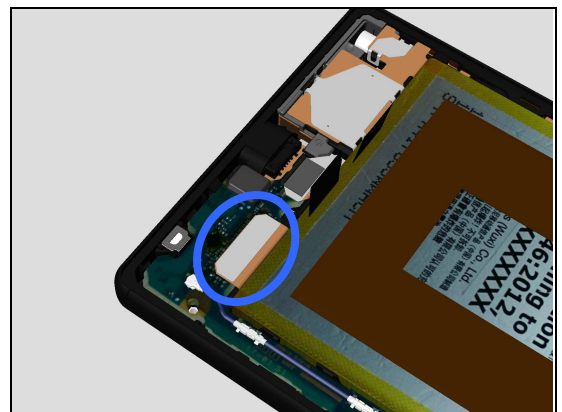
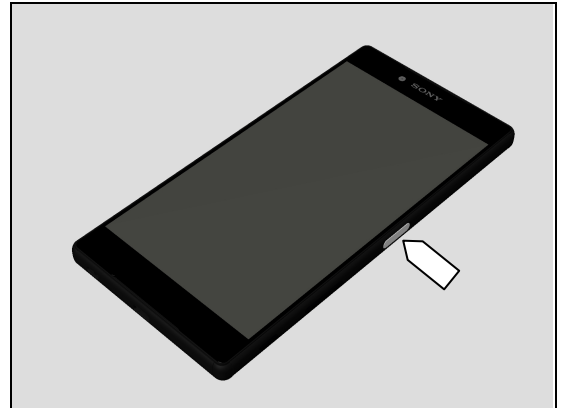
Inspect the BtB connector of Display FPC to Main PBA.

Action:

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

3. If the Display FPC is damaged – replace Display Frame Assy.

4. Replace Main PBA.



Problem Areas

1.5 LED/Illumination

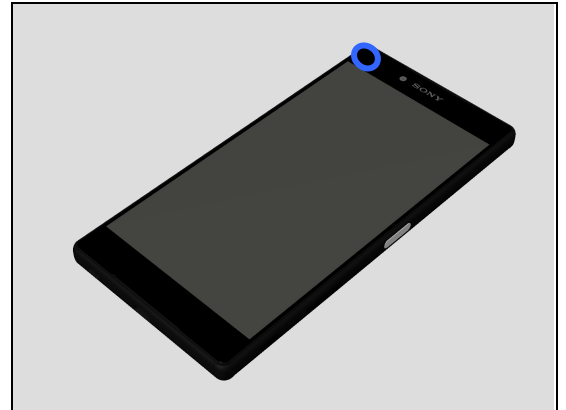
1.5.1 LED/Illumination

Check:

Inspect external window area of Notification LED on the Display Frame Assy.

Action:

1. If dirty – clean it.

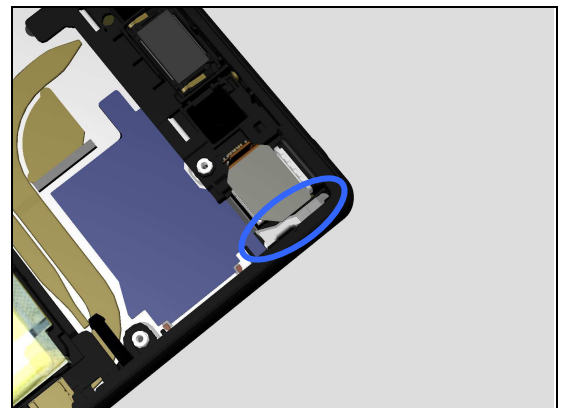


Check:

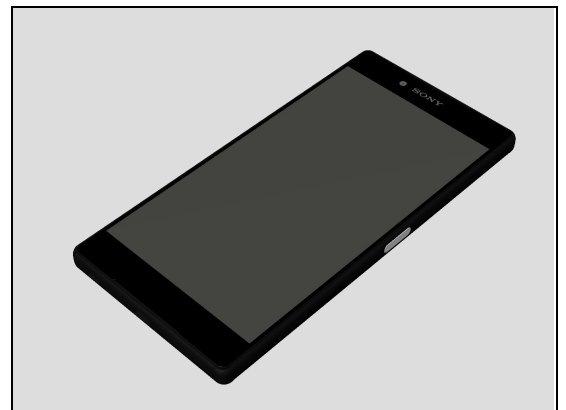
Inspect the Light Guide.

Action:

1. If dirty – clean it.



3. If damaged – replace Display Frame Assy.

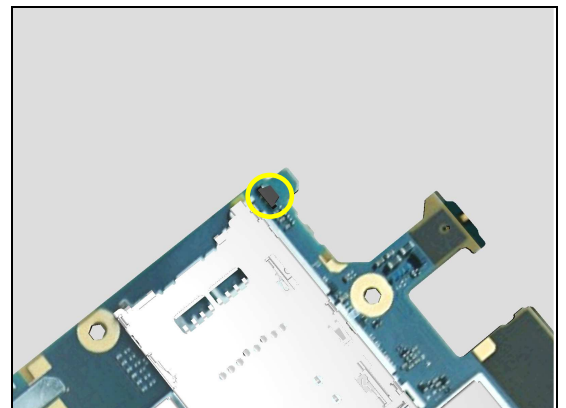


Check:

Inspect the LED on Main PBA.

Action:

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



Problem Areas

1.6 Speaker

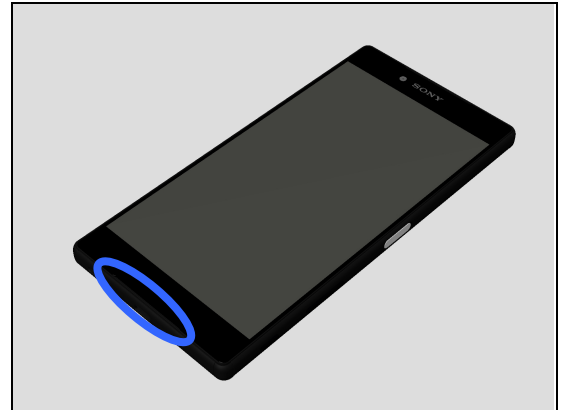
1.6.1 Speaker Bottom

Check:

Inspect the Speaker Bottom external port on the Display Frame Assy.

Action:

1. If clogged – clean it.



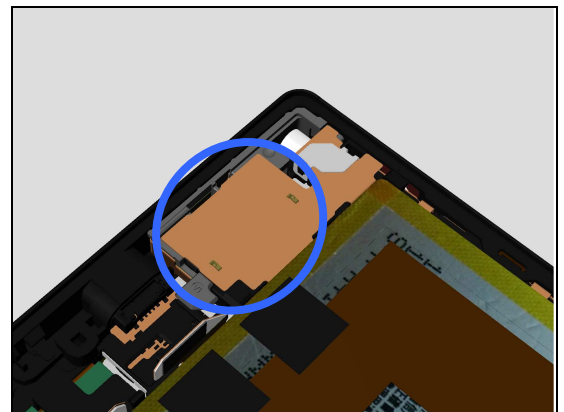
2. If damaged – replace the Display Frame Assy.

Check:

Inspect the speaker FPC is assembled well or not.

Action:

1. If not assembled well – reassemble it.

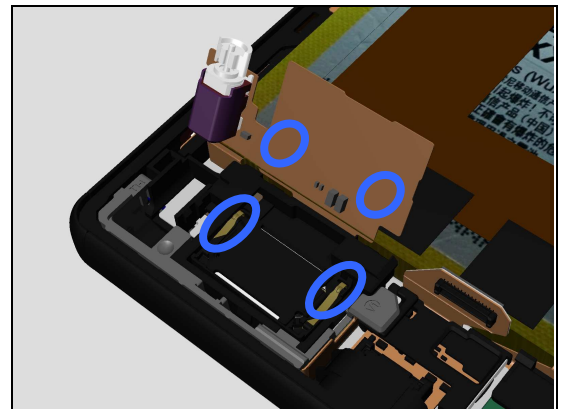


Check:

Inspect the contact pads on the FPC Key Module and the contact pins on the Speaker Bottom.

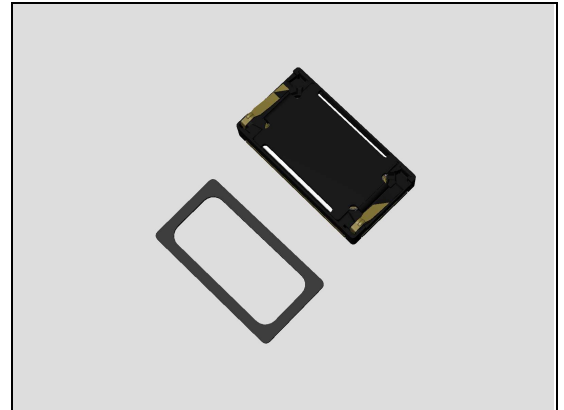
Action:

1. If dirty – clean them.

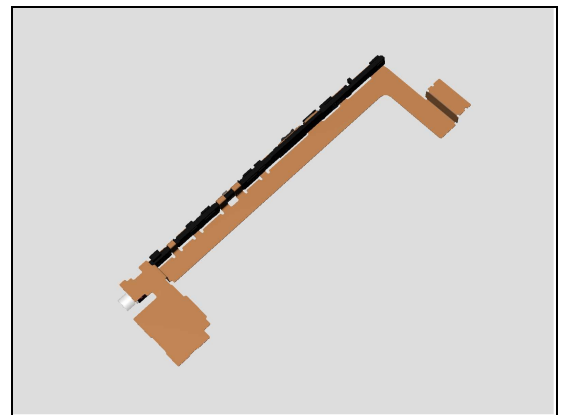


Problem Areas: Speaker

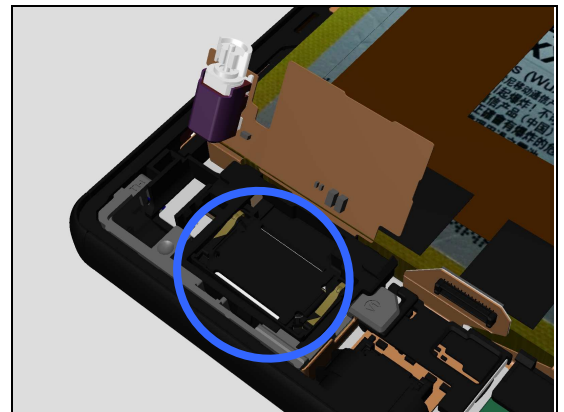
2. If contact pins on the Speaker Bottom are damaged – replace the Adhesive WR Speaker and Speaker Bottom.



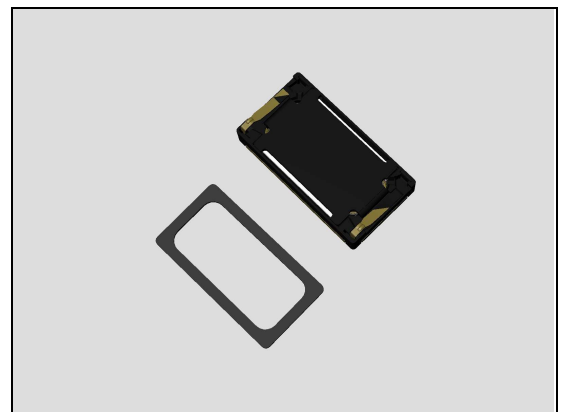
3. If the contact pads on the FPC Key Module are damaged - replace the FPC Key Module.



Check:
Inspect if the Speaker bottom is assembled well onto its cavity.



Action:
1. If not assembled well – replace the Adhesive WR Speaker and Speaker Bottom.



Problem Areas: Speaker

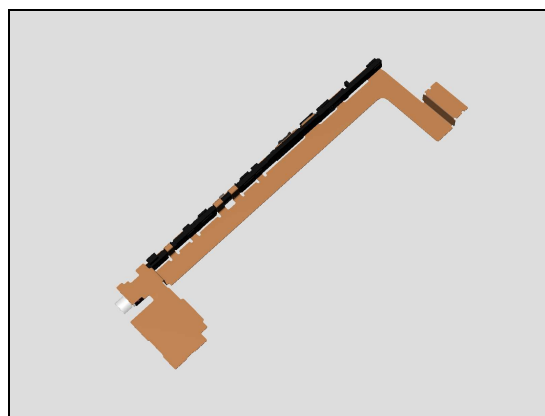
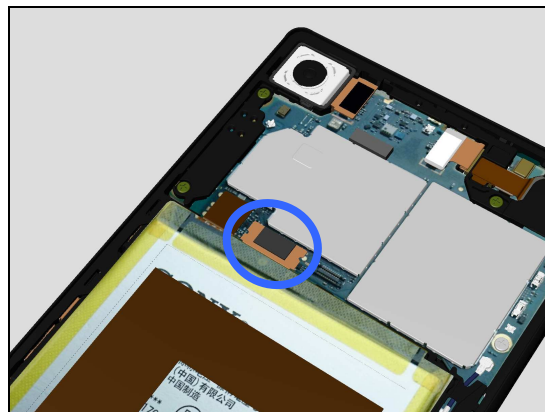
Check:

Inspect the BtB connector of FPC Key Module to Main PBA.

Action:

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

3. If the FPC Key Module is damaged – replace it.
4. Replace Main PBA.



Problem Areas

1.7 Earphone

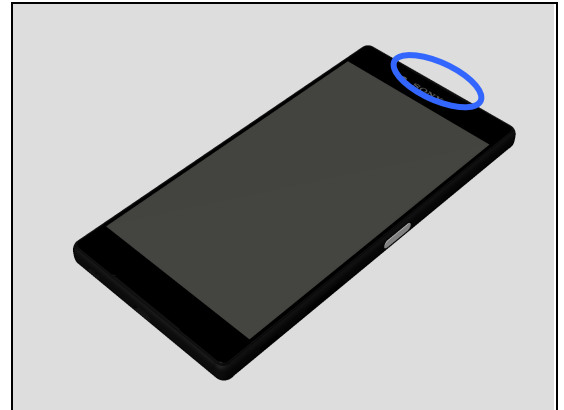
1.7.1 Speaker Top

Check:

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

Action:

1. If clogged – clean it.

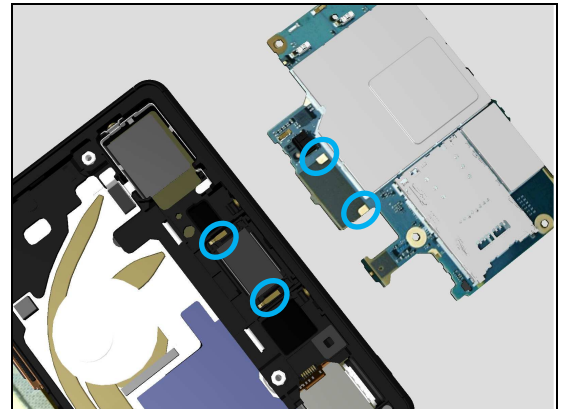


Check:

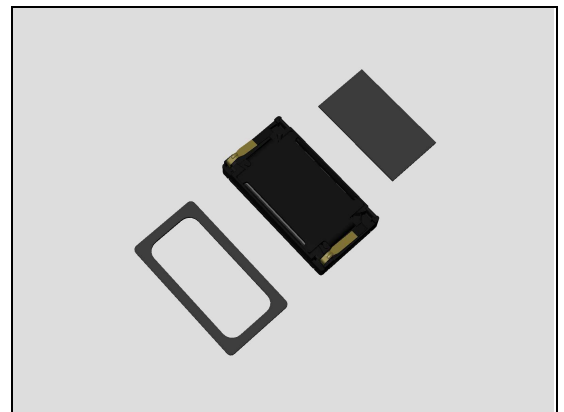
Inspect the contact pads on the Main PBA and the contact pins on the Speaker Top.

Action:

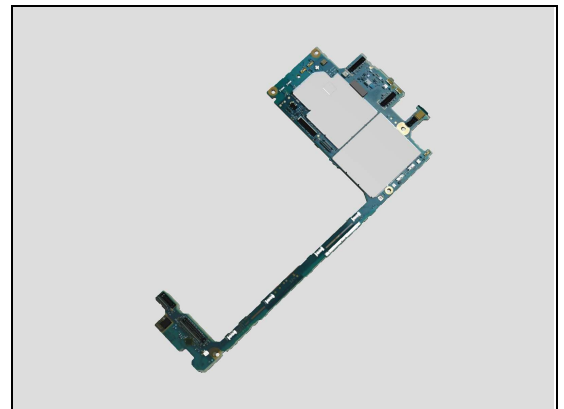
1. If dirty – clean them.



2. If the contact pins of the Speaker Top or the Top Speaker are damaged – replace Speaker Top, Adhesive WR Speaker and Cushion Aco.



3. Replace Main PBA.



Problem Areas

1.8 Microphone

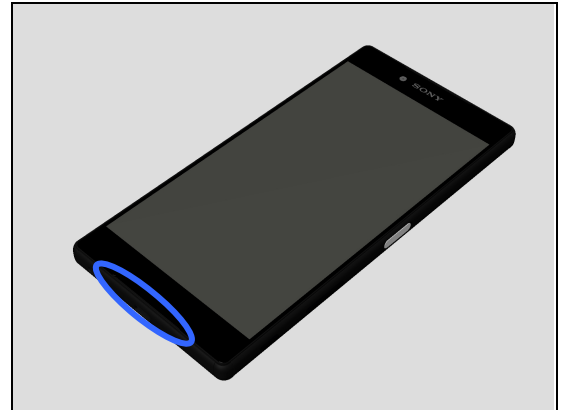
1.8.1 Primary Microphone

Check:

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

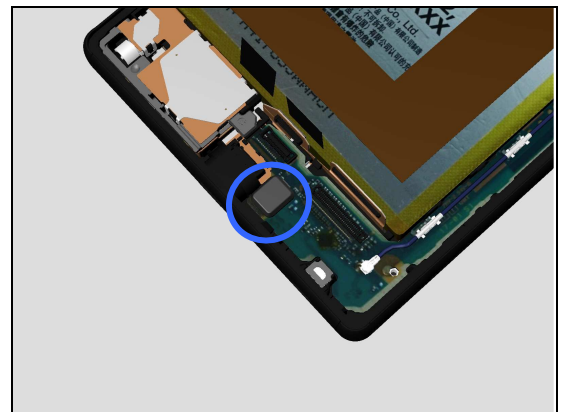
Action:

1. If clogged – clean it.



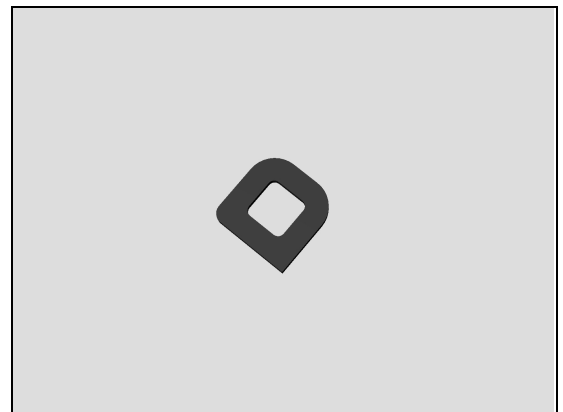
Check:

Inspect if the Cap 1st Mic Sub Assy or 1st Mic part of the Main PBA is assembled well or not.



Action:

1. If not assembled well – replace the Adhesive 1st Mic and reassemble it.



2. If the Cap 1st Mic Sub Assy is not assembled well or damaged – replace the Cap 1st Mic Sub Assy and Adhesive 1st Mic and then reassemble it.
3. Replace the Main PBA.



Problem Areas: Microphone

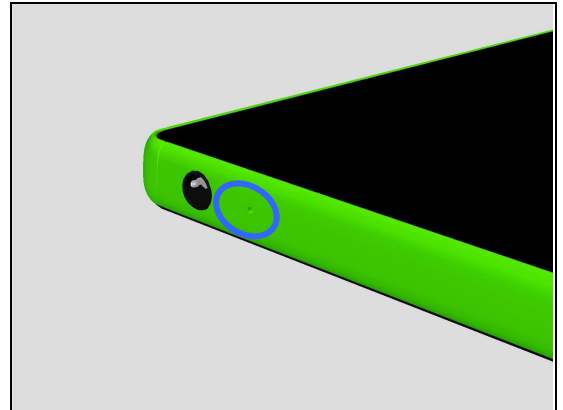
1.8.2 Secondary Microphone

Check:

Inspect the external port of secondary microphone on the Display Frame Assy.

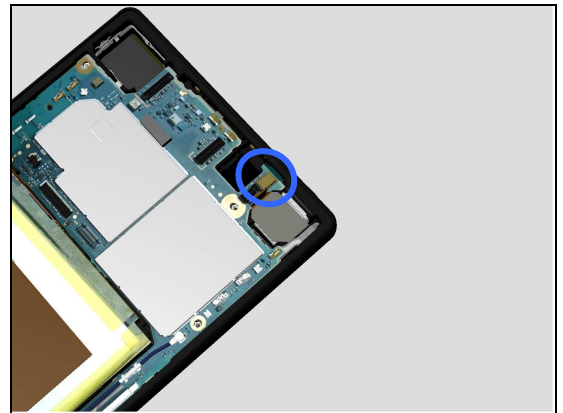
Action:

1. If clogged – clean it.



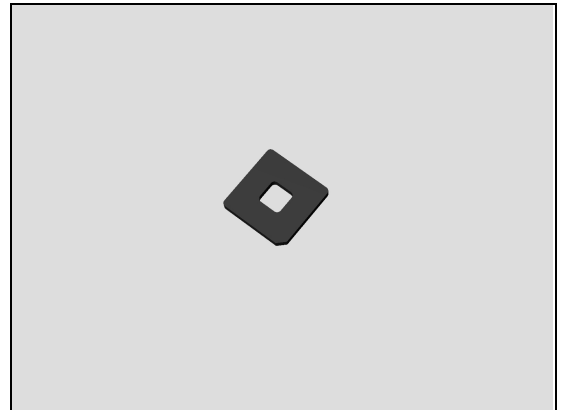
Check:

Inspect the 2nd Mic part of the Main PBA is assembled well or not.



Action:

1. If not assembled well – replace the Adhesive 2nd Mic and reassemble it.
2. Replace Main PBA.



Problem Areas

1.9 Vibrator

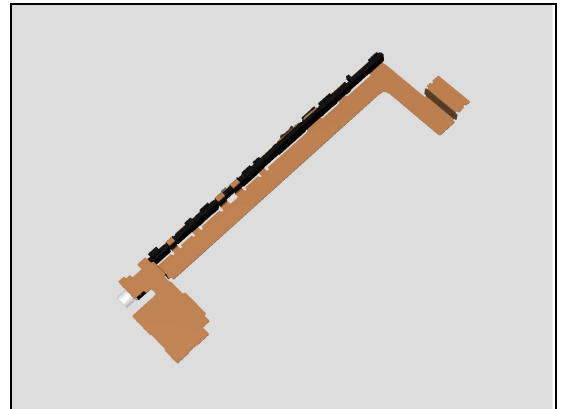
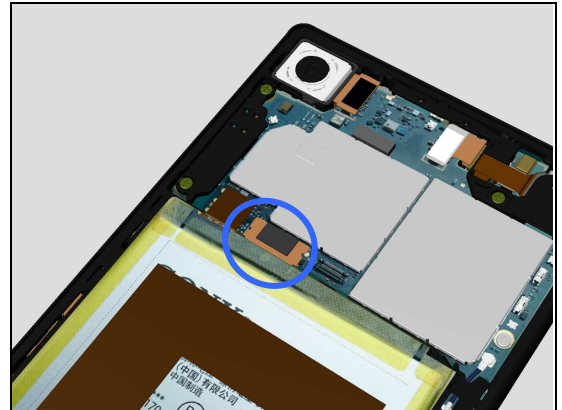
1.9.1 Vibrator not generating alerts

Check:

Inspect the BtB connector of FPC Key Module to Main PBA.

Action:

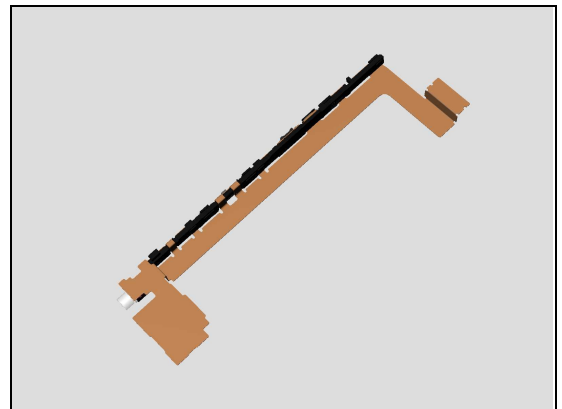
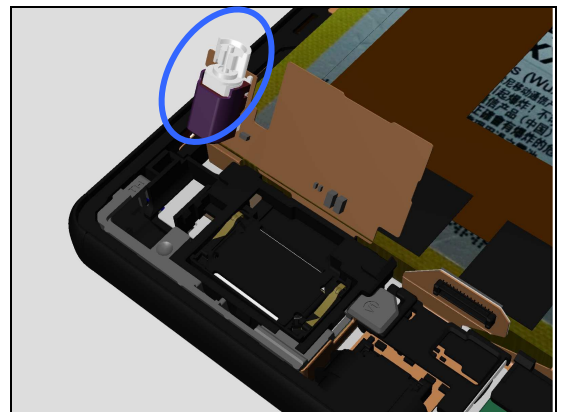
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the FPC Key Module is damaged – replace it.
4. Replace Main PBA.

Check:

Inspect the Vibrator on the FPC Key Module.



Action:

1. If damaged – replace the FPC Key Module.

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 Panel Rear Sub Assy.

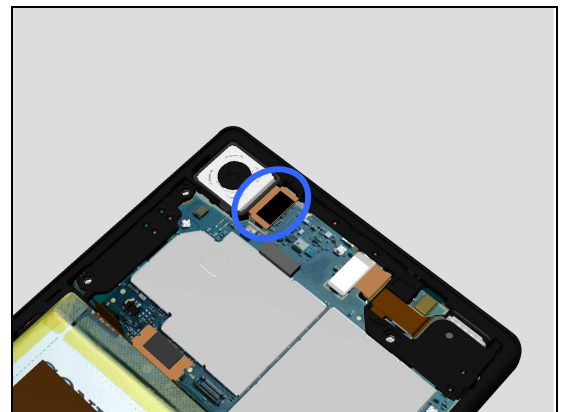


Check:

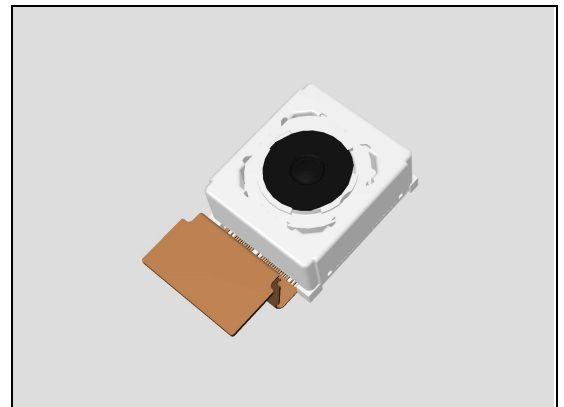
Inspect the BtB connector of Main Camera to Main PBA.

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 chat camera window.

Action:

1. If dirty – clean it.

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

Check:

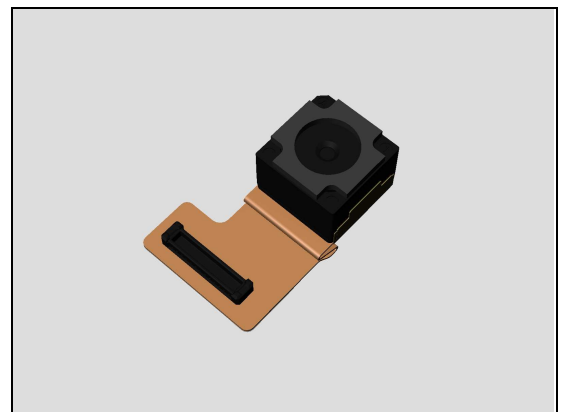
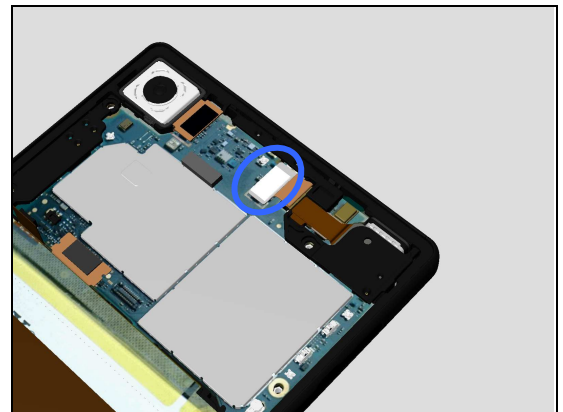
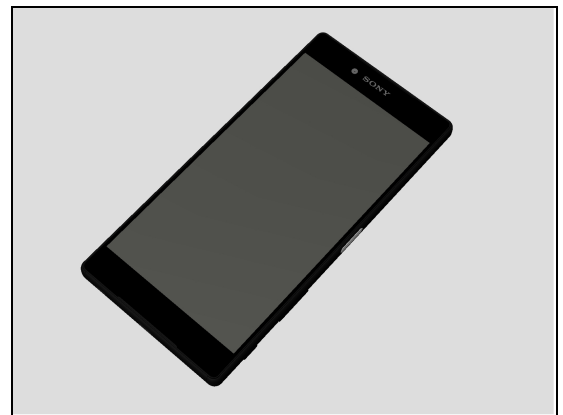
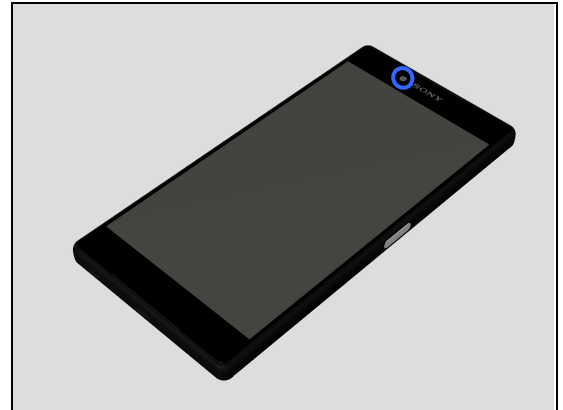
Inspect the BtB connector of Chat Camera to Main PBA.

Action:

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

3. If the Chat Camera is damaged – replace the Chat Camera.

4. Replace Main PBA.



Problem Areas

1.11 Flash LED

1.11.1 Flash LED not flashing

Check:

Inspect the external area of the flash LED.

Action:

1. If dirty – clean it.

2. If scratched or damaged – replace the Panel Rear Sub Assy.

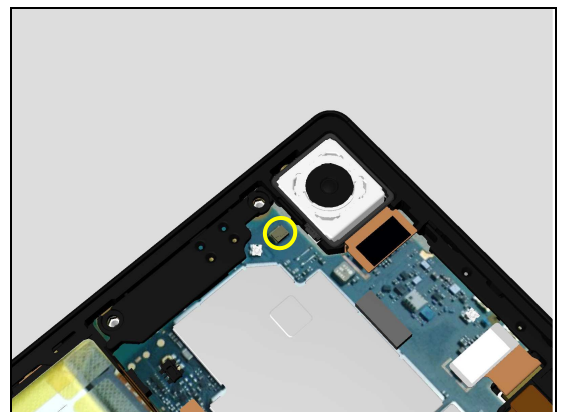
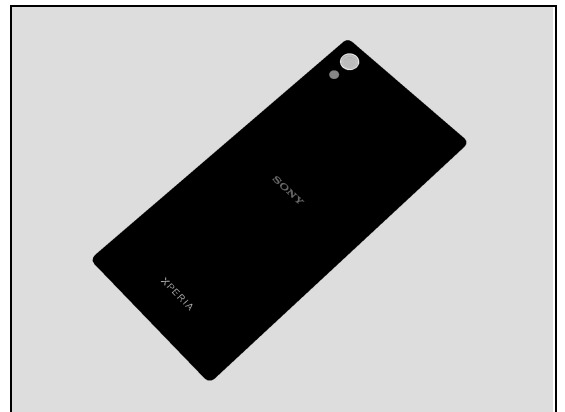
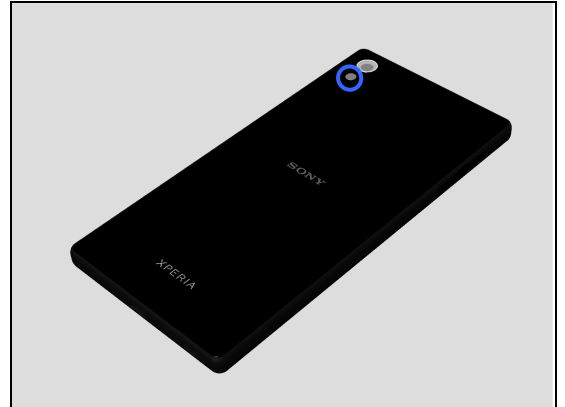
Check:

Inspect the Flash LED on Main PBA.

Action:

1. If dirty – clean it.

2. Replace Main PBA.



Problem Areas

1.12 Bluetooth and WLAN Main

1.12.1 Bluetooth or WLAN Main connection failure

Check:

Inspect the Bluetooth and WLAN contact pads on Ant WLAN and the contact pins on main PBA.

These 2 contacts are signal feed point.

Action:

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

2. If the contact pads on Ant WLAN are damaged – replace the Ant WLAN.

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

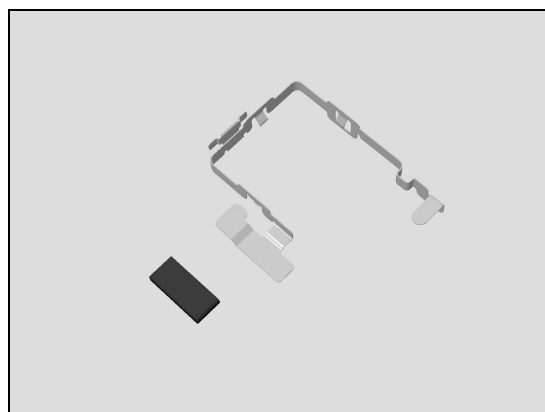
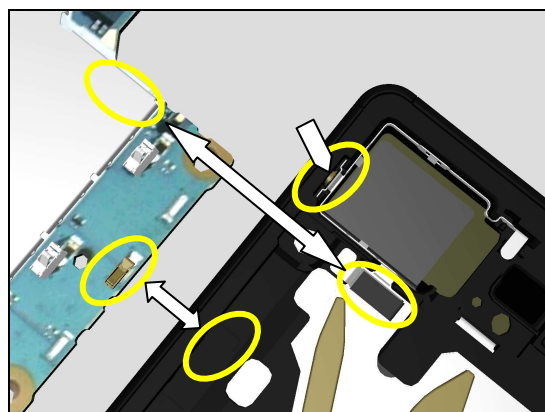
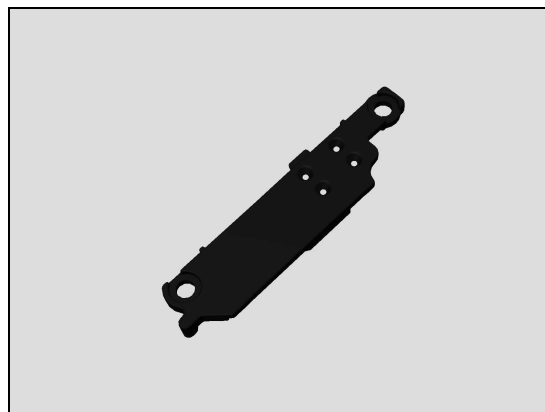
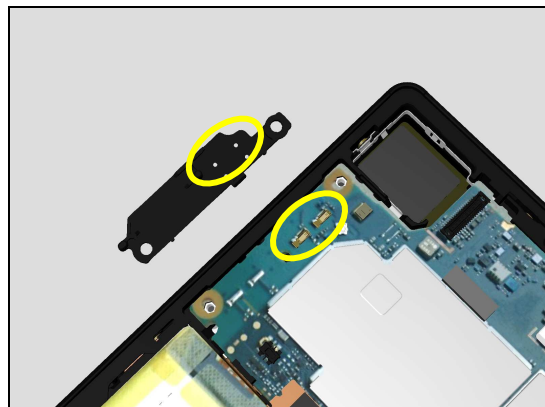
Check:

Inspect these contacts to ground for Bluetooth and WLAN is good or not.

Action:

1. If dirty or oxidized – clean the them.

2. If the Shield Camera or/and Gasket Shield Cam are damaged – replace them.



Problem Areas: Bluetooth and WLAN Main

3. If the Display Frame Assy are damaged – replace it.
4. Replace Main PBA.

Check:

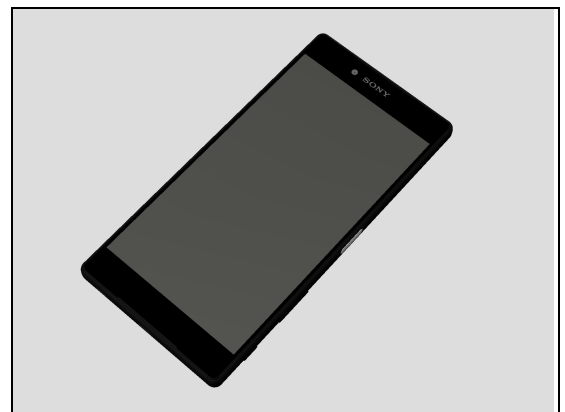
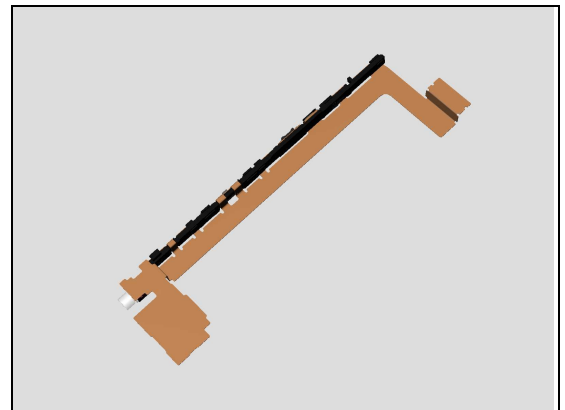
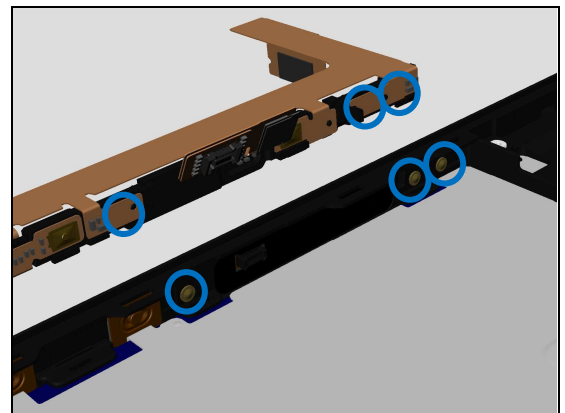
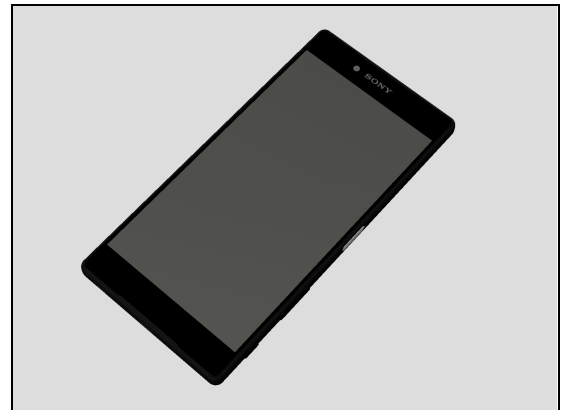
Inspect the contact pins on the Display Frame Assy and and contact pads on the FPC Key Module.

Action:

1. If not properly contacted – reassemble the FPC Key Module.
2. If dirty or oxidized – clean them

3. If the contact pads on the FPC Key Module are damaged – replace FPC Key Module.

4. If the contact pins on the Display Frame Assy are damaged – replace Display Frame Assy.



Problem Areas

1.13 WLAN Sub

1.13.1 WLAN Sub connection failure

Check:

Inspect the WLAN contact pad on Ant Cellular Sub and the contact pin on main PBA (1).

Inspect the WLAN contact pad on Ant Cellular Sub and the contact pad on main PBA (2).

Only the contact marked with 1 are signal feed point.

Action:

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

2. If the contact pads on Ant Cellular Sub are damaged – replace the on Ant Cellular Sub.

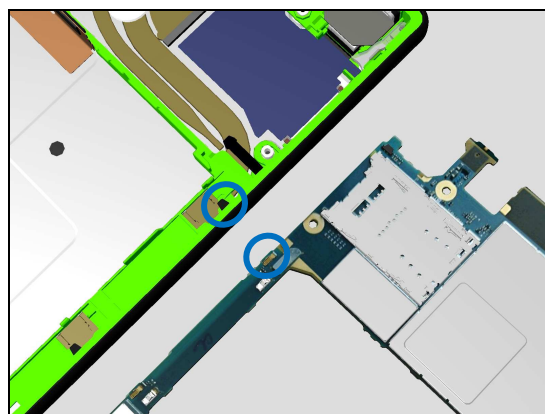
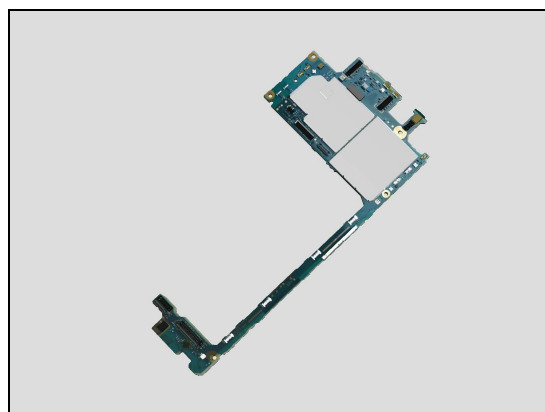
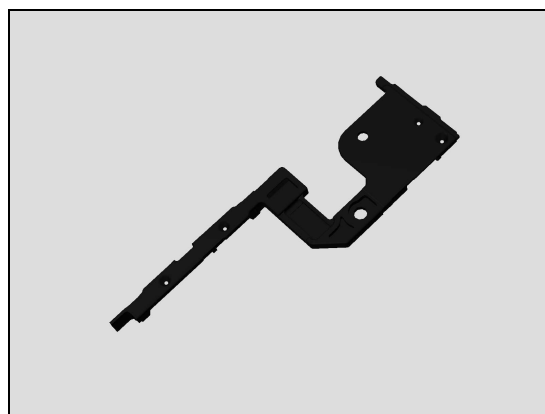
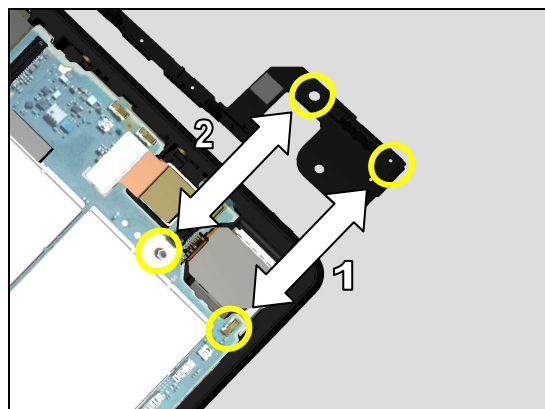
3. Replace Main PBA.

Check:

Inspect the contact pad on Display Frame Assy and the contact pin on main PBA.

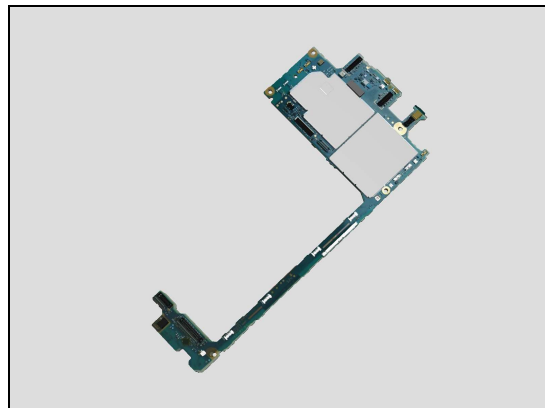
Action:

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



Problem Areas: WLAN Sub

2. If the contact pin is damaged – replace the Main PBA



3. If the contact pad is damaged – replace the Display Frame Assy.



Problem Areas

1.14 NFC

1.14.1 NFC malfunctions

Check:

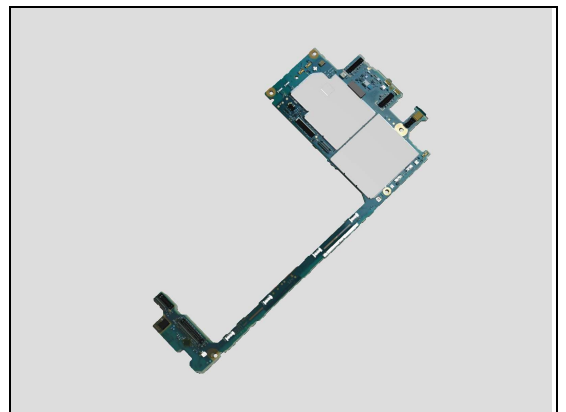
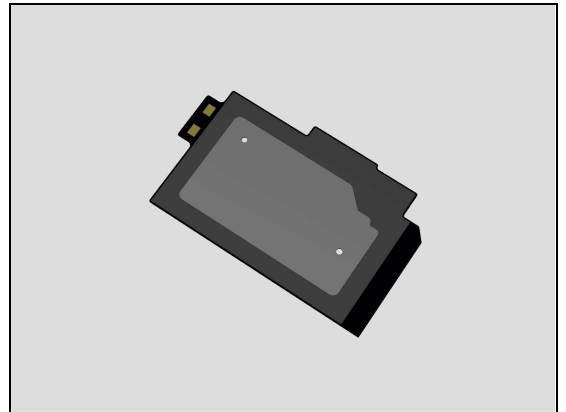
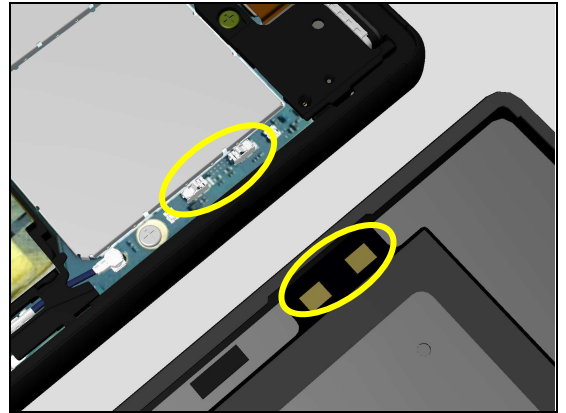
Inspect the Antenna NFC contact pads and the contact pins on Main PBA.

Action:

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

2. If the Antenna NFC contact pads are damaged – replace the Antenna NFC.

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



Problem Areas

1.15 GPS

1.15.1 GPS malfunctions

Check:

Inspect the Ant Cellular Sub contact pads and the contact pins on main PBA(1).

Inspect the Ant Cellular Sub contact pads and the contact pins on Display Frame Assy(2).

Only the contact marked with 1 is signal feed point.

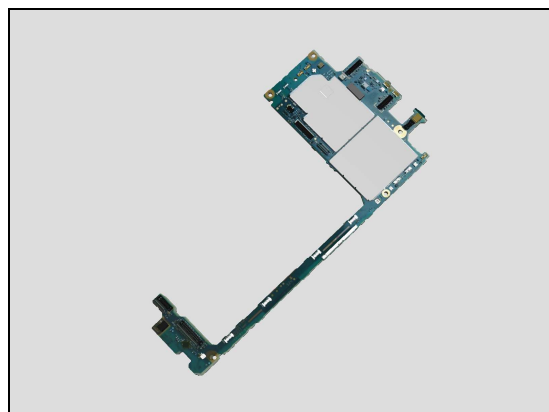
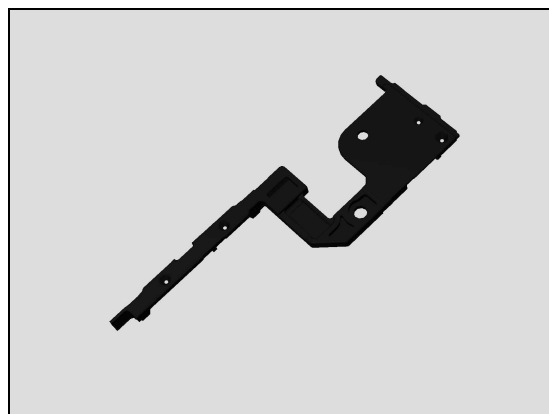
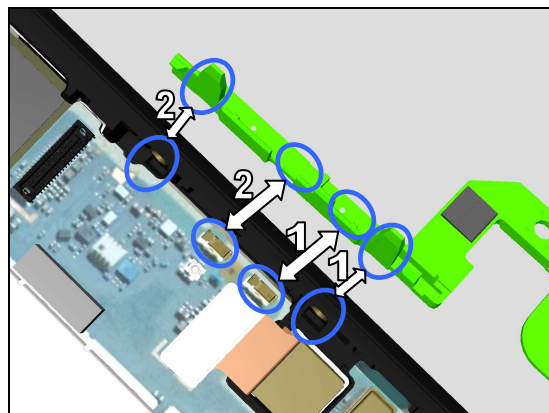
Action:

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

2. If the Ant Cellular Sub contact pads are damaged – replace the Ant Cellular Sub.

3. If the Display Frame Assy contact pins are damaged – replace the Display Frame Assy.

4. If the contact pins on main PBA are damaged – replace Main PBA.



Problem Areas

1.16 Compass

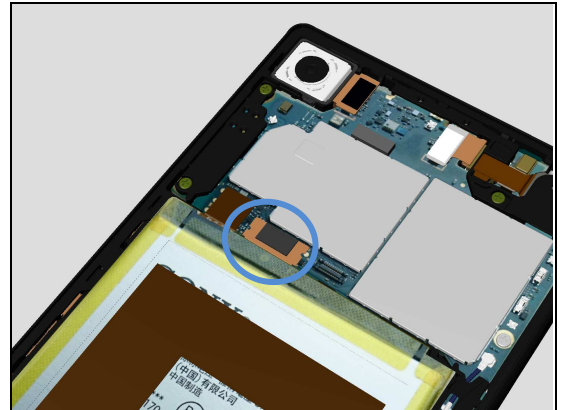
1.16.1 Compass fails

Check:

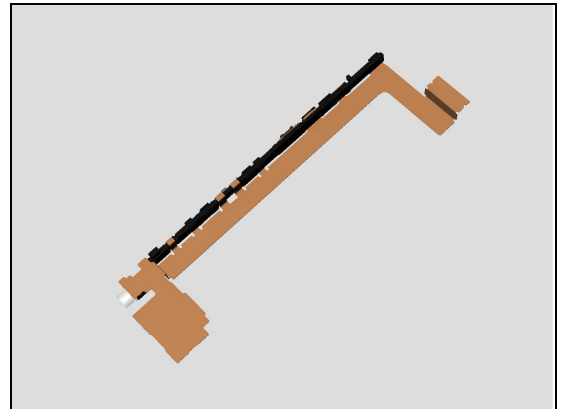
Inspect the BtB connector of FPC Key Module to Main PBA.

Action:

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

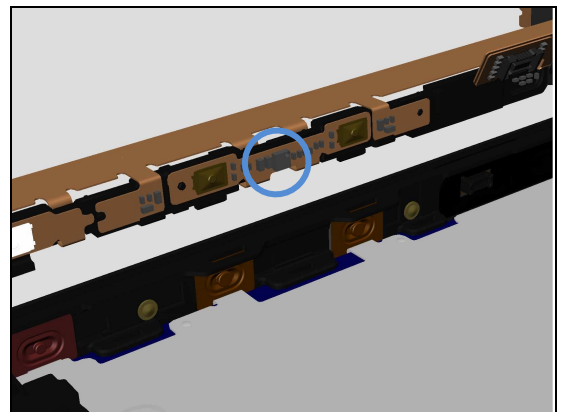


3. If the FPC Key Module is damaged – replace it.
4. Replace Main PBA.



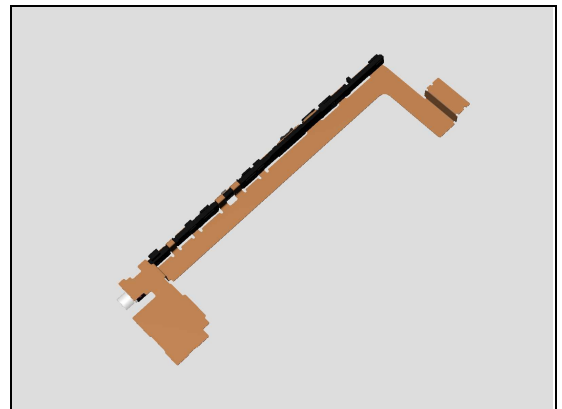
Check:

Inspect the compass chipset on the FPC Key Module.



Action:

1. If the compass chipset is damaged – replace the FPC Key Module.



Problem Areas

1.17 Accelerometer

1.17.1 Accelerometer test fails

Action:

1. Follow the 1289-2983 Sony Mobile Repair Application – mechanical to run the Accelerometer Calibration.
2. Replace Main PBA.

Problem Areas

1.18 Gyroscope

1.18.1 Gyroscope test fails

Action:

1. Follow the 1289-2983 Sony Mobile Repair Application – mechanical to run the Gyroscope Calibration.
2. Replace Main PBA.

Problem Areas

1.19 Ambient Light Sensor

1.19.1 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.

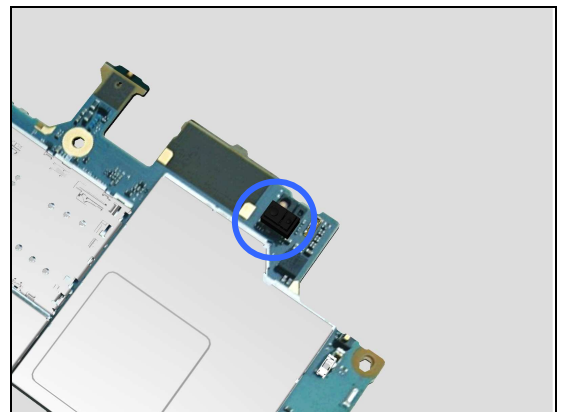
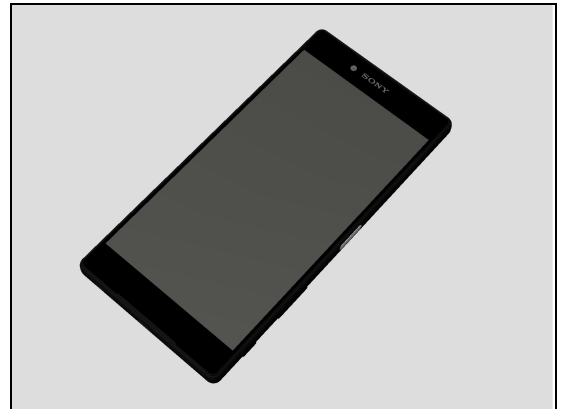
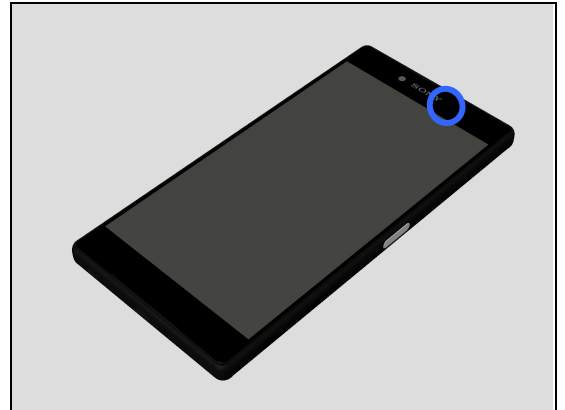
Check:

Inspect the light sensor on the Main PBA.

Action:

1. If dirty or oxidized – clean it.

2. Replace Main PBA.



Problem Areas

1.20 Proximity Switch

1.20.1 Proximity switch malfunctions

Check:

Inspect the external window area of proximity switch.

Action:

1. If dirty – clean it.

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

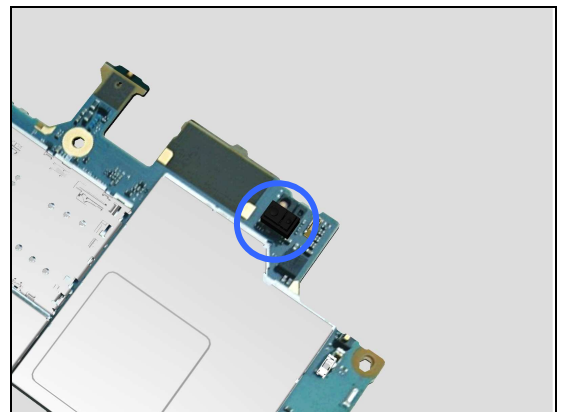
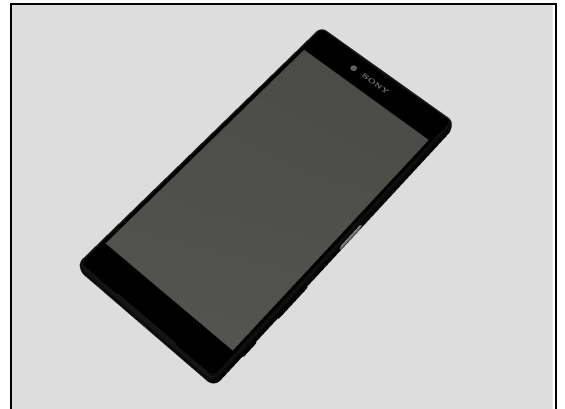
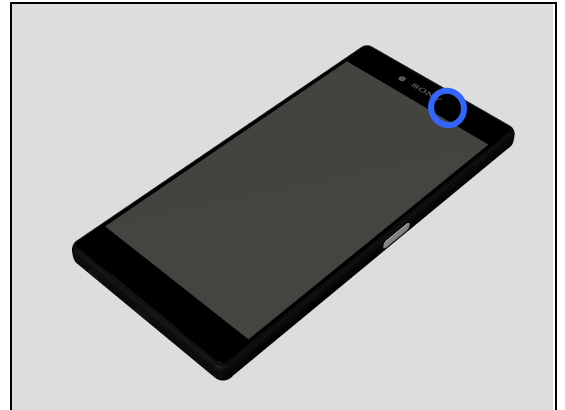
Check:

Inspect the proximity switch on the Main PBA.

Action:

1. If dirty or oxidized – clean it.

2. Replace Main PBA.



Problem Areas

1.21 Pressure Sensor

1.21.1 Pressure Sensor test fails

Replace Main PBA.

Problem Areas

1.22 Water Resistance

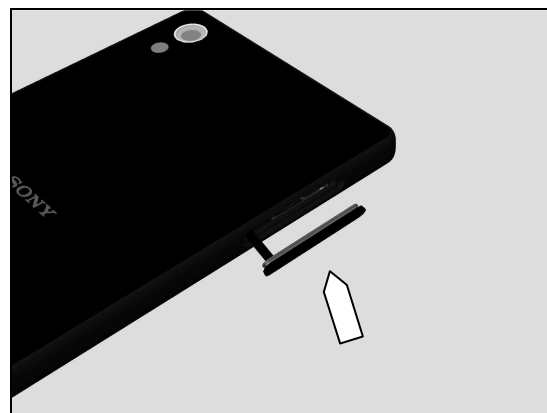
1.22.1 Water Resistance fails

Check:

Inspect the Cap Combo Sub Assy.

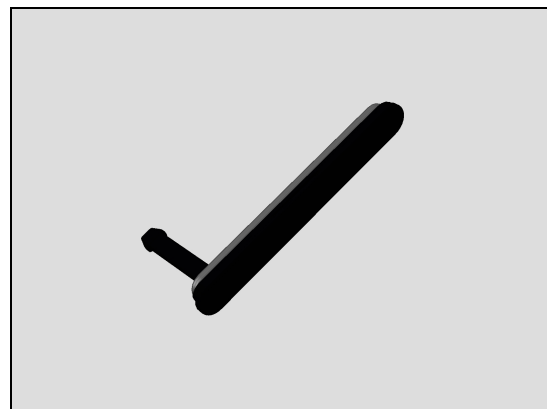
Action:

1. If dirty – clean it.
2. If not properly assembled – disassemble and reassemble.



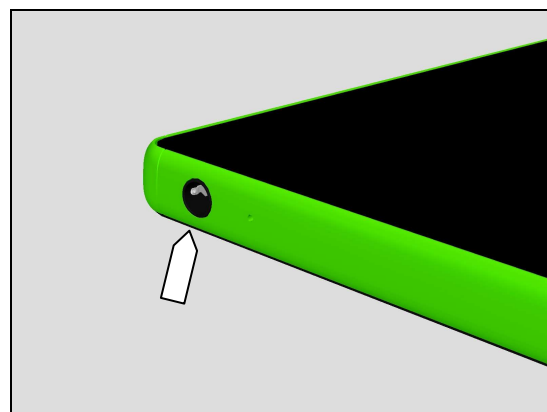
3. If the Cap Combo Sub Assy is damaged – replace it.

Run the Water Resistance Test again!



Check:

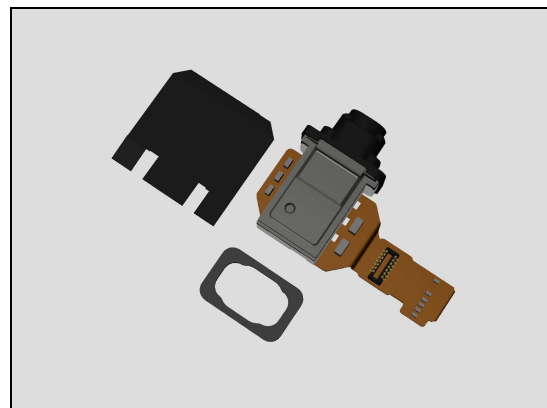
Inspect the Audio Jack hole.



Action:

1. If not assembled well – replace the Adhesive WP Audio Jack to reassemble FPC Jack Module.
2. If damaged – replace the Sheet Shade Audio Jack, Adhesive WP Audio Jack and FPC Jack Module.

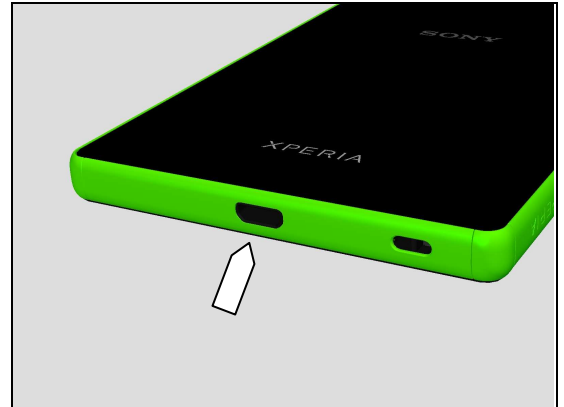
Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

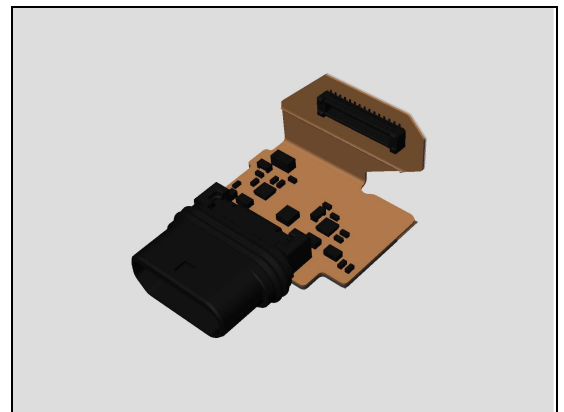
Inspect the USB connector.



Action:

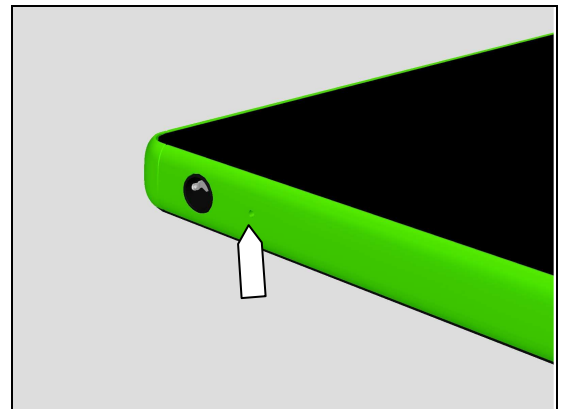
1. If FPC USB Module is not properly assembled – reassemble it
2. If FPC USB Module is damaged – replace it.

Run the Water Resistance Test again!



Check:

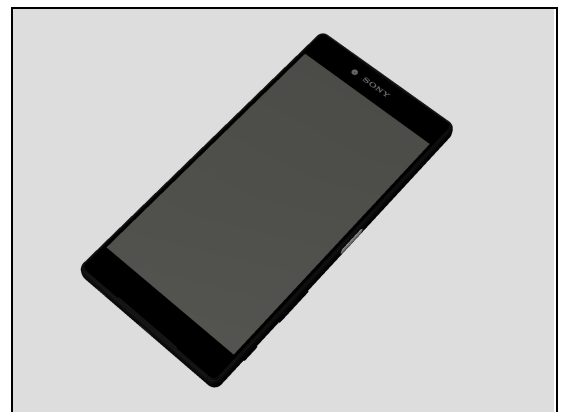
Inspect the secondary microphone port.



Action:

If damaged – replace the Display Frame Assy.

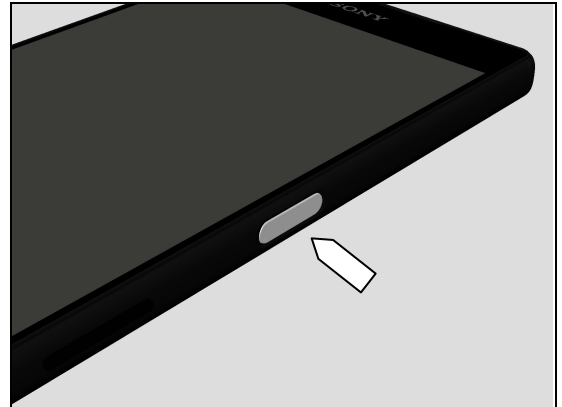
Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

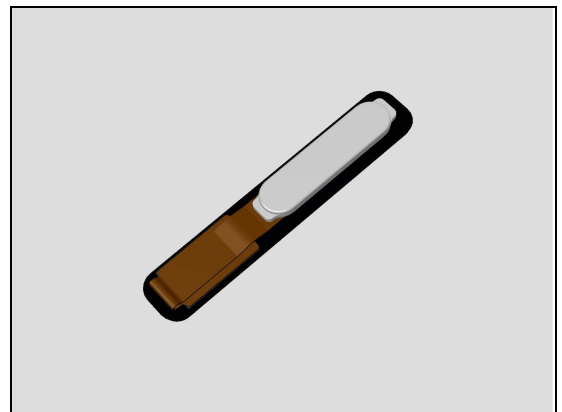
Inspect the Fingerprint Sensor Module.



Action:

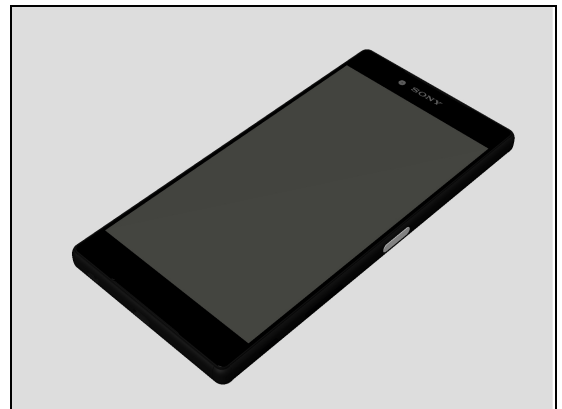
1. If Fingerprint Sensor Module is not properly assembled – reassemble it
2. If Fingerprint Sensor Module is damaged – replace it.

Run the Water Resistance Test again!



Check:

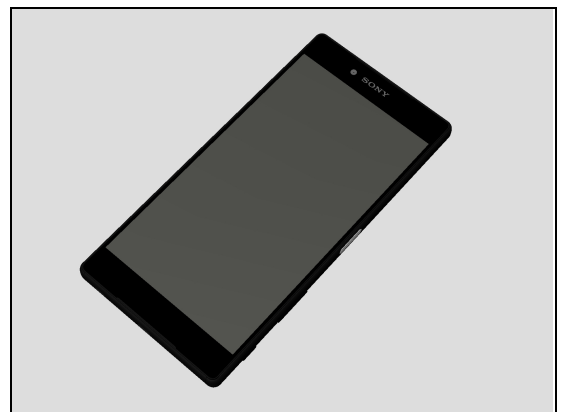
Inspect the edge of Display for damage and gap.



Action:

1. If the edge of Display Frame Assy has gap – replace Display Frame Assy.
2. If the Display Frame Assy is damaged – replace Display Frame Assy.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

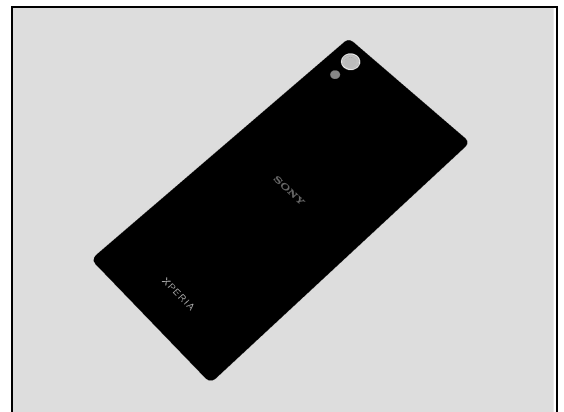
Inspect the edge of Panel Rear Sub Assy for damage and gap and Inspect the main camera window.



Action:

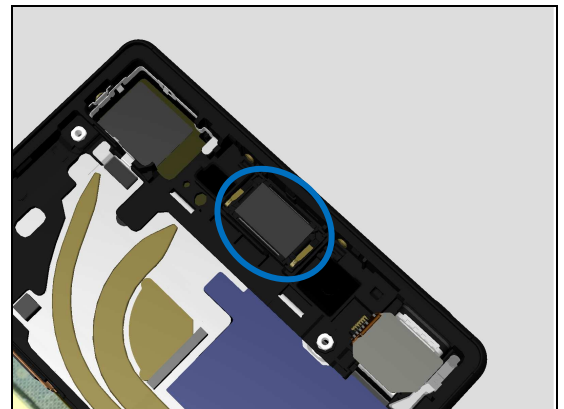
1. If the edge of Panel Rear Sub Assy has gap – reassemble Panel Rear Sub Assy.
2. If Panel Rear Sub Assy is damaged or main camera window has gap – replace Panel Rear Sub Assy and Antenna NFC.

Run the Water Resistance Test again!



Check:

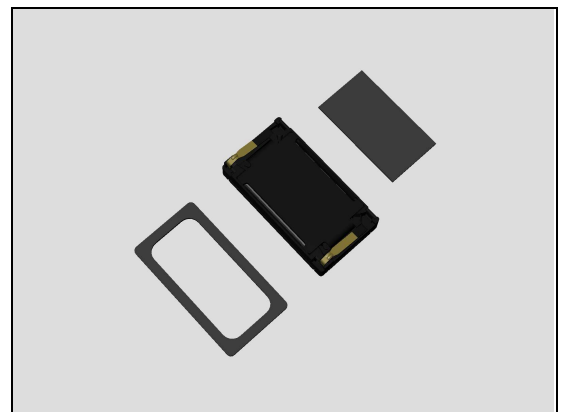
Inspect the Speaker Top.



Action:

If not assembled well or damaged – replace the Cushion ACO, Speaker Top and Adhesive WR Speaker.

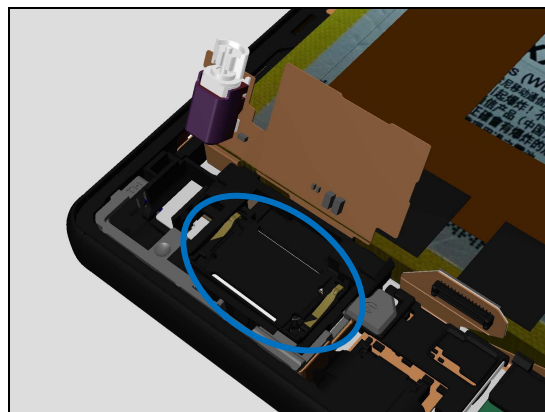
Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

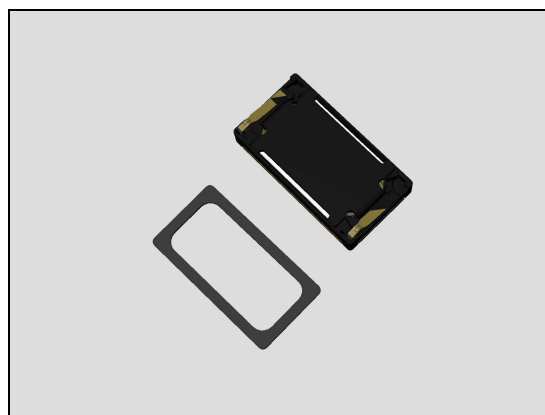
Inspect assembly of Speaker Bottom.



Action:

If not assembled well or damaged – replace the Speaker Bottom and Adhesive WR Speaker.

Run the Water Resistance Test again!



Problem Areas

1.23 Real Time Clock

1.23.1 Real time clock test fails

Action:

Replace Main PBA.

Problem Areas

1.24 Total call time

1.24.1 Total call time fails

Action:

Replace Main PBA.

Problem Areas

1.25 External Memory (E6853)

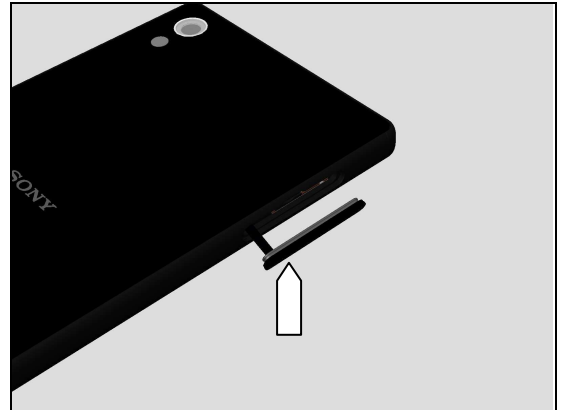
1.25.1 Memory Card not detected

Check:

Inspect that if a memory card is properly inserted.

Action:

If not properly inserted – insert the memory card correctly.

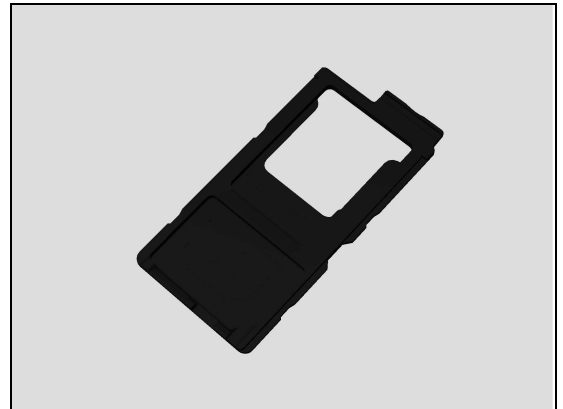


Check:

Inspect the memory card holder.

Action:

1. If dirty or clogged – clean the Tray Combo SS.
2. Replace Tray Combo SS.

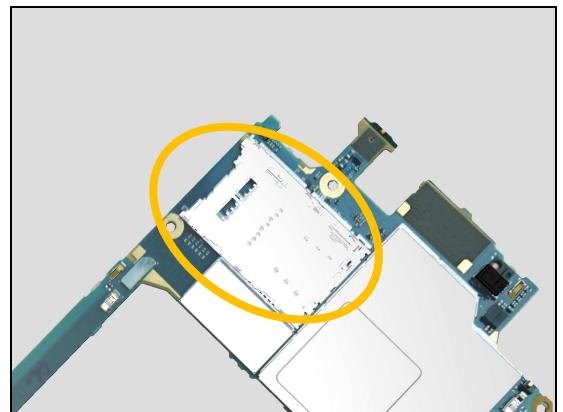


Check:

Inspect the SIM/SD card holder on Main PBA.

Action:

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



Problem Areas

1.26 External Memory (E6833/E6883)

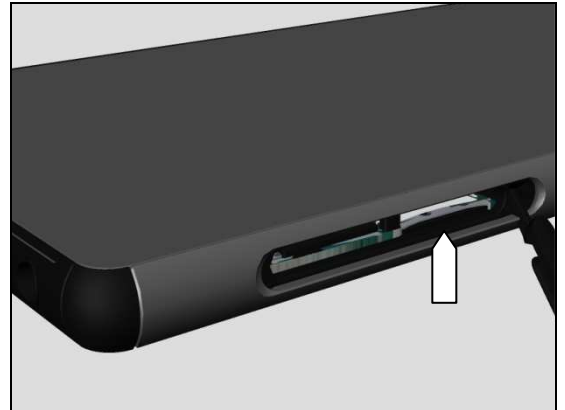
1.26.1 Memory Card not detected

Check:

Inspect that if a memory card is properly inserted.

Action:

If not properly inserted – insert the memory card correctly.

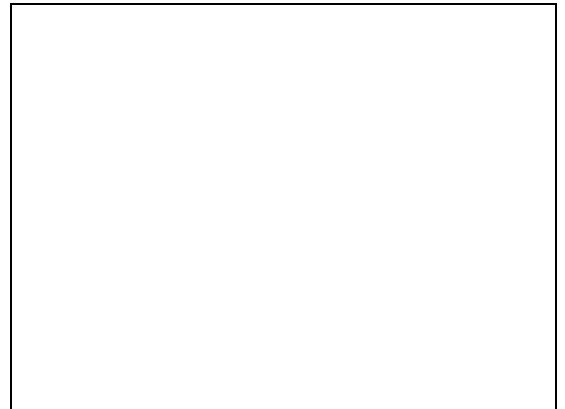
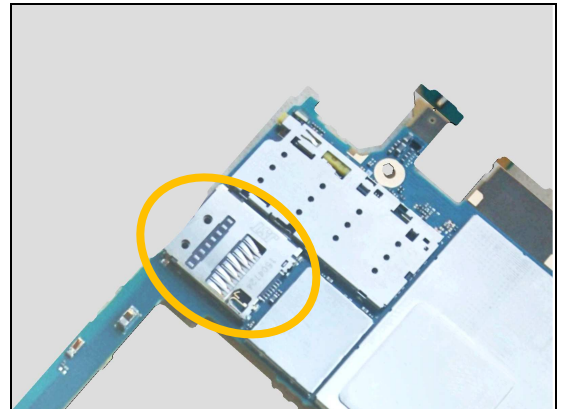


Check:

Inspect the SD card holder on Main PBA.

Action:

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



Problem Areas

1.27 Security

1.27.1 Security fails

Action:

Replace Main PBA.

Problem Areas

1.28 FM Radio

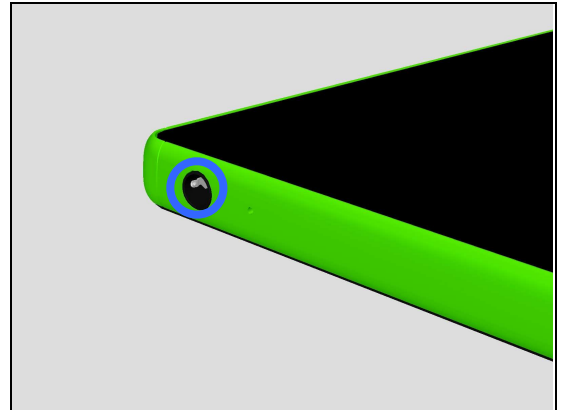
1.28.1 No/Poor FM Radio reception

Check:

Inspect the external port of the Audio Jack.

Action:

1. If dirty or oxidized – clean it.

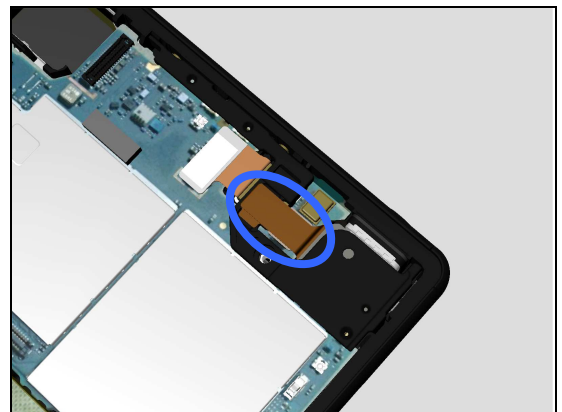


Check:

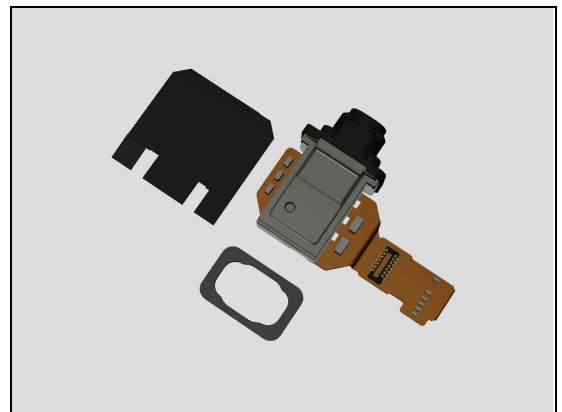
Inspect the BtB connector of FPC Jack Module to Main PBA.

Action:

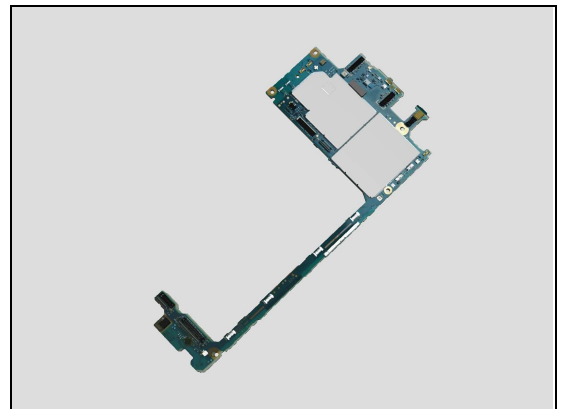
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector or FPC Jack Module is damaged – replace the Sheet Shade Audio Jack, Adhesive WP Audio Jack and FPC Jack Module.



4. Replace Main PBA.



Problem Areas

1.29 Verify Certificates

1.29.1 Verify Certificates fails

Action:

N/A.

Problem Areas

1.30 IrDA Test

1.30.1 IrDA test fails

N/A. No IrDA functionality in the phone.

Problem Areas

1.31 TV-Out Test

1.31.1 TV-Out test fails

Check:

Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.

2. If USB connector damaged – replace FPC USB Module.

Check:

Inspect the BtB connector of FPC USB Module to Main PBA.

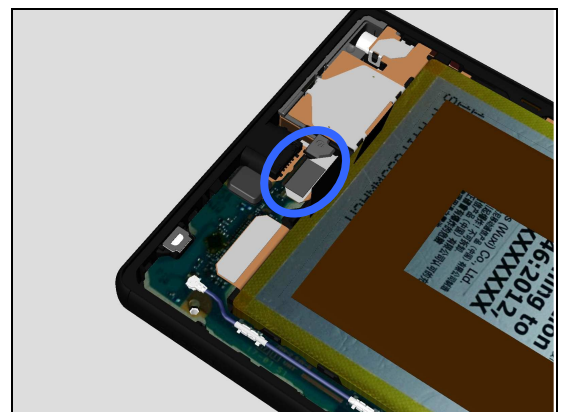
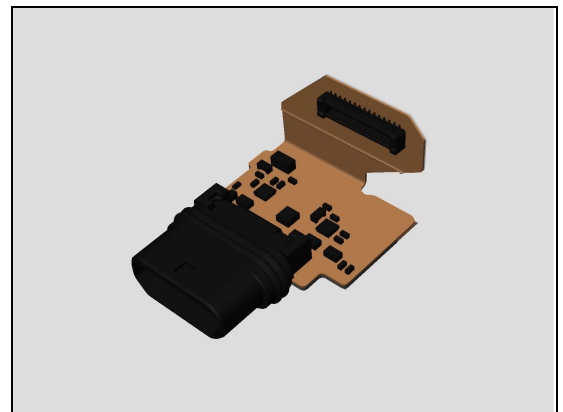
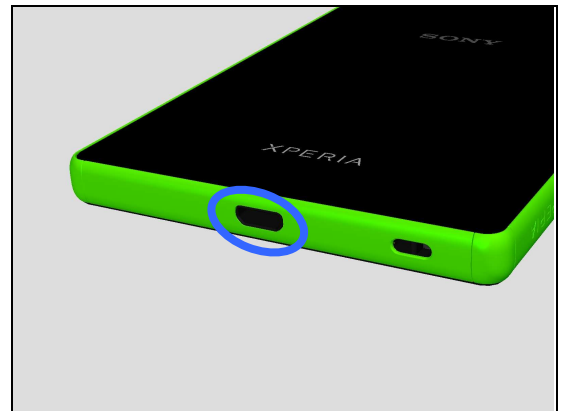
Action:

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

2. If dirty or oxidized – clean it.

3. If FPC USB Module is damaged – replace it.

4. Replace Main PBA.



Problem Areas

1.32 Network & Signal

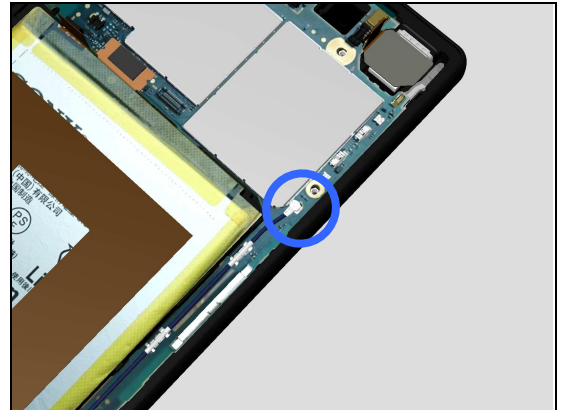
1.32.1 No/Poor signal

Check:

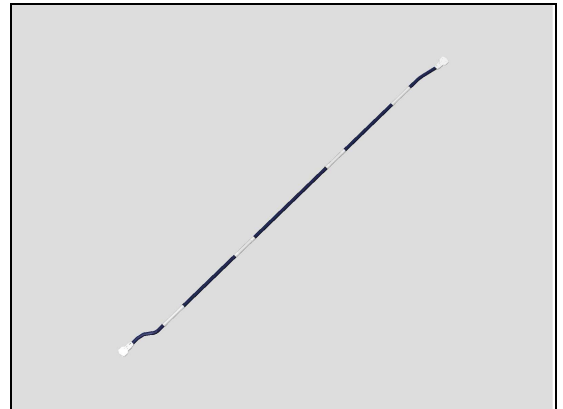
Inspect the RF connector of RF Cable to the Main PBA.

Action:

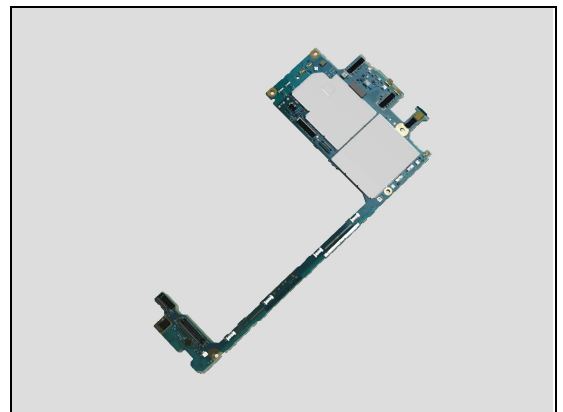
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



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



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

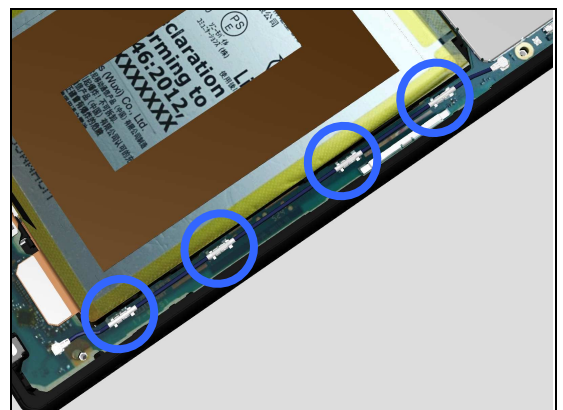


Check:

Inspect if the RF Cable is mounted into its clips.

Action:

If not properly assembled – reassemble it.



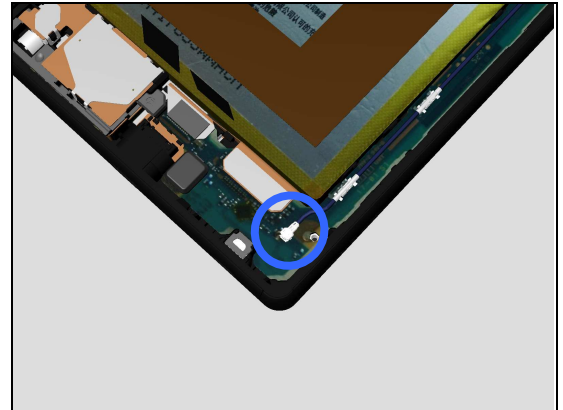
Problem Areas: Network & Signal

Check:

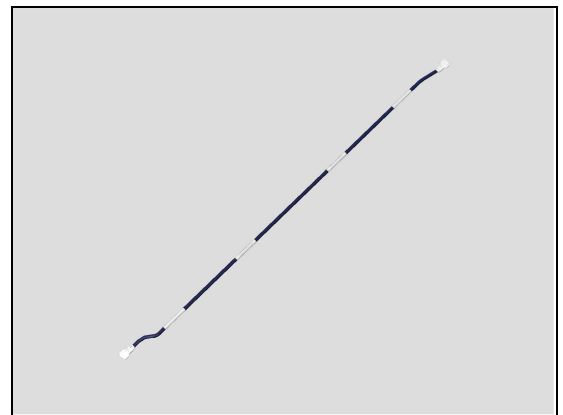
Inspect the RF connector of RF Cable to the Main PBA.

Action:

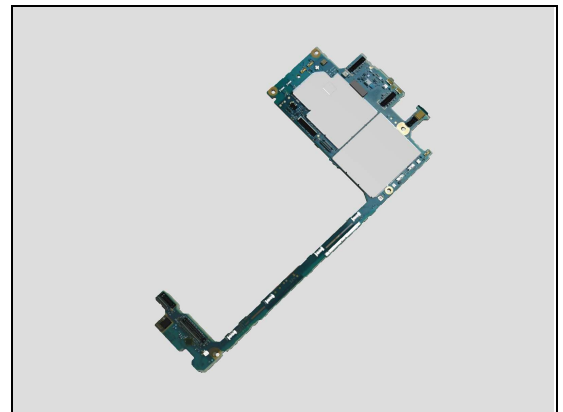
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



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



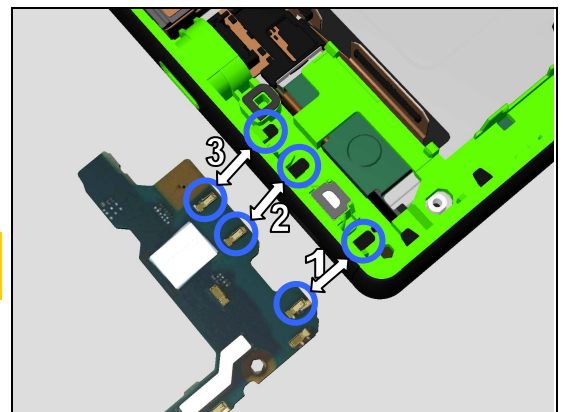
4. If the connector on the Main PBA is damaged – replace Main PBA.



Check:

Inspect the contact pins on the Main PBA and contact pads on the Display Frame Assy.

Only the contacts marked with 1 and 2 are signal feed point.



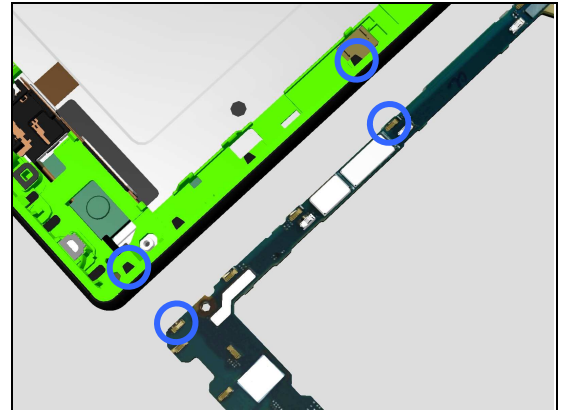
Problem Areas: Network & Signal

Check:

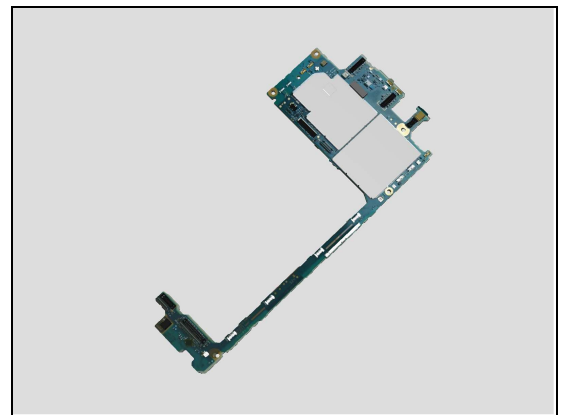
Inspect the contact pins on the Main PBA and contact pads on the Display Frame Assy.

Action:

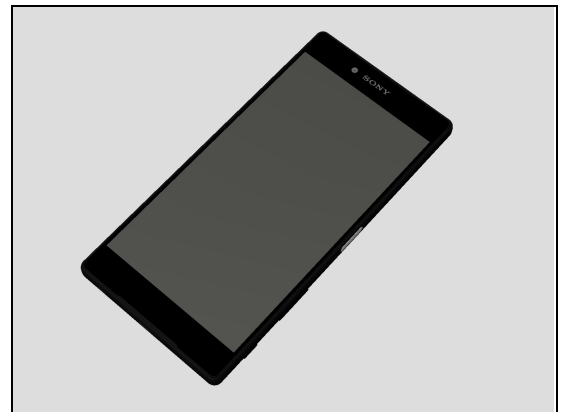
1. If not properly contacted – reassemble the Main PBA.
2. If dirty or oxidized – clean them



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



4. If the contact pads are damaged – replace the Display Frame Assy.

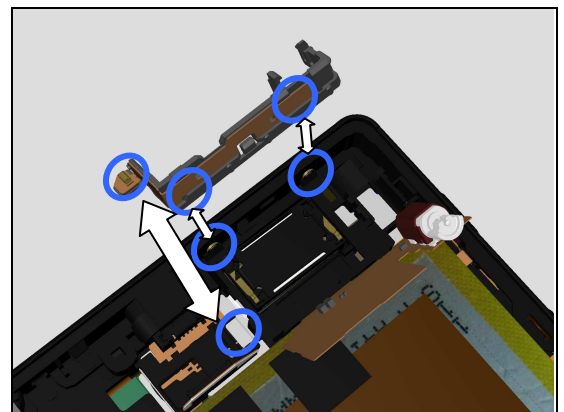


Check:

Inspect if the contact pins on the Display Frame Assy, contact pins and pads on the Ant Cellular Main and contact pad of the Plate USB GND.

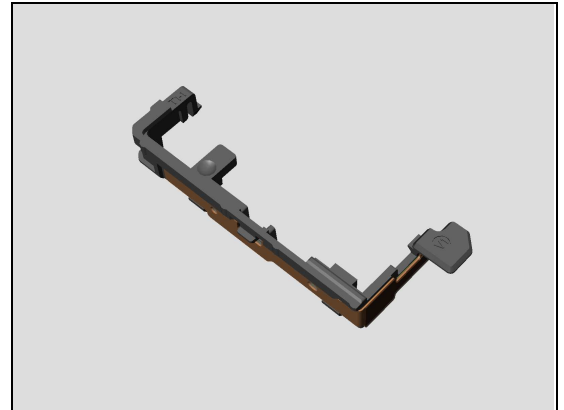
Action:

1. If not properly contacted – reassemble them.
2. If dirty or oxidized – clean them

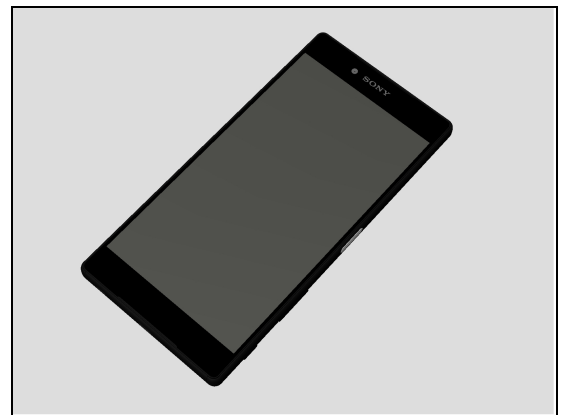


Problem Areas: Network & Signal

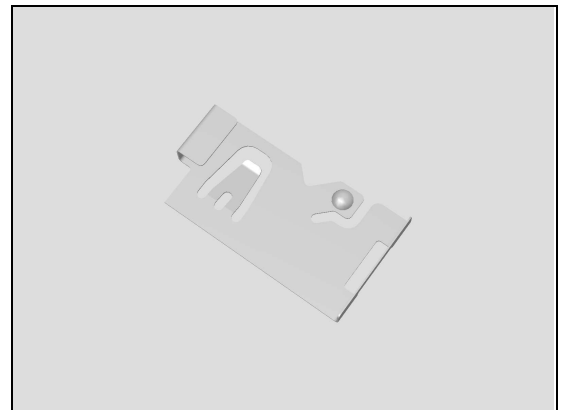
3. If the contact pins and pads on the Ant Cellular Main is damaged – replace Ant Cellular Main.



4. If the contact pins on the Display Frame Assy is damaged – replace Display Frame Assy.



5. If the Plate USB GND is damaged – replace it.

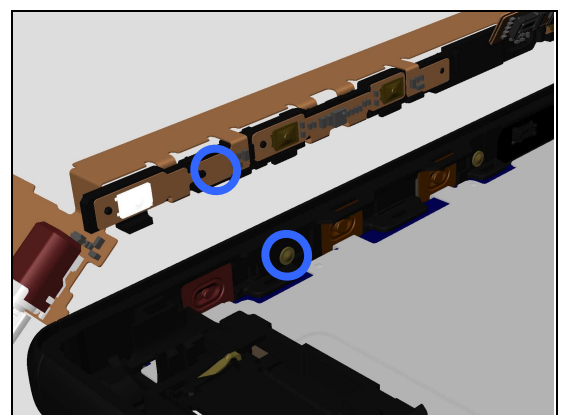


Check:

Inspect the contact pin on the Display Frame Assy and and contact pad on the FPC Key Module.

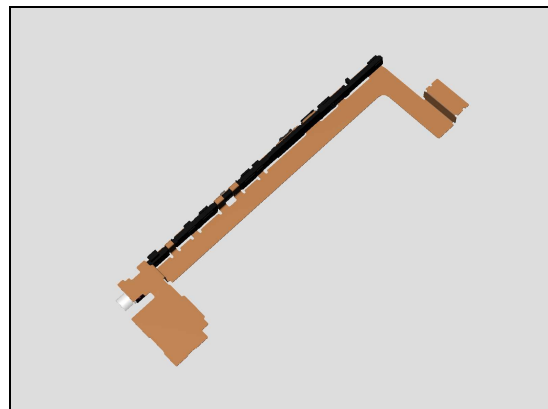
Action:

1. If not properly contacted – reassemble the FPC Key Module.
2. If dirty or oxidized – clean them



Problem Areas: Network & Signal

3. If the contact pad on the FPC Key Module is damaged – replace FPC Key Module.



4. If the contact pin on the Display Frame Assy is damaged – replace Display Frame Assy.



Check:

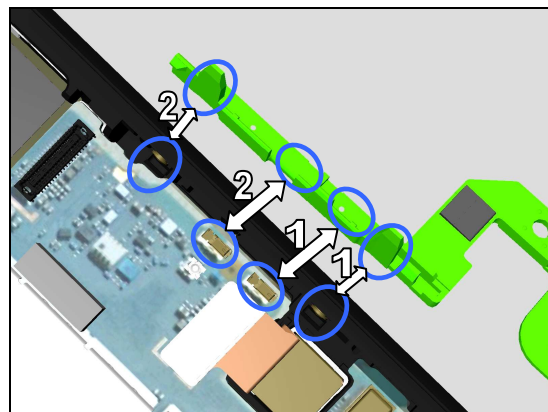
Inspect the Ant Cellular Sub contact pads and the contact pins on main PBA(1).

Inspect the Ant Cellular Sub contact pads and the contact pins on Display Frame Assy(2).

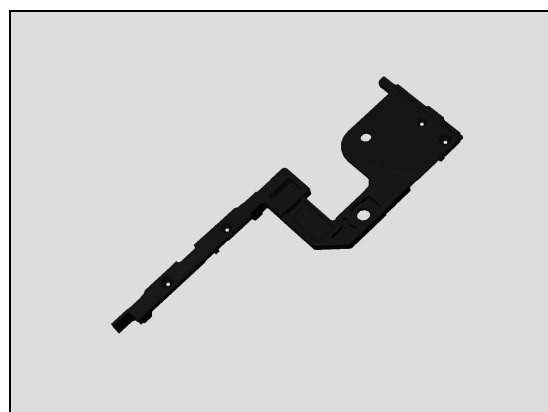
Only the contact marked with 1 is signal feed point.

Action:

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

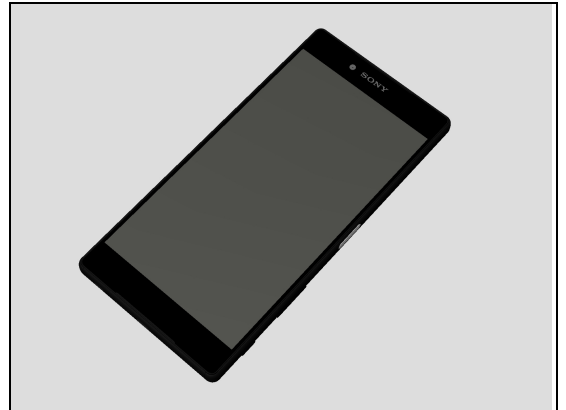


2. If the Ant Cellular Sub contact pads are damaged – replace the Ant Cellular Sub.

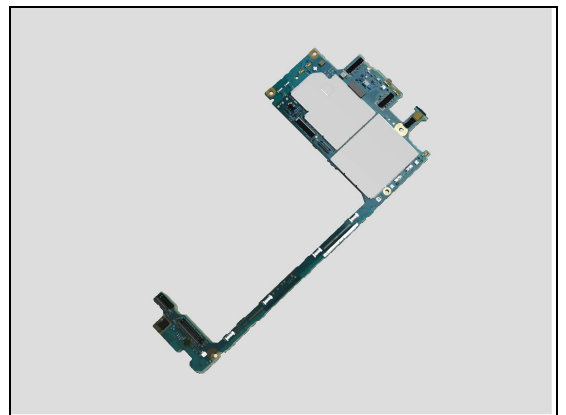


Problem Areas: Network & Signal

3. If the Display Frame Assy contact pins are damaged – replace the Display Frame Assy.



4. If the contact pins on main PBA are damaged – replace Main PBA.



Problem Areas

1.33 SIM (E6853)

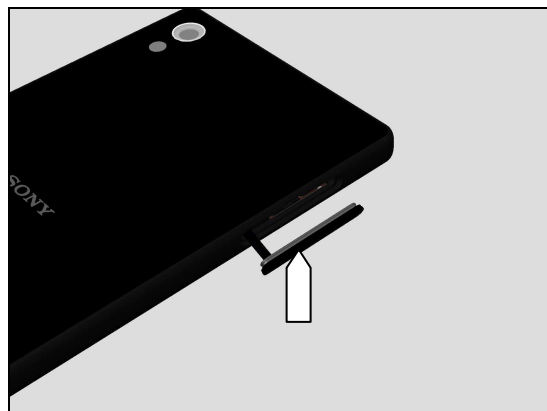
1.33.1 SIM not detected

Check:

Inspect the external port of the SIM/SD card holder.

Action:

If dirty or clogged – clean the external port.

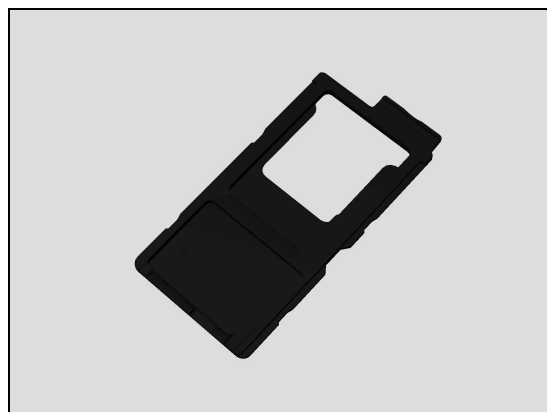


Check:

Check if Nano SIM is properly mounted into the Tray Combo DS and if a Tray Combo DS can be properly inserted and inspect the Tray Combo DS.

Action:

1. If not properly assembled – reassemble it.
2. If damaged – Replace Tray Combo DS.



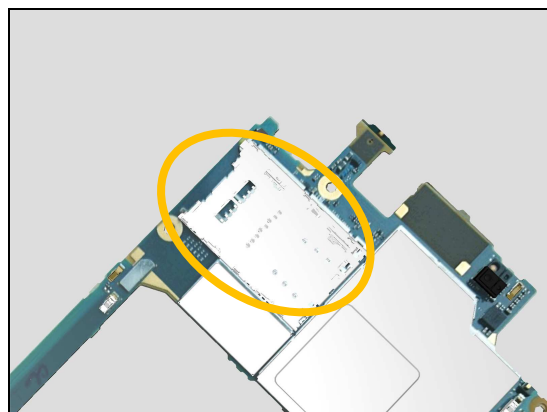
Check:

Inspect the SIM/SD card holder on Main PBA.

Action:

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

Note: only Single SIM illustration shown!



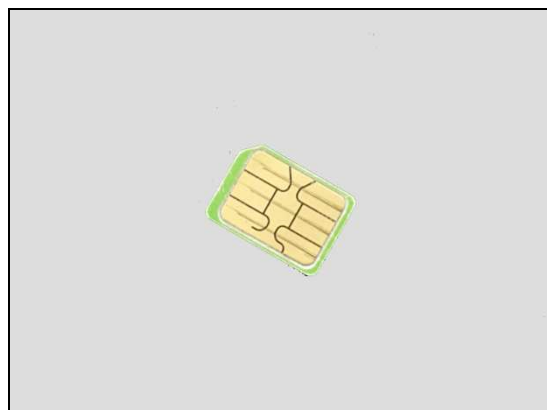
1.33.2 Incorrect Nano SIM indicated

Check:

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

Action:

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



Problem Areas

1.34 SIM (E6833/E6883)

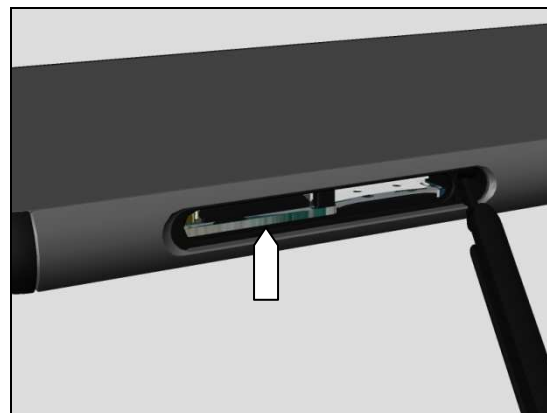
1.34.1 SIM not detected

Check:

Inspect the external port of the SIM/SD card holder.

Action:

If dirty or clogged – clean the external port.

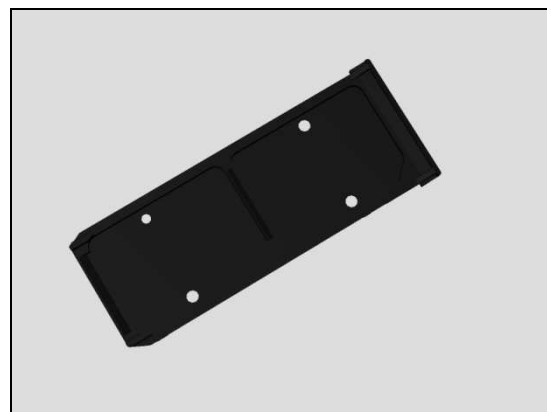


Check:

Check if Nano SIM is properly mounted into the Tray Combo DS and if a Tray Combo DS can be properly inserted and inspect the Tray Combo DS.

Action:

1. If not properly assembled – reassemble it.
2. If damaged – Replace Tray Combo DS.

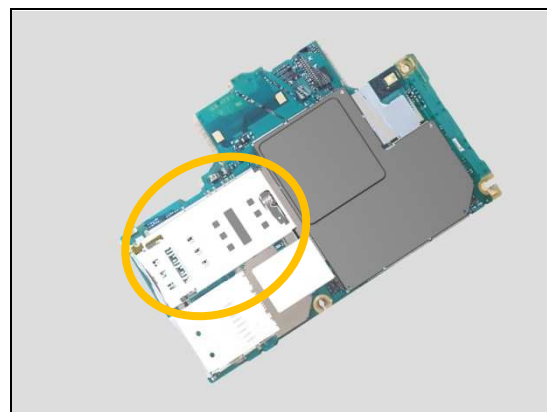


Check:

Inspect the SIM card holder on Main PBA.

Action:

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



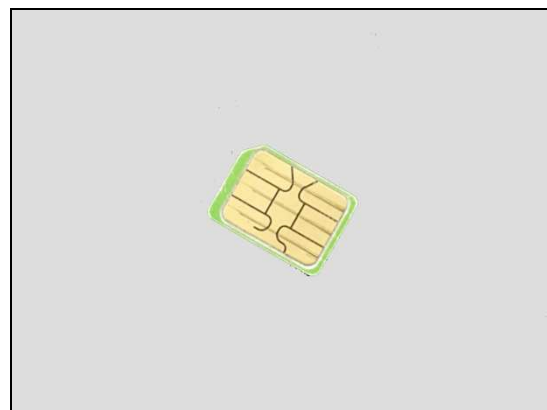
1.34.2 Incorrect Nano SIM indicated

Check:

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

Action:

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



Problem Areas

1.35 Charging

1.35.1 Battery will not charge by USB connector

Check:

Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.

2. If USB connector is damaged – replace FPC USB Module.

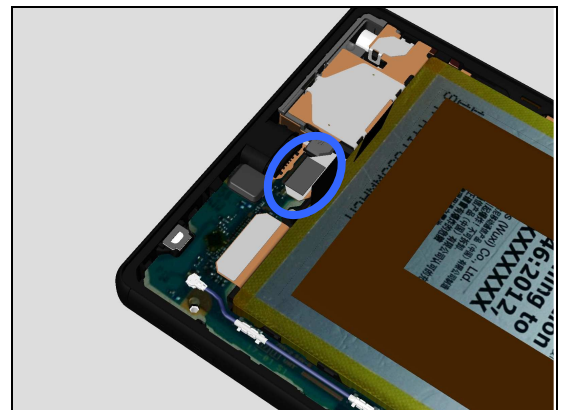
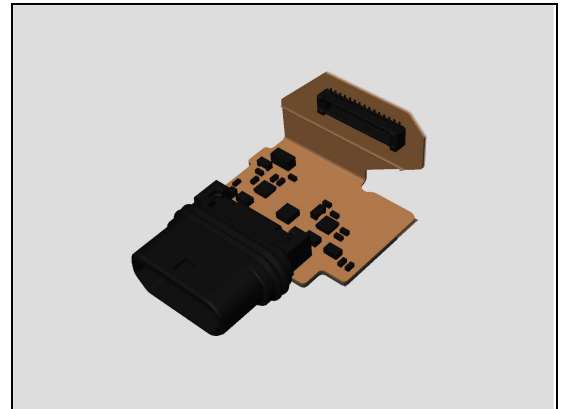
Check:

Inspect the BtB connector of FPC USB Module to Main PBA.

Action:

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

3. If FPC USB Module is damaged – replace it.



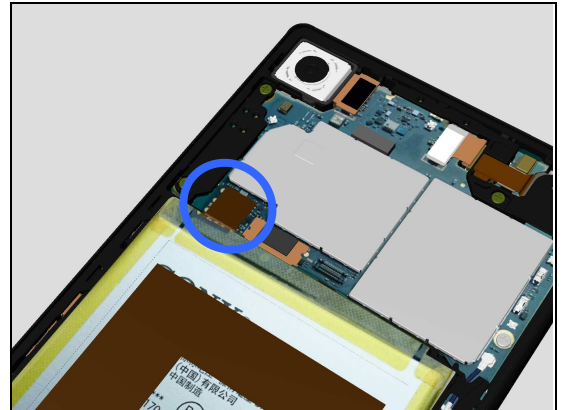
Problem Areas: Charging

Check:

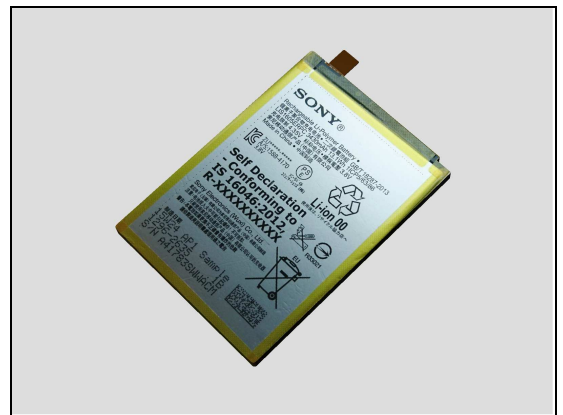
Inspect the BtB connector of the Battery to Main PBA.

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 FPC or the Battery is damaged – replace the Battery.
4. Replace Main PBA.



Problem Areas

1.36 Audio Jack test

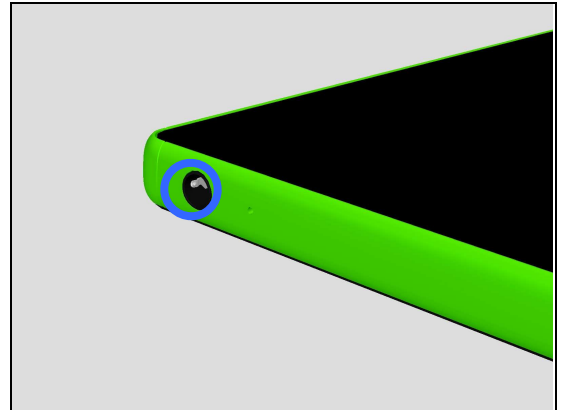
1.36.1 Connection to headset fails

Check:

Inspect the external port of the Audio Jack.

Action:

1. If dirty or oxidized – clean it.

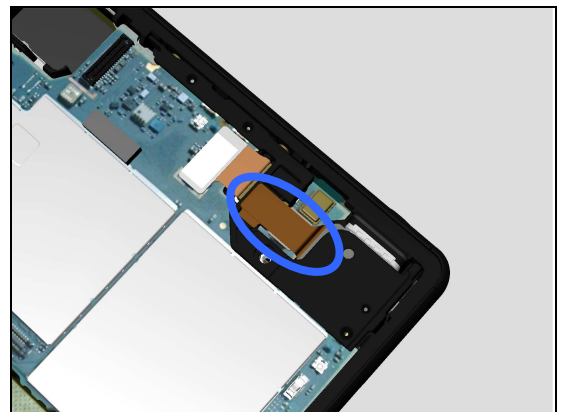


Check:

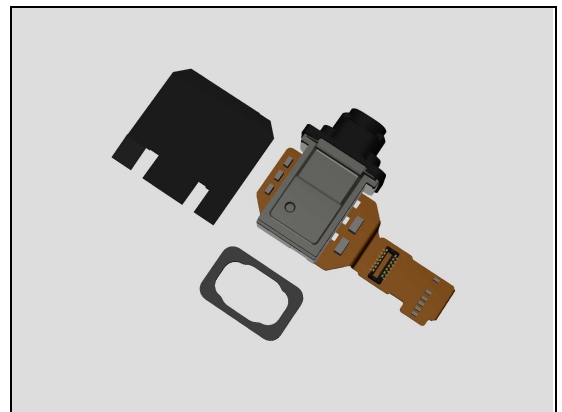
Inspect the BtB connector of FPC Jack Module to Main PBA.

Action:

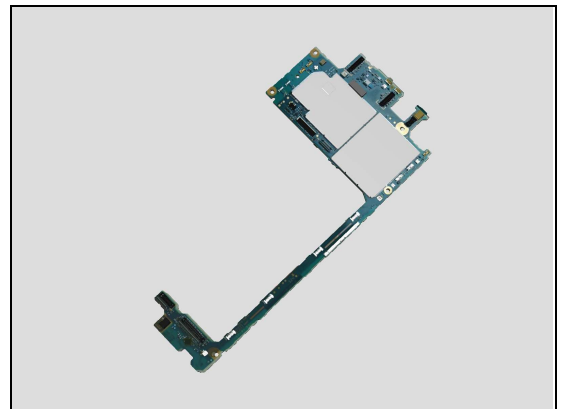
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector or FPC Jack Module is damaged – replace the Sheet Shade Audio Jack, Adhesive WP Audio Jack and FPC Jack Module.



4. Replace Main PBA.



Problem Areas

1.37 Finger Print Sensor test

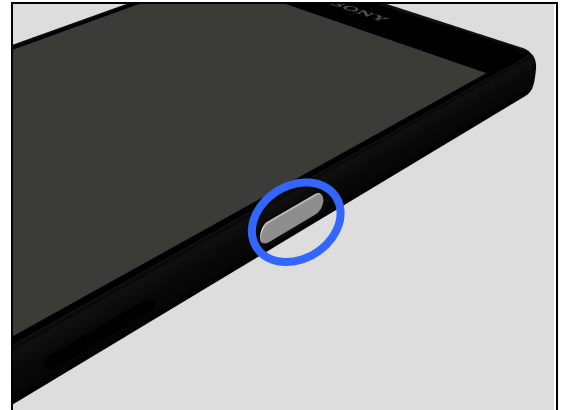
1.37.1 Finger Print Sensor test fails

Check:

Inspect the Fingerprint Sensor Module.

Action:

1. If dirty or oxidized – clean it.
2. If the Fingerprint Sensor Module is damaged – replace the Fingerprint Sensor Module.

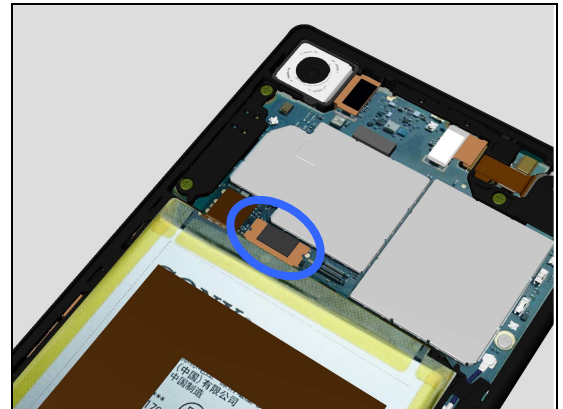


Check:

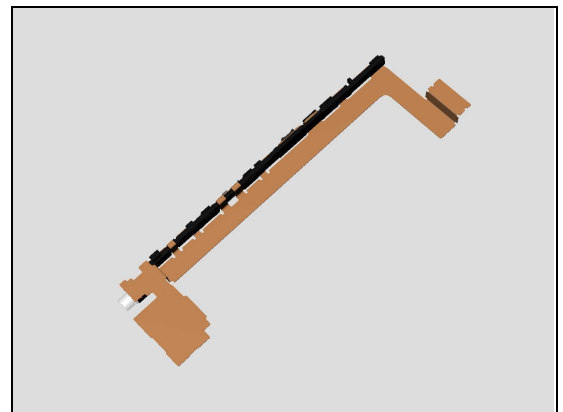
Inspect the BtB connector of FPC Key Module to Main PBA.

Action:

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



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

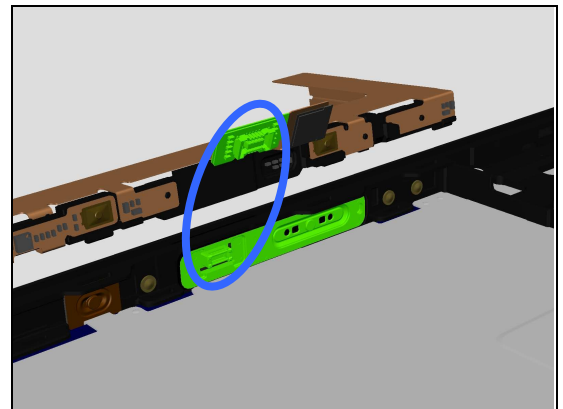


Check:

Inspect the BtB connector of Fingerprint Sensor Module to FPC Key Module.

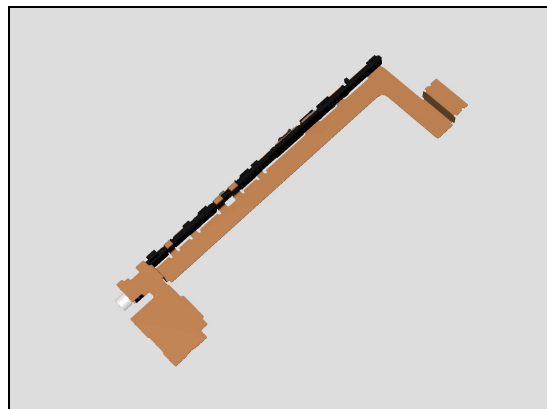
Action:

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

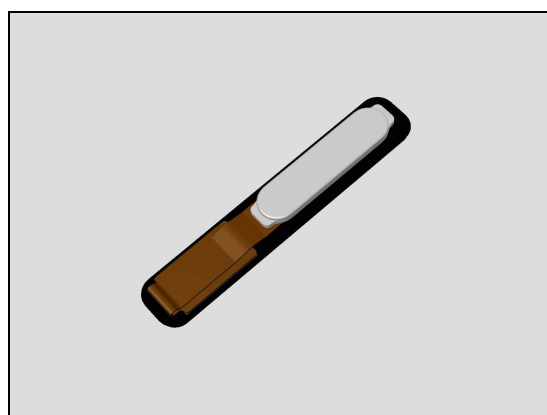


Problem Areas: Finger Print Sensor test

3. If the BtB connector or FPC Key Module is damaged – replace the FPC Key Module.



4. If the BtB connector of Fingerprint Sensor Module is damaged – replace the Fingerprint Sensor Module.



Problem Areas

1.38 Data Communication

1.38.1 Data transfer via System Connector fails

Check:

Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.

2. If USB connector is damaged – replace FPC USB Module.

Check:

Inspect the BtB connector of FPC USB Module to Main PBA.

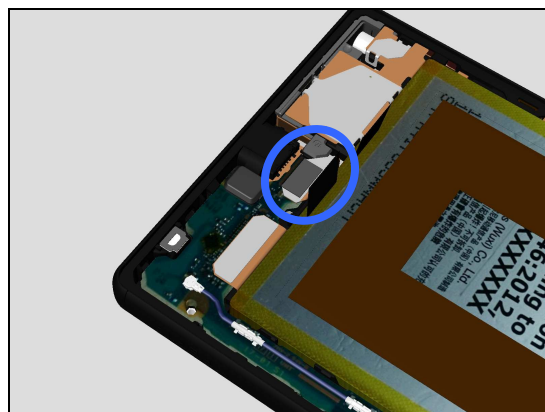
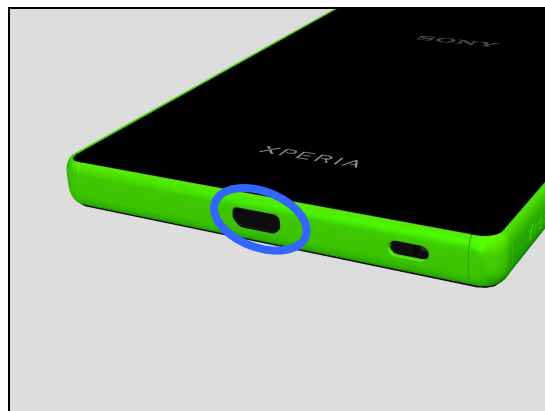
Action:

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

2. If dirty or oxidized – clean it.

3. If FPC USB Module is damaged – replace it.

4. Replace Main PBA.



2 Revision History

Rev.	Date	Changes / Comments
1	2015-Otc-18	Initial release
2	2015-Nov-02	Updated chapter 1.12, 1.13 and 1.32 about signal contact pins and pads.