

Troubleshooting Guide

- mechanical -



Xperia™ Z3+
E6553

Xperia™ Z3+ Dual
E6533

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

Always finally connect the Embedded Battery BtB connector before the Rear Panel is reassembled.

Note: Proximity Calibration always must be performed when Top Flex module, Display Frame Assy and Main PBA reassembly, or Top Flex module 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 Audio Jack 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 'E6553' or 'E6533', E6553 and E6533 share the same trouble shooting guide as common sections, whose pictures are used with E6553. 'E6533' chapters or sections use E6533 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 2.3.5 (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

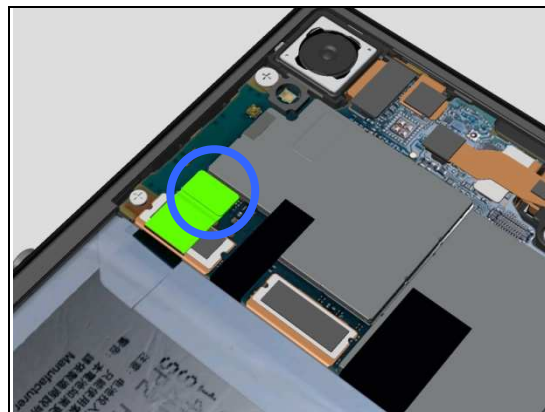
Check:

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.

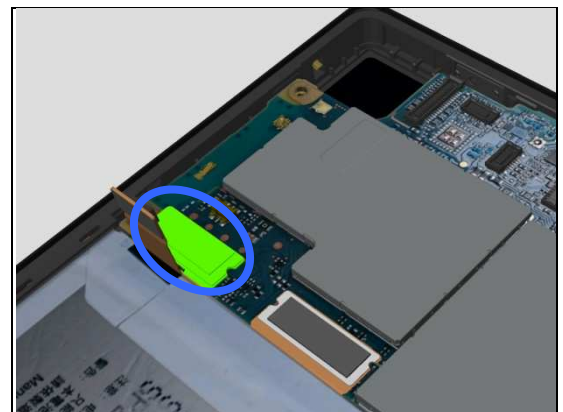


Check:

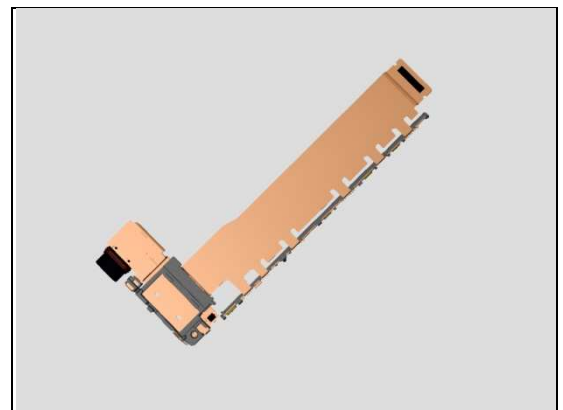
Inspect the BtB connector of Relay_U Flex module to Main PBA.

Action:

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



3. If the Relay_U Flex module is damaged – replace it.
4. Replace Main PBA.



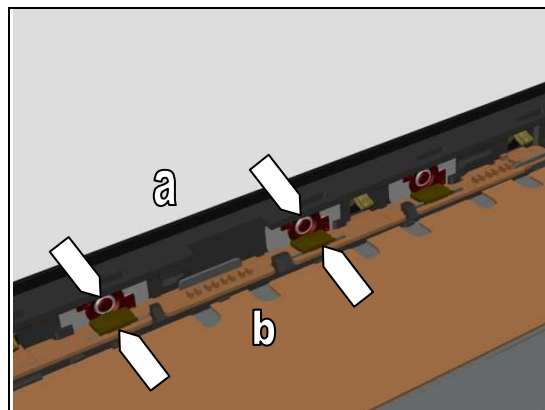
Problem Areas: Keys

Check:

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

Action:

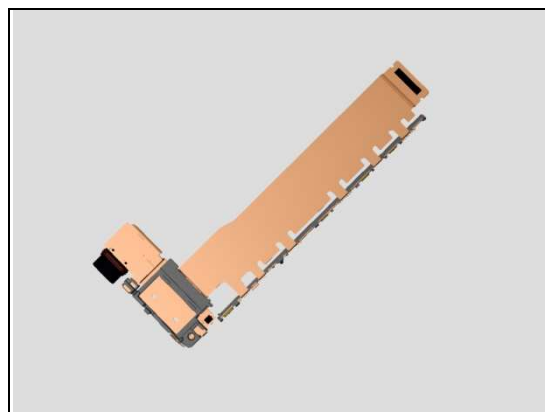
1. If dirty – clean them.



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 Relay_U Flex 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 Display Frame Assy.



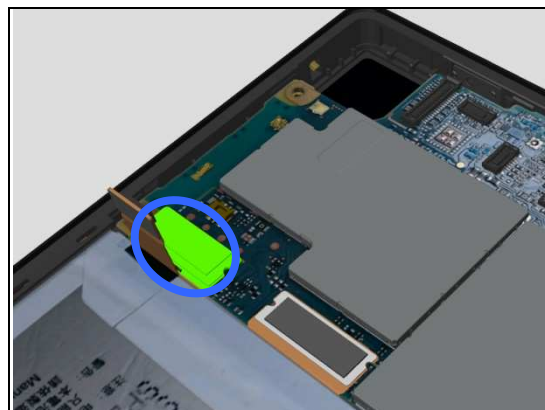
Problem Areas: Keys

Check:

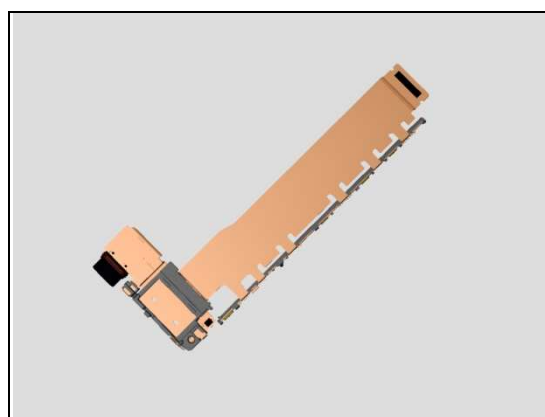
Inspect the BtB connector of Relay_U Flex Module to Main PBA.

Action:

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



3. If the Relay_U Flex Module is damaged – replace it.
4. Replace Main PBA.

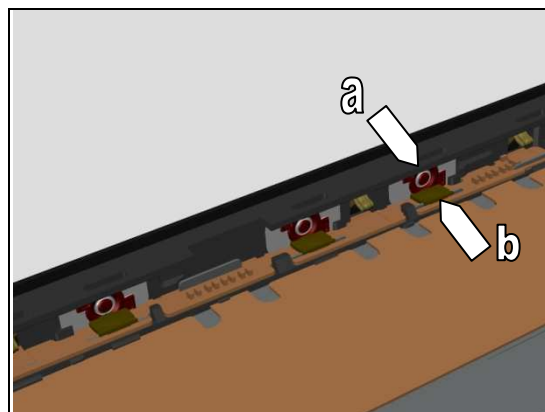


Check:

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 Display Frame Assy.



Problem Areas: Keys

3. If the On/Off key switch is damaged – replace the Relay_U Flex 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.

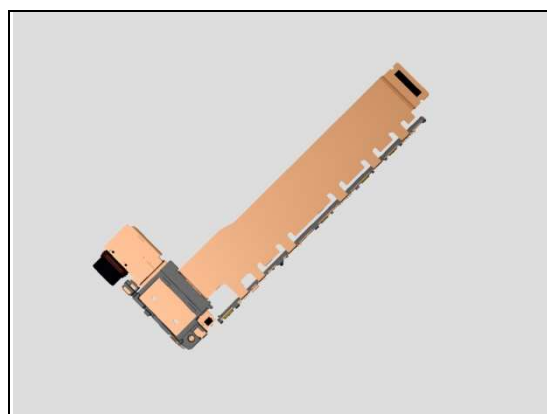
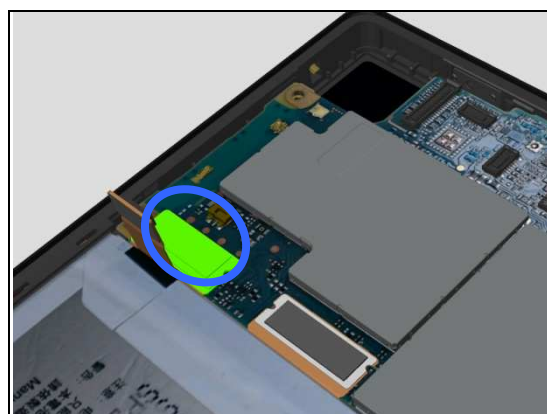
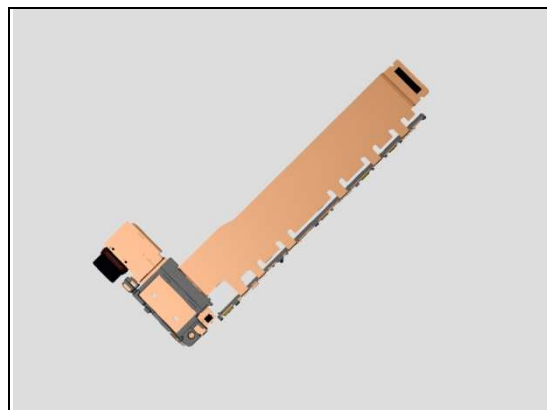
Check:

Inspect the BtB connector of Relay_U Flex Module to Main PBA.

Action:

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

3. If the Relay_U Flex Module is damaged – replace it.
4. Replace Main PBA.



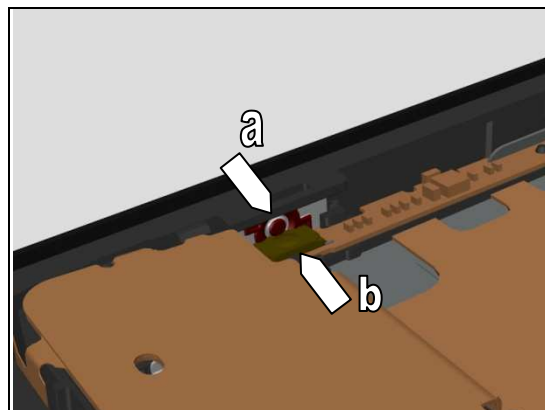
Problem Areas: Keys

Check:

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

Action:

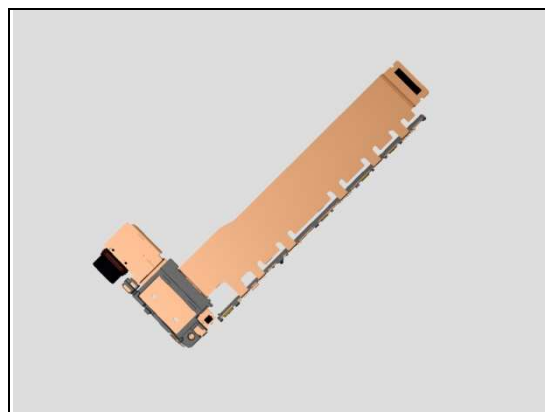
1. If dirty – clean them.



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 Relay_U Flex 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.



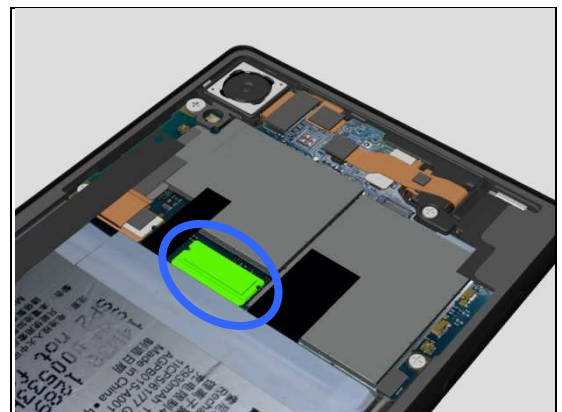
2. If scratched or damaged – replace the Display Frame Assy.

Check:

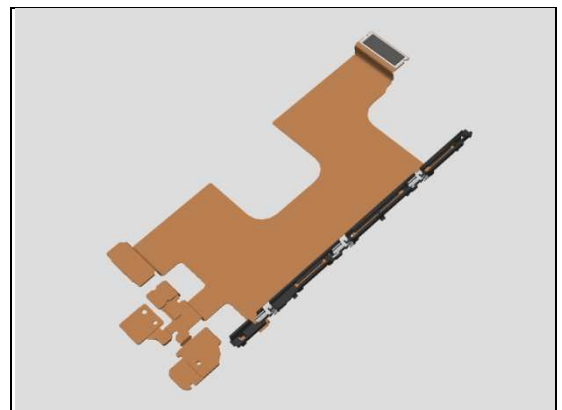
Inspect the BtB connector of Relay_L Flex Module to Main PBA.

Action:

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



3. If the Relay_L Flex Module is damaged – replace Relay_L Flex Module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.



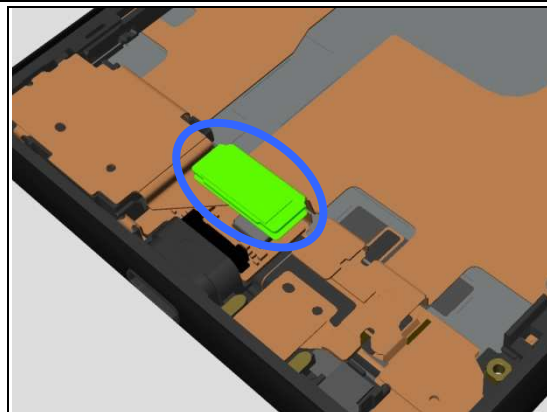
Problem Areas: Touch Screen

Check:

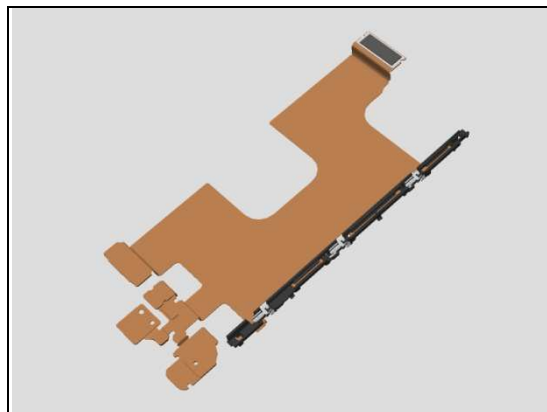
Inspect the BtB connector of Relay_L Flex Module to Display Frame Assy.

Action:

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



3. If the Relay_L Flex Module is damaged – replace Relay_L Flex Module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.



4. Replace Display Frame Assy.
5. 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.

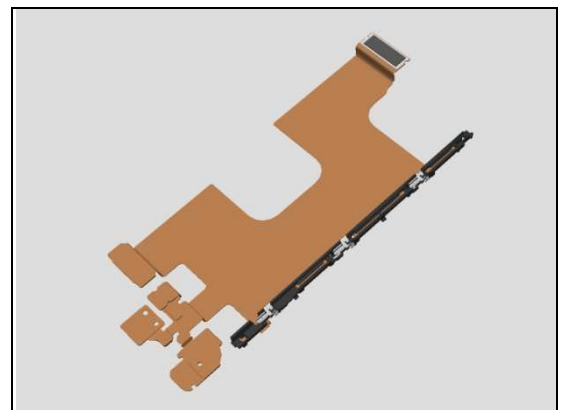
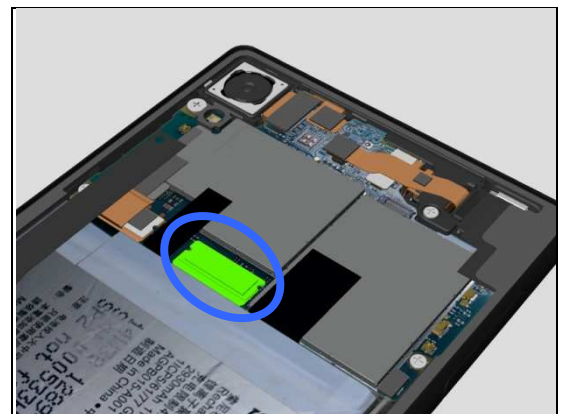
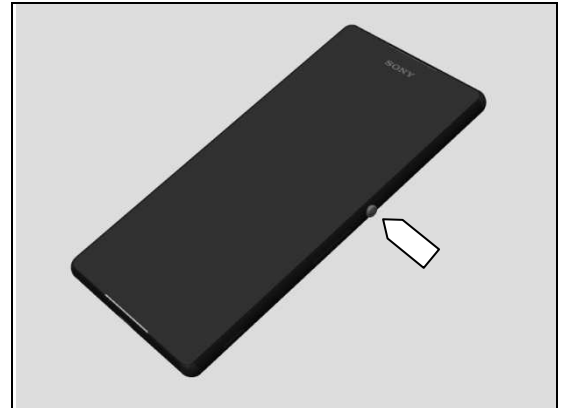
Check:

Inspect the BtB connector of Relay_L Flex Module to Main PBA.

Action:

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

3. If the Relay_L Flex Module is damaged – replace replace Relay_L Flex Module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.



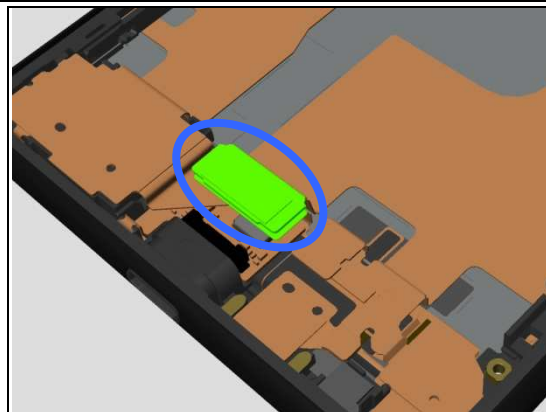
Problem Areas: Display

Check:

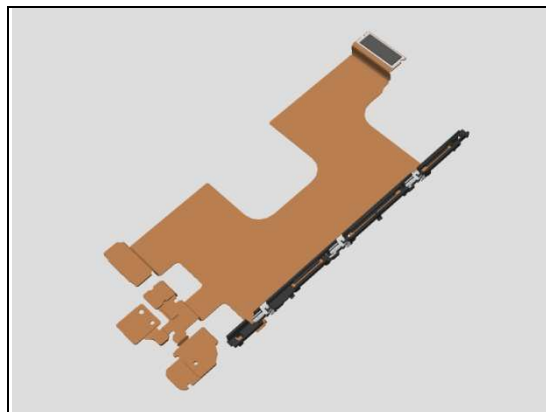
Inspect the BtB connector of Relay_L Flex Module to Display Frame Assy.

Action:

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



3. If the Relay_L Flex Module is damaged – replace Relay_L Flex Module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.



4. Replace Display Frame Assy.
5. 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.

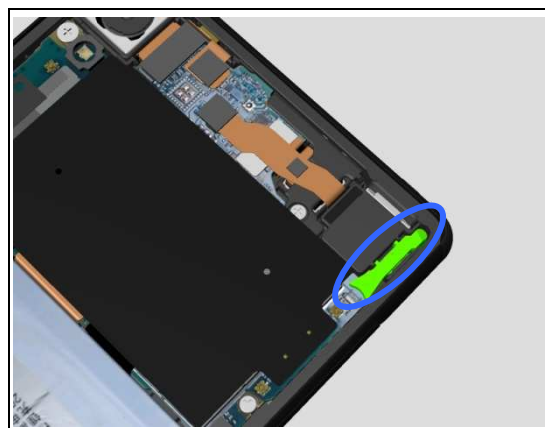


Check:

Inspect the Light Guide 3LED.

Action:

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



3. If damaged – replace it.

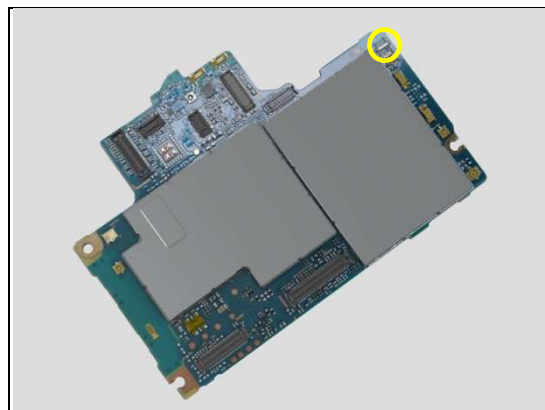


Check:

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 Loudspeaker

Check:

Inspect the Loudspeaker external port on the Display Frame Assy.

Action:

1. If clogged – clean it.



2. If damaged – replace the Display Frame Assy.

Check:

Inspect the Loudspeaker and Cap Speaker Sub Assy is assembled well into its cavity.

Action:

1. If not assembled well – reassemble it.

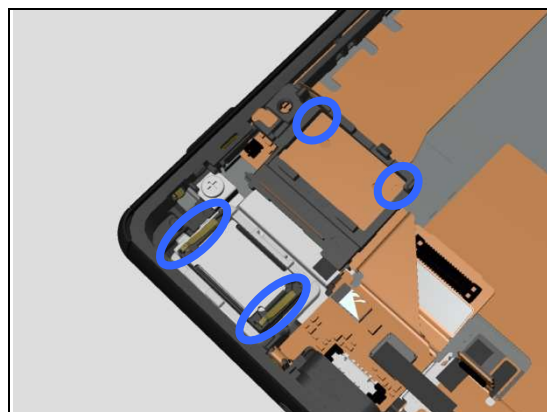


Check:

Inspect the contact pads on the Relay_U Flex Module and the contact pins on the Loudspeaker.

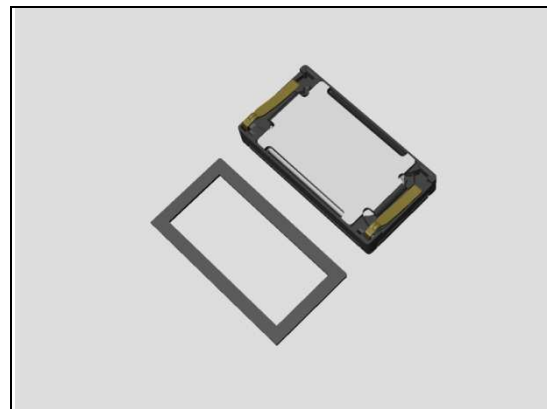
Action:

1. If dirty – clean them.

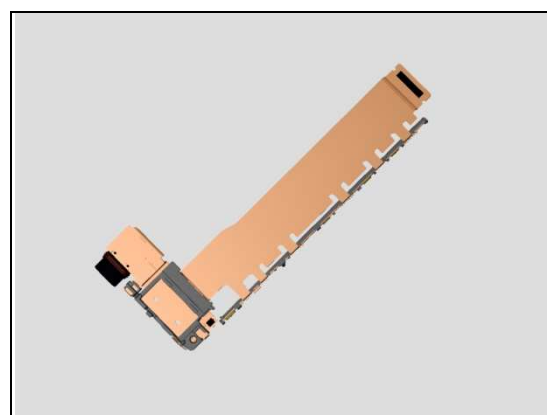


Problem Areas: Speaker

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



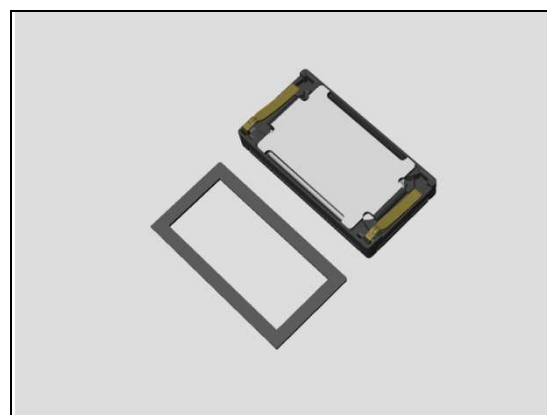
3. If the contact pads on the Relay_U Flex Module are damaged - replace the Relay_U Flex Module.



Check:
Inspect if the Loudspeaker is assembled well onto Cap Speaker Sub Assy.



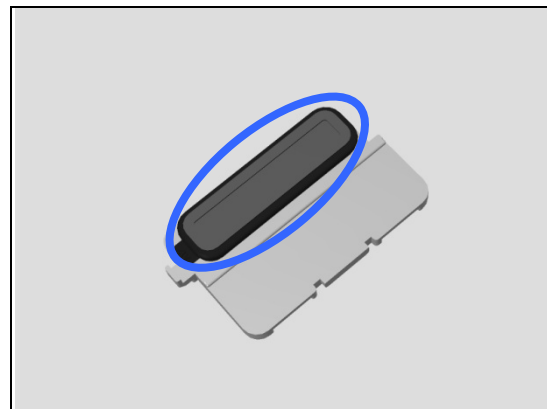
Action:
1. If not assembled well – replace the Adhesive WR Speaker and Loudspeaker.



Problem Areas: Speaker

Check:

Inspect if the Loudspeaker sheet on the Cap Speaker Sub Assy.



Action:

1. If not assembled well or damaged – replace the Cap Speaker Sub Assy and Loudspeaker.

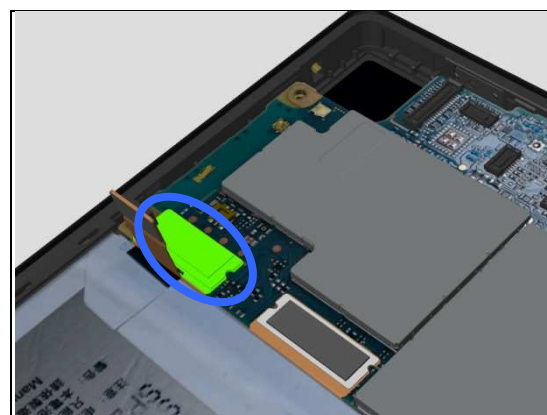


Check:

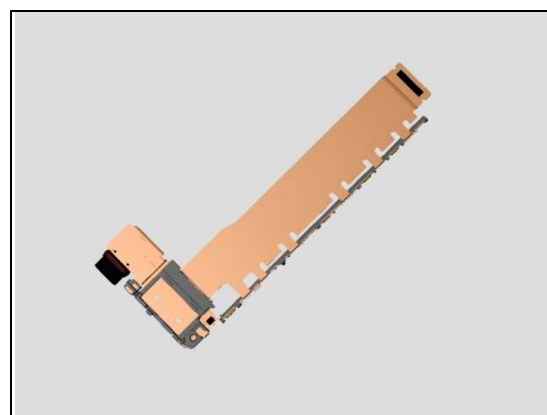
Inspect the BtB connector of Relay_U Flex Module to Main PBA.

Action:

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



3. If the Relay_U Flex Module is damaged – replace it.
4. Replace Main PBA.



Problem Areas

1.7 Earphone

1.7.1 Top Speaker

Check:

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

Action:

1. If clogged – clean it.

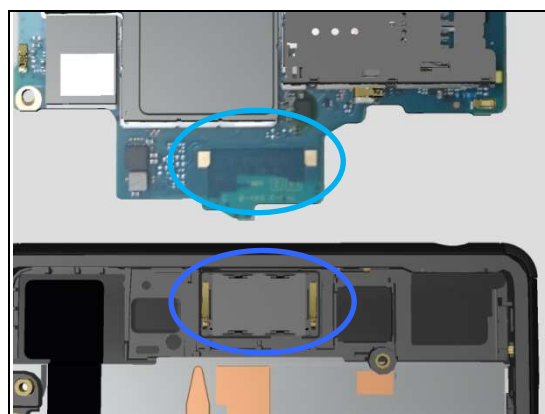


Check:

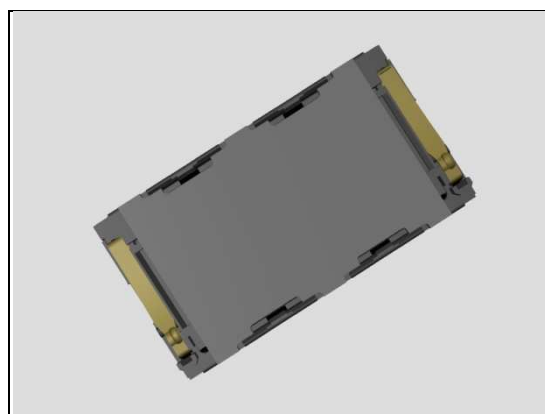
Inspect the contact pads on the Main PBA and the contact pins on the Top Speaker.

Action:

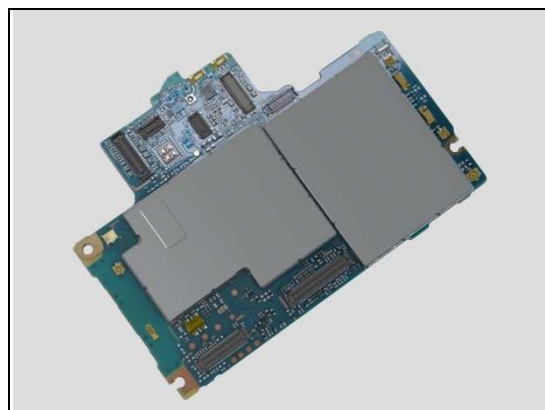
1. If dirty – clean them.



2. If the contact pins of the Top Speaker or the Top Speaker are damaged – replace it.



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.

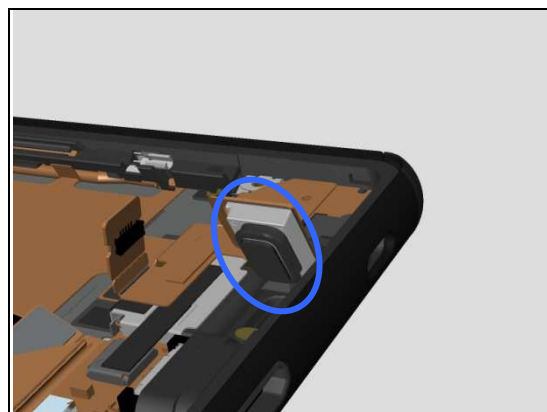


Check:

Inspect if the Cap Mic 1st Sub Assy is assembled well into its cavity.

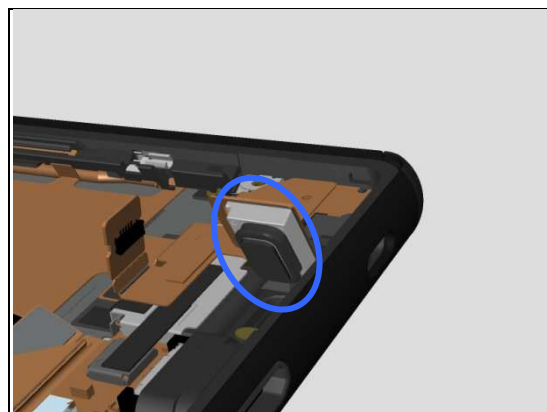
Action:

1. If not assembled well – reassemble it.



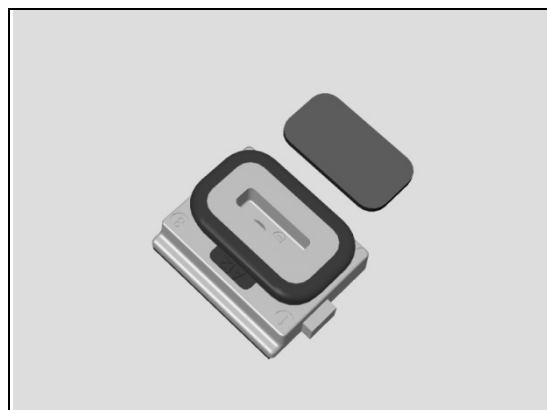
Check:

Inspect if the Cap Mic 1st Sub Assy and Sheet WR Mic 1st is assembled well.



Action:

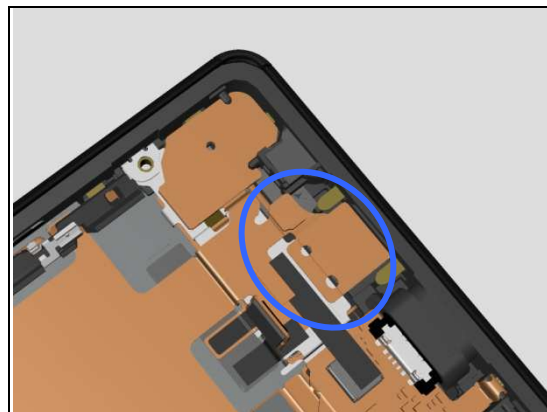
1. If not assembled well or damaged – replace the Cap Mic 1st Sub Assy and Sheet WR Mic 1st.



Problem Areas: Microphone

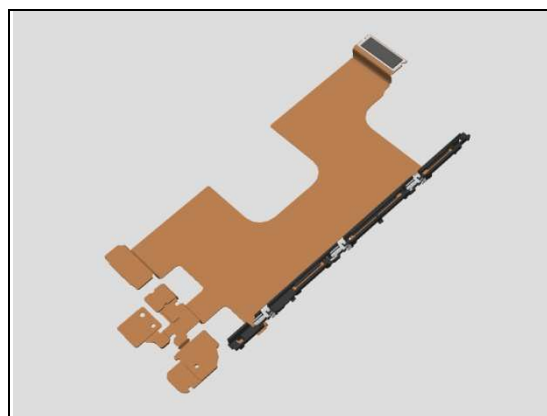
Check:

Inspect the Relay_L Flex Module.



Action:

If the Relay_L Flex Module is damaged – replace Relay_L Flex Module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.

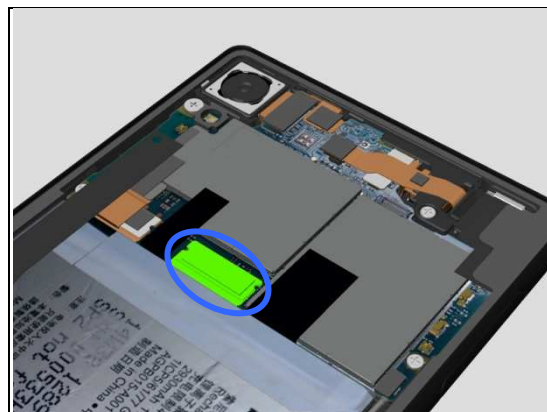


Check:

Inspect the BtB connector of Relay_L Flex Module to Main PBA.

Action:

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



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.

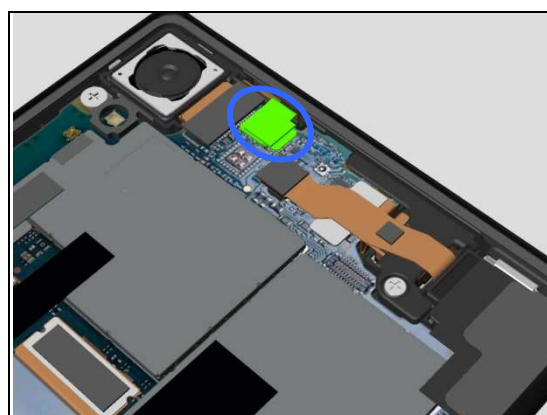


Check:

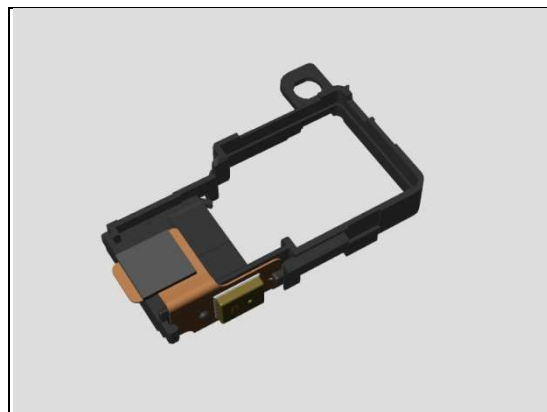
Inspect the BtB connector of Top Flex Module to Main PBA.

Action:

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



3. If the Top Flex Module is damaged – replace it.
4. Replace Main PBA.



Problem Areas

1.9 Vibrator

1.9.1 Vibrator not generating alerts

Check:

Inspect the Vibrator connector and assembly of Vibrator

Action:

1. If the Vibrator is not assembled well – reassemble it
2. If the connector is not properly connected – disconnect and reconnect it.
3. If the connector is dirty or oxidized – clean it.

4. If the connector or wires of vibrator or vibrator itself is damaged – replace the Vibrator.

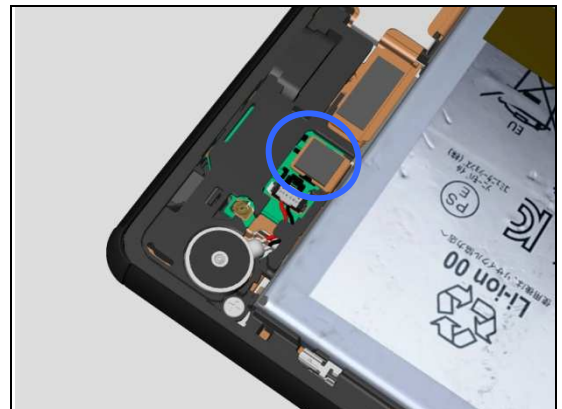
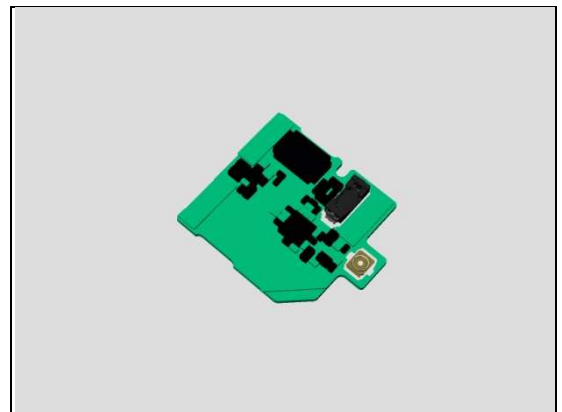
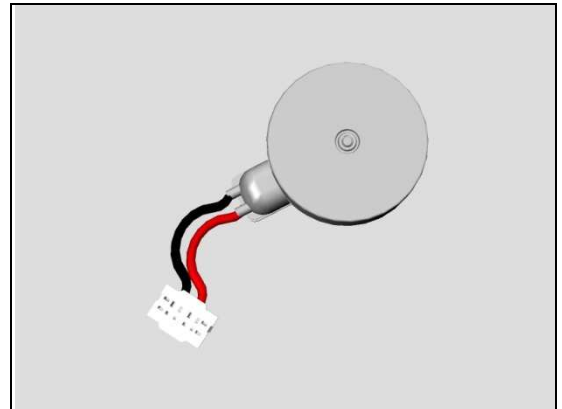
3. If the connector on the Sub PBA is damaged – replace the Sub PBA.

Check:

Inspect the BtB connector of Relay_L Flex module to the Sub PBA.

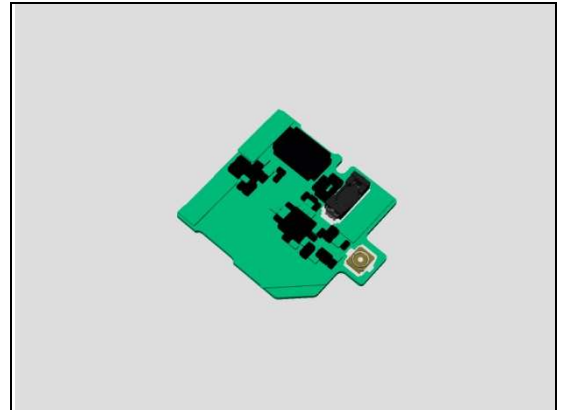
Action:

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

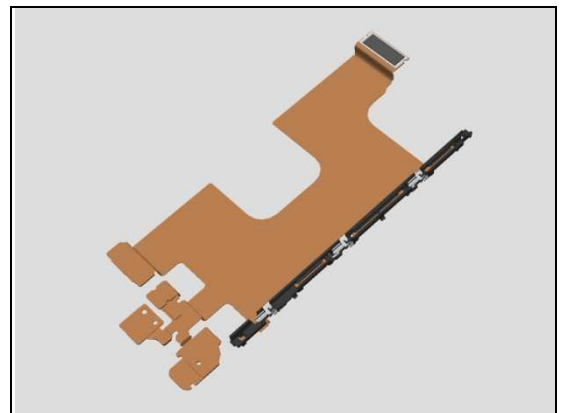


Problem Areas: Vibrator

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



4. If the Relay_L Flex module is damaged – replace Relay_L Flex Module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.

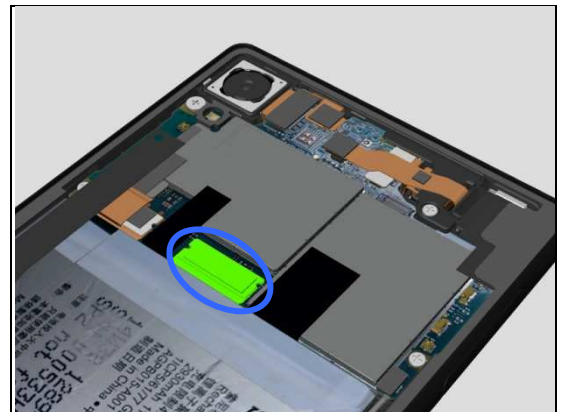


Check:

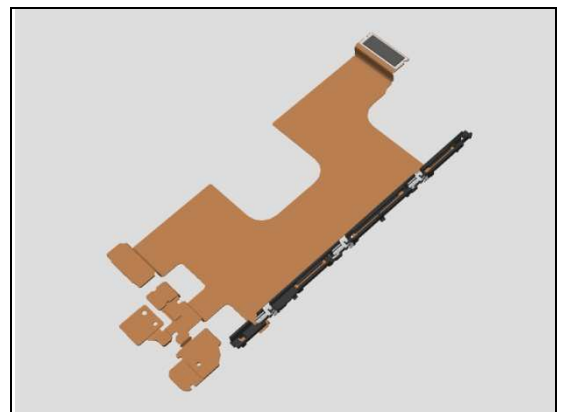
Inspect the BtB connector of Relay_L Flex Module to Main PBA.

Action:

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



3. If the Relay_L Flex Module is damaged – replace Relay_L Flex Module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.
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 Panel Rear.

Check:

Inspect the BtB connector of Main Camera to Main PBA.

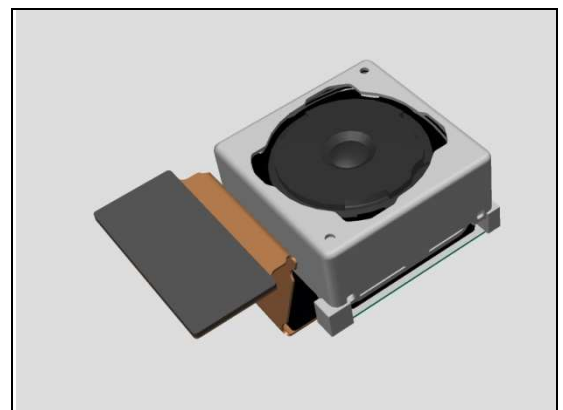
Action:

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.

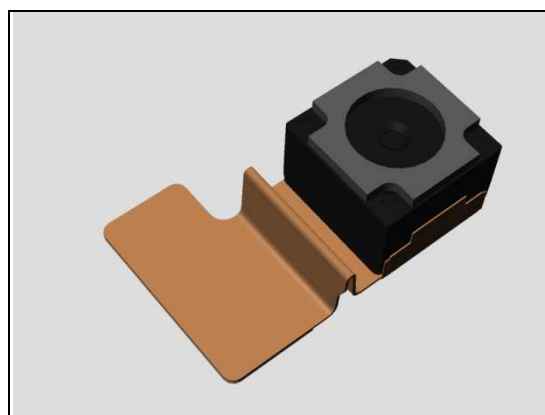
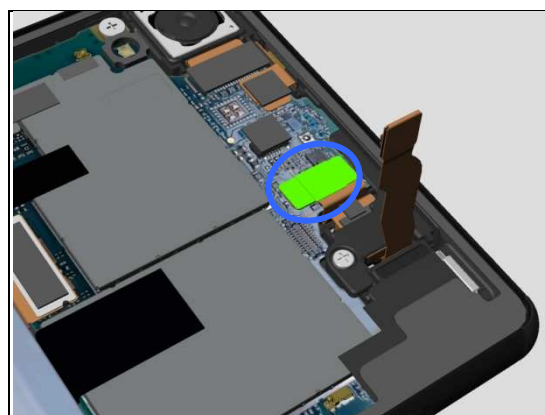
Action:

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.

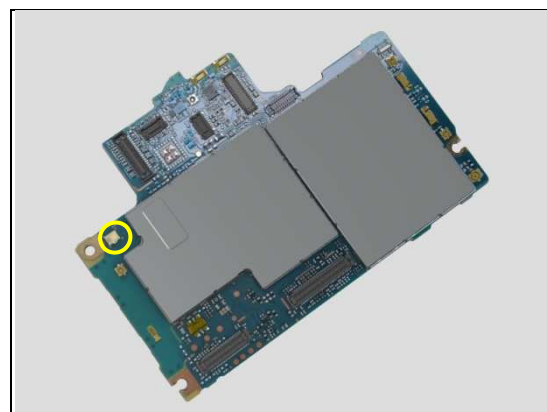
Check:

Inspect the Flash LED on Main PBA.

Action:

1. If dirty – clean it.

2. Replace Main PBA.



Problem Areas

1.12 Bluetooth and WLAN 2.4GHz

1.12.1 Bluetooth or WLAN 2.4GHz connection failure

Check:

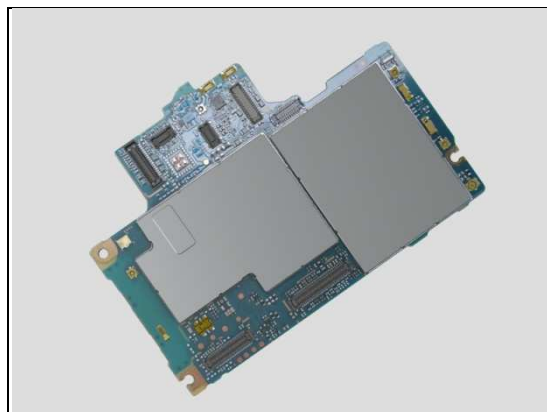
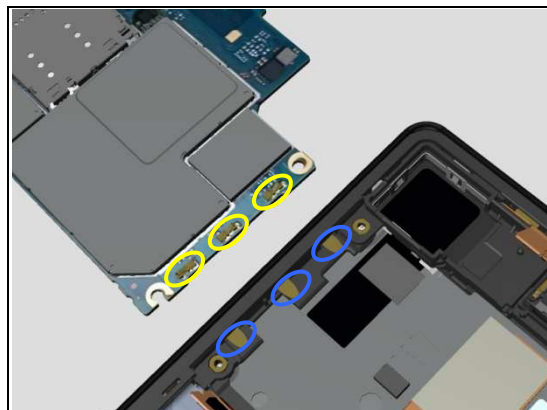
Inspect the WLAN contact pads on Display Frame Assy and the contact pins on main PBA.

Action:

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

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

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



Problem Areas

1.13 WLAN 5GHz

1.13.1 WLAN 5GHz connection failure

Check:

Inspect the WLAN contact pad on Antenna WLAN and the contact pin on main PBA.

Action:

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

2. If the contact pad on Antenna WLAN is damaged – replace the on Antenna WLAN.

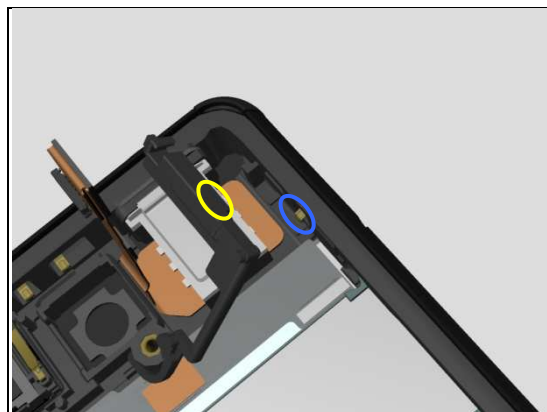
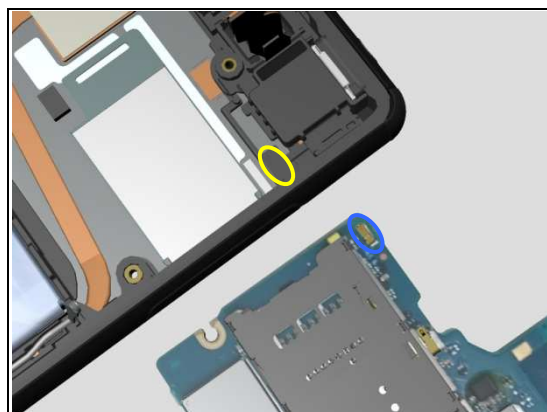
3. If the contact pin on Main PBA is damaged – replace Main PBA.

Check:

Inspect the WLAN contact pad on Antenna WLAN and the contact pin on Display Frame Assy.

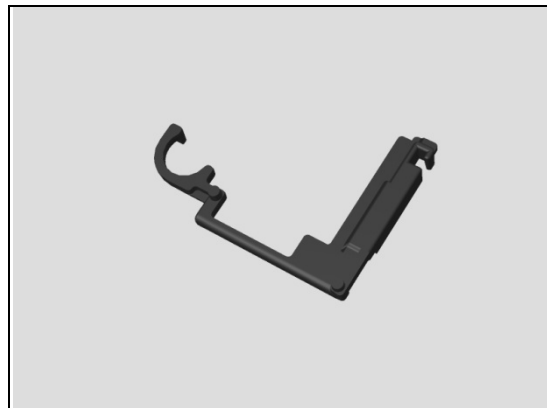
Action:

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



Problem Areas: WLAN 5GHz

2. If the contact pad on Antenna WLAN is damaged – replace the on Antenna WLAN.



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



Problem Areas

1.14 NFC

1.14.1 NFC malfunctions

Check:

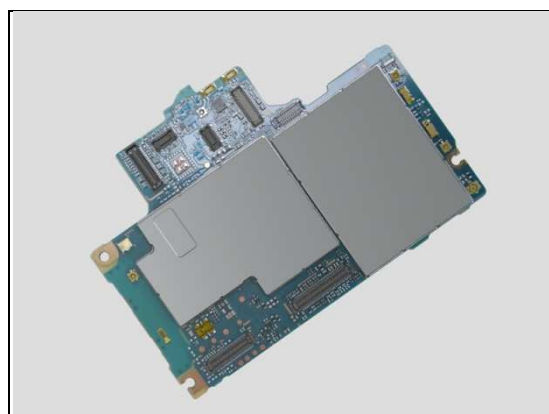
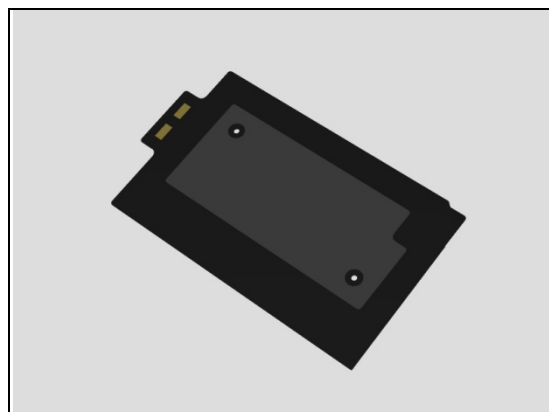
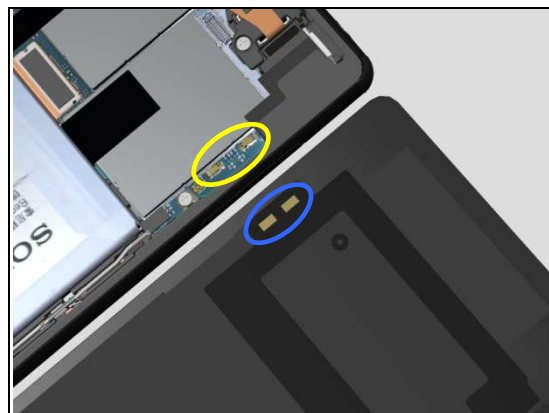
Inspect the NFC antenna contact pads on Panel Rear and the contact pins on Main PBA.

Action:

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

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

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 Antenna Diversity contact pads and the contact pins on main PBA.

Action:

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

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

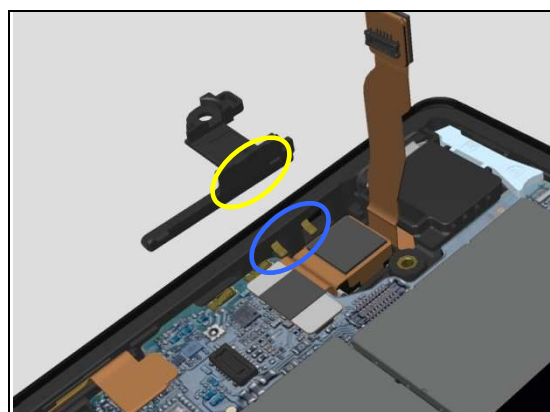
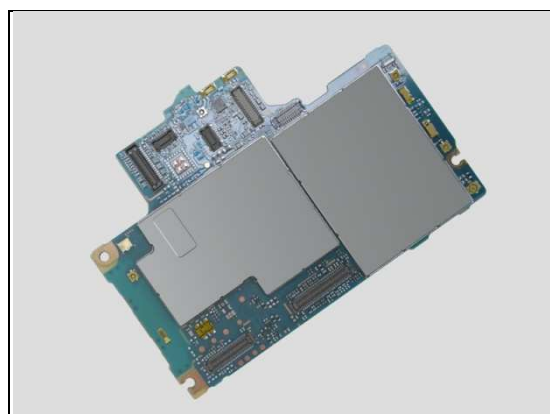
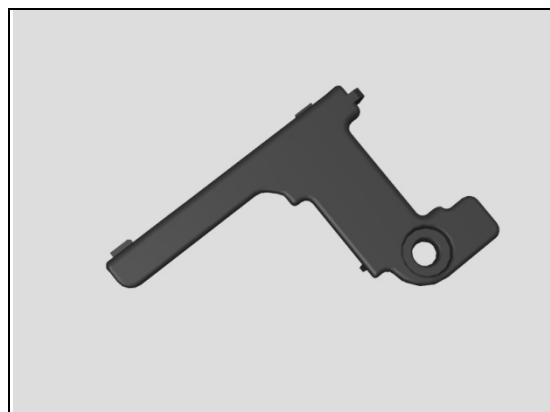
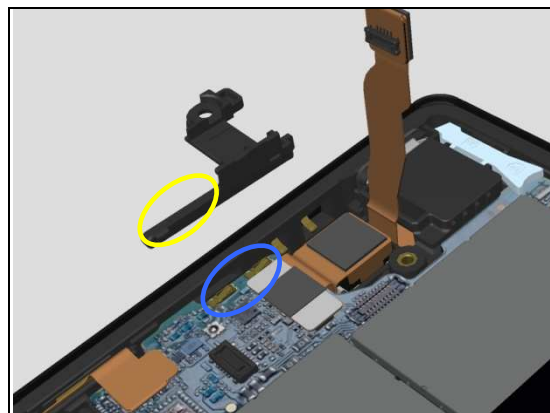
3. If the contact pins on main PBA are damaged – replace Main PBA.

Check:

Inspect the Antenna Diversity contact pads and the contact pins on Display Frame Assy.

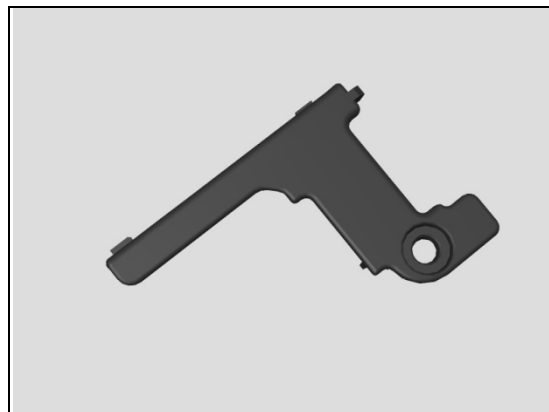
Action:

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



Problem Areas: GPS

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



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



Problem Areas

1.16 Compass

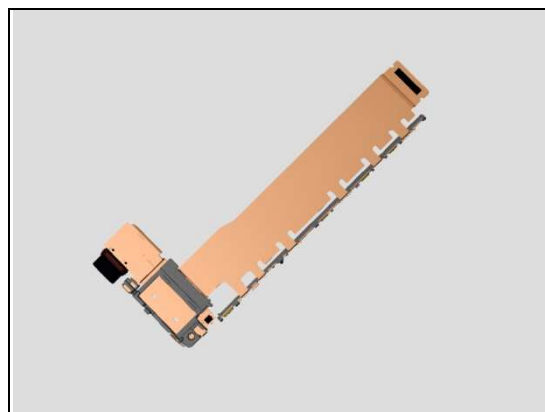
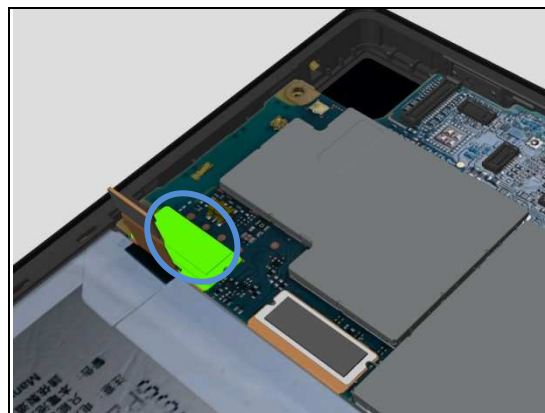
1.16.1 Compass fails

Check:

Inspect the BtB connector of Relay_U Flex module to Main PBA.

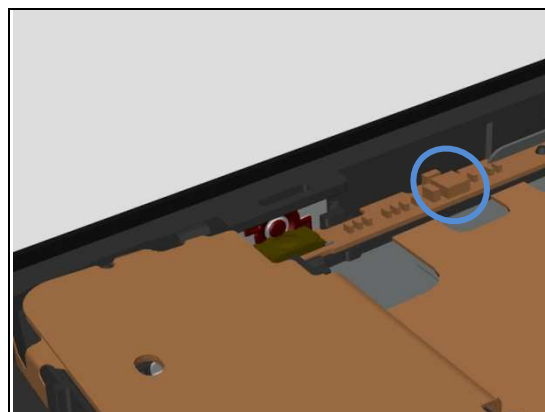
Action:

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



3. If the Relay_U Flex Module is damaged – replace it.

4. Replace Main PBA.



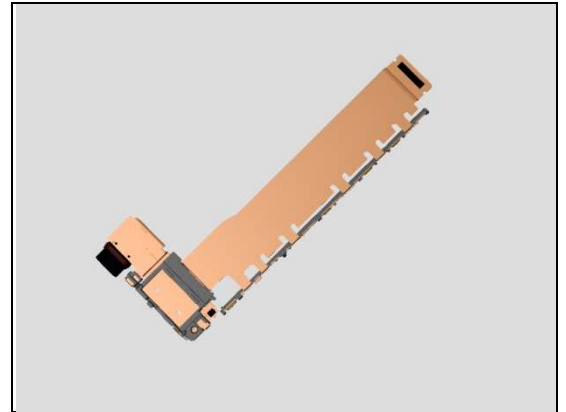
Check:

Inspect the compass chipset on the Relay_U Flex Module.

Problem Areas: Compass

Action:

1. If the compass chipset is damaged – replace the Relay_U Flex 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

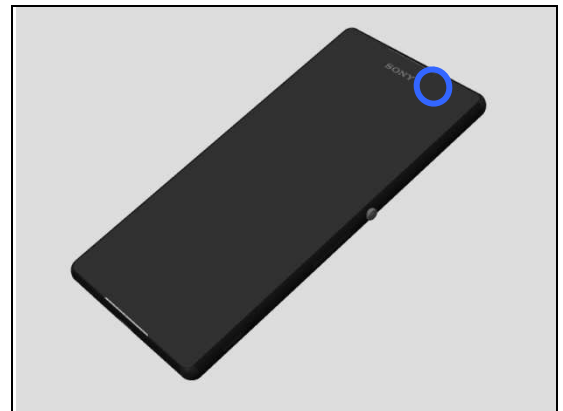
1.19.1 Light Sensor malfunctions

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.

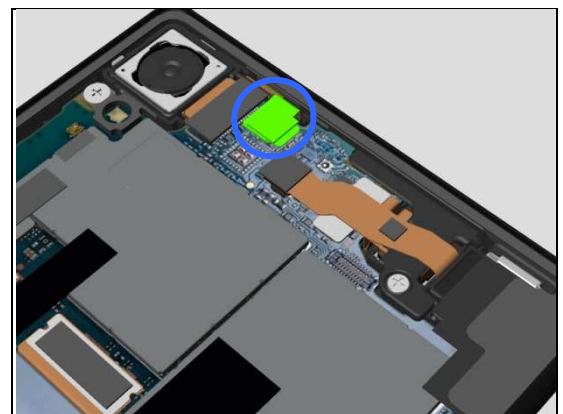


Check:

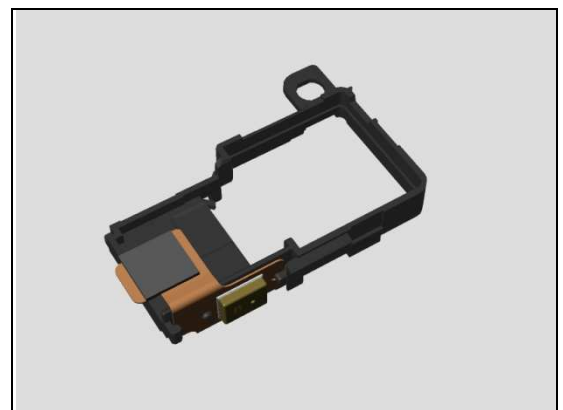
Inspect the BtB connector of Top Flex Module to Main PBA.

Action:

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



3. If the Top Flex Module is damaged – replace it.
4. 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.

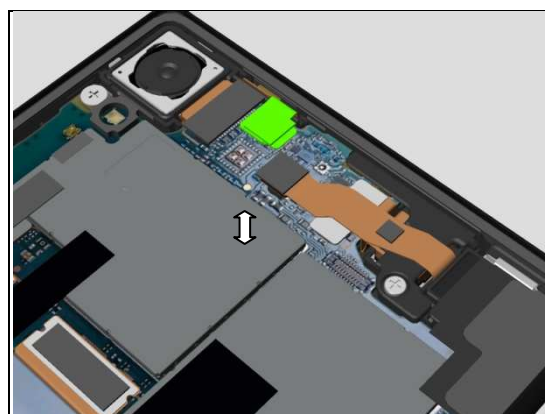


Check:

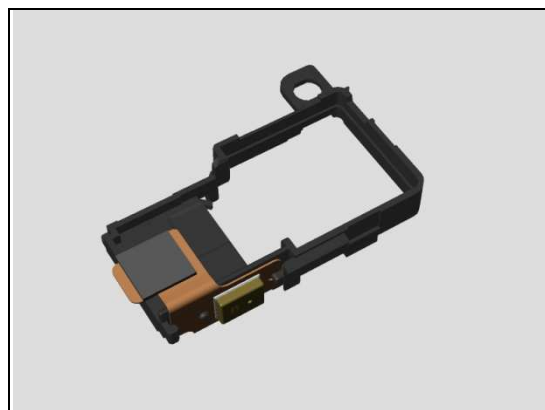
Inspect the BtB connector of Top Flex Module to Main PBA.

Action:

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



3. If the Top Flex Module is damaged – replace it.
4. 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 SIM/SD.

Action:

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

3. If the Cap SIM/SD is damaged – replace it.

Run the Water Resistance Test again!



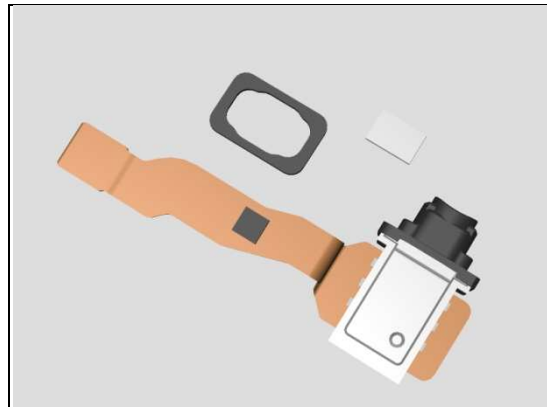
Check:

Inspect the Audio Jack hole.

Action:

1. If not assembled well – replace the Adhesive WP Audio Jack to reassemble Audio Jack.
2. If damaged – replace the Spacer Audio Jack, Audio Jack and Adhesive WP Audio Jack.

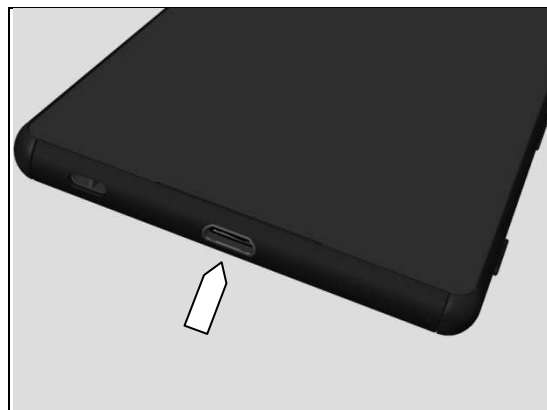
Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

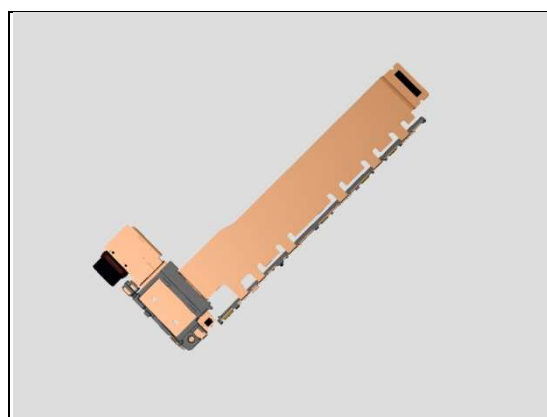
Inspect the USB connector.



Action:

1. If Relay_U Flex module is not properly assembled – reassemble it
2. If Relay_U Flex 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 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!



Check:

Inspect the edge of Panel Rear for damage and gap and Inspect the flash LED window.



Action:

1. If the edge of Panel Rear has gap – reassemble Panel Rear.
2. If Panel Rear is damaged or flash LED window has gap – replace Panel Rear, NFC Antenna and RF top.

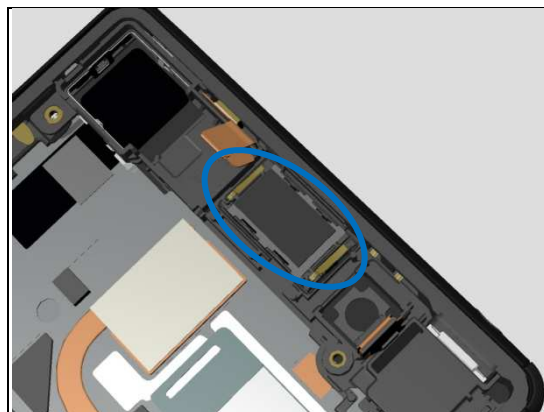
Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

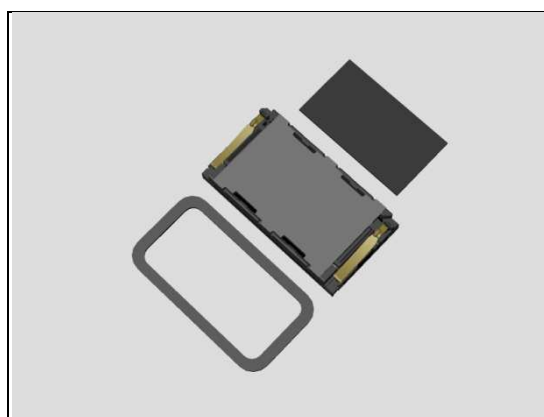
Inspect the Top Speaker.



Action:

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

Run the Water Resistance Test again!



Check:

Inspect assembly of Loudspeaker and Cap Speaker Sub Assy.



Action:

1. If not properly assembled – reassemble it into its cavity.
2. If the Loudspeaker is not assembled well onto Cap Speaker Sub Assy – replace the Loudspeaker and Adhesive WP Speaker
3. If damaged– replace the Loudspeaker and Cap Speaker Sub Assy.

Run the Water Resistance Test again!



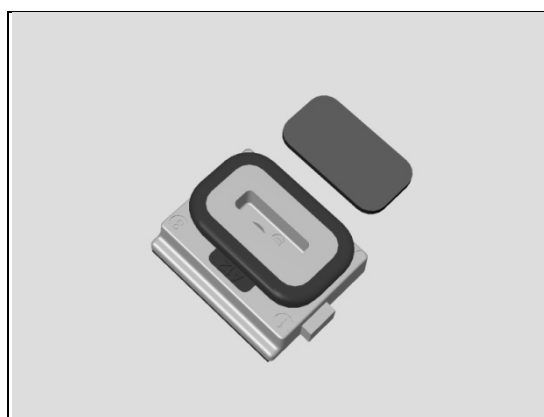
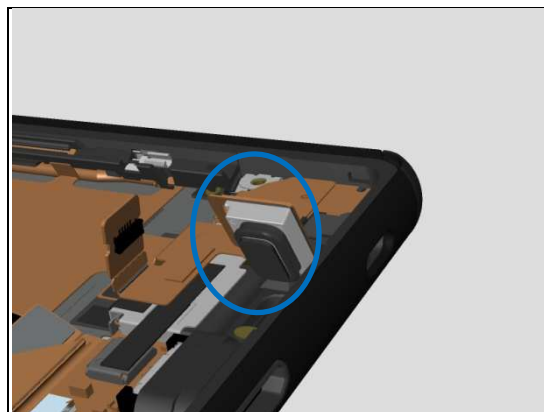
Problem Areas: Water Resistance

Check:

Inspect assembly of the Relay_L Flex module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.

1. If not properly assembled – reassemble it into its cavity.
2. If the Sheet WR Mic 1st is not assembled well onto Cap Mic 1st Sub Assy – replace the Sheet WR Mic 1st.
3. If the Cap Mic 1st Sub Assy is not assembled well onto Relay_L Flex module – replace the Sheet WR Mic 1st and Cap Mic 1st Sub Assy.
4. If damaged– replace the Sheet WR Mic 1st and Cap Mic 1st Sub Assy.

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 (E6553)

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.

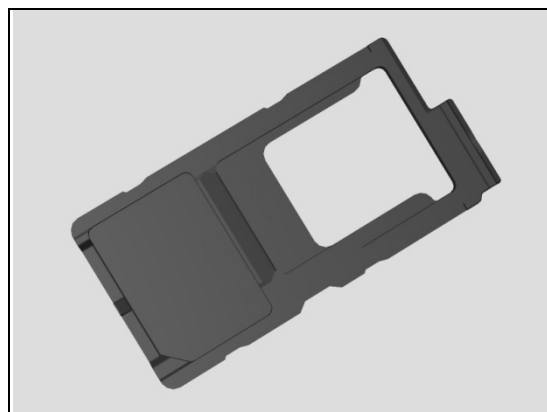


Check:

Inspect the memory card holder.

Action:

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

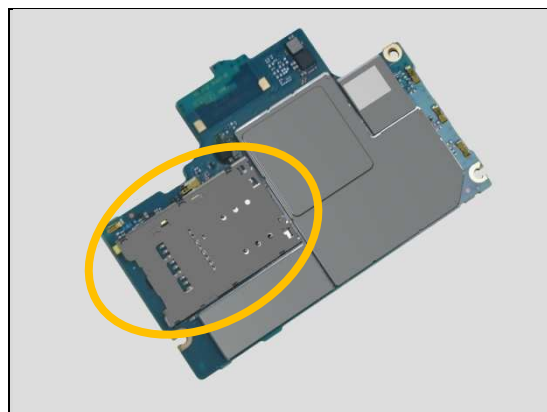


Check:

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 (E6533)

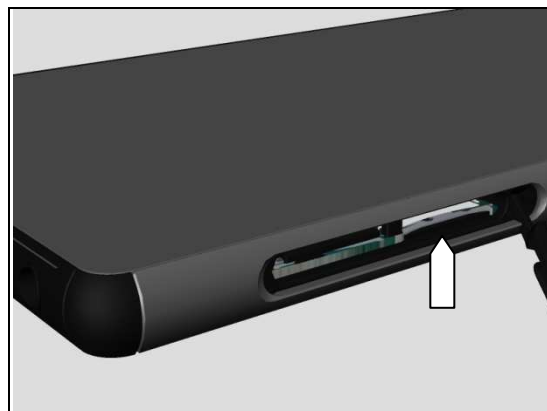
1.26.1 Memory Card not detected

Check:

Inspect that if a memory card is properly inserted.

Action:

If not properly inserted – insert the memory card correctly.

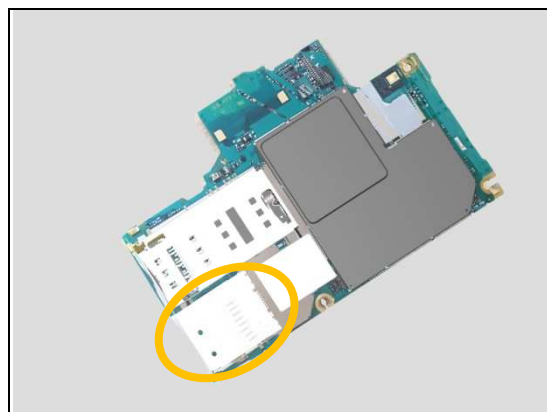


Check:

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.

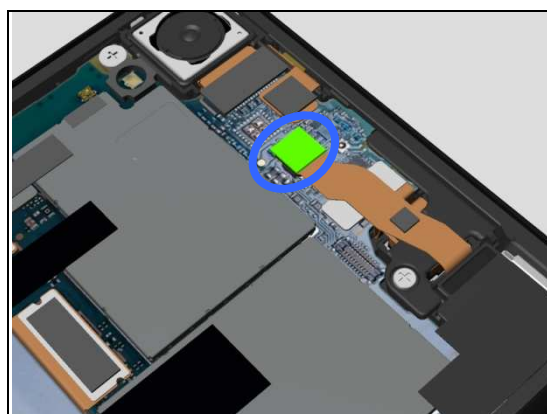


Check:

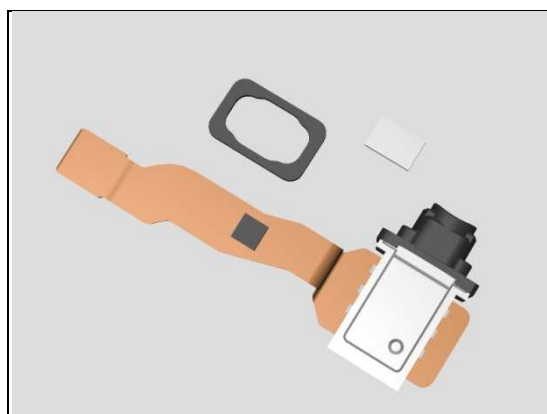
Inspect the BtB connector of Audio Jack to Main PBA.

Action:

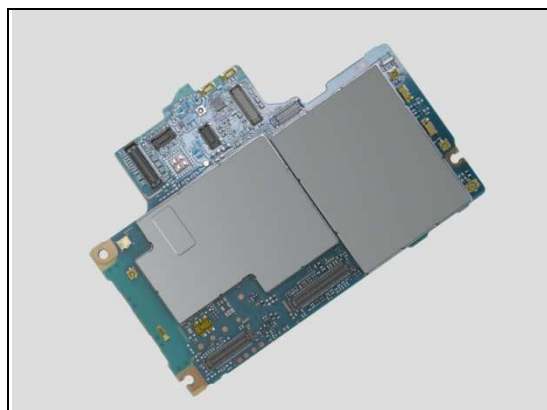
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector or Audio Jack is damaged – replace the Spacer Audio Jack, Audio Jack and Adhesive WP Audio Jack.



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:

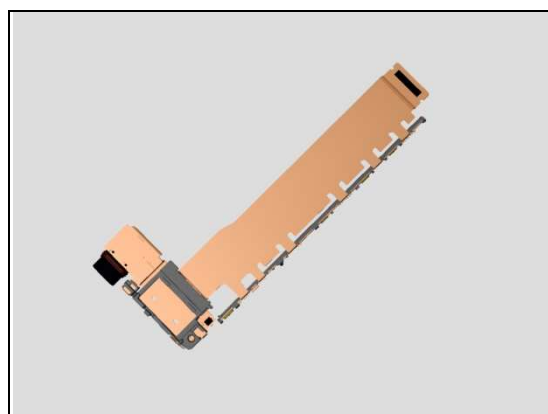
Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.



2. If USB connector damaged – replace Relay_U Flex module.



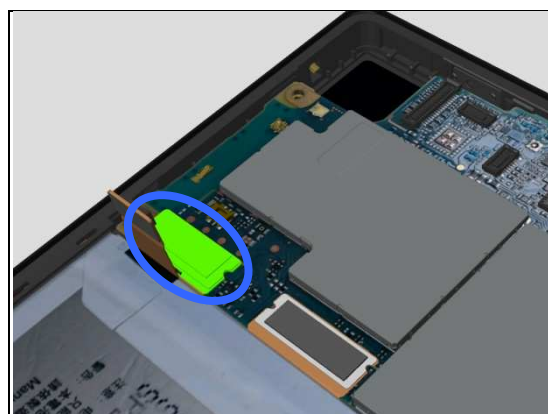
Check:

Inspect the BtB connector of Relay_U Flex module to Main PBA.

Action:

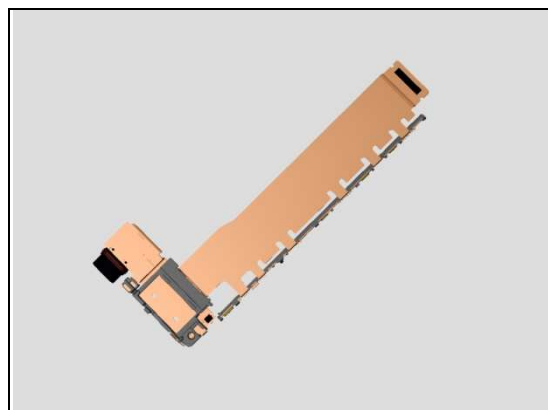
1. If not properly connected – disconnect and reconnect it.

2. If dirty or oxidized – clean it.



3. If Relay_U Flex module is damaged – replace it.

4. Replace Main PBA.



Problem Areas

1.32 Network & Signal

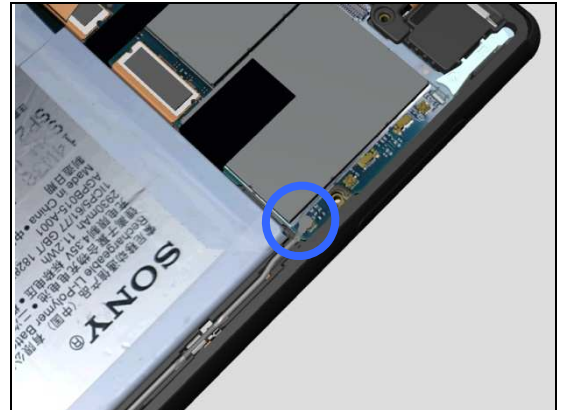
1.32.1 No/Poor signal

Check:

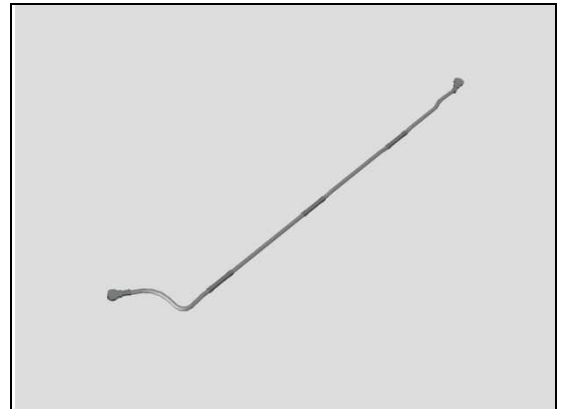
Inspect the RF connector of RF Cable to the Main PBA.

Action:

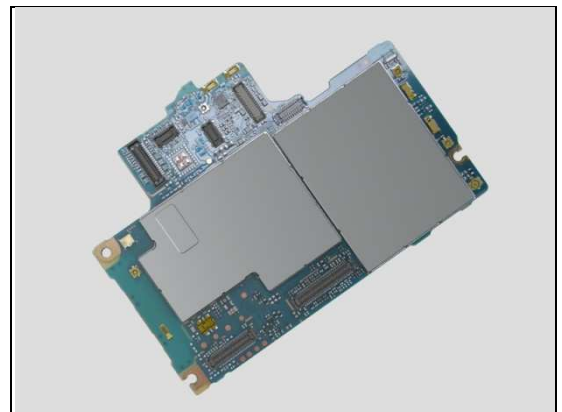
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



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



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

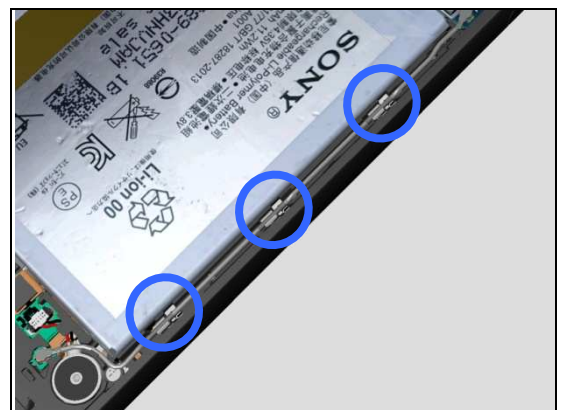


Check:

Inspect if the RF Cable is mounted into its clips.

Action:

If not properly assembled – reassemble it.



Problem Areas: Network & Signal

Check:

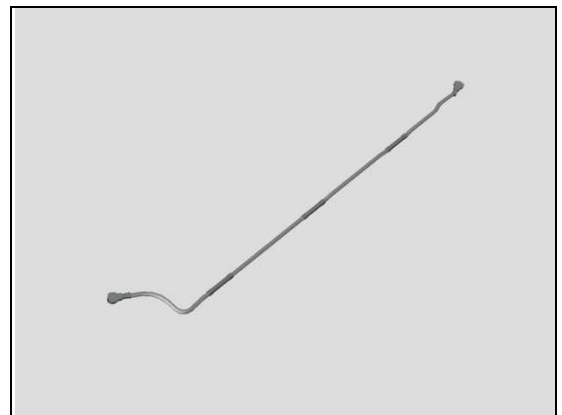
Inspect the RF connector of RF Cable to the Sub PBA.

Action:

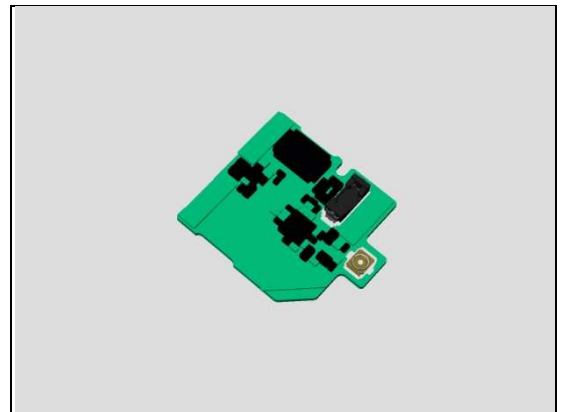
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



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



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

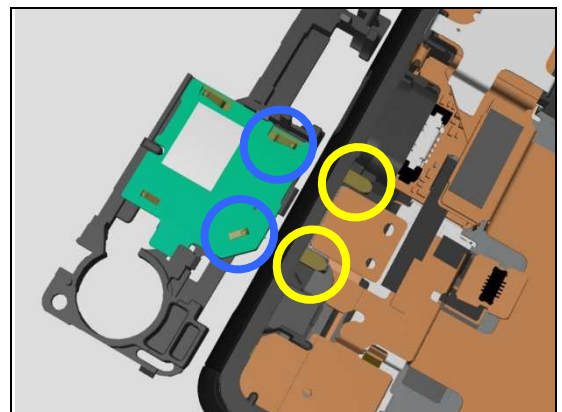


Check:

Inspect the contact springs on the Sub PBA and contact pads on the Display Frame Assy.

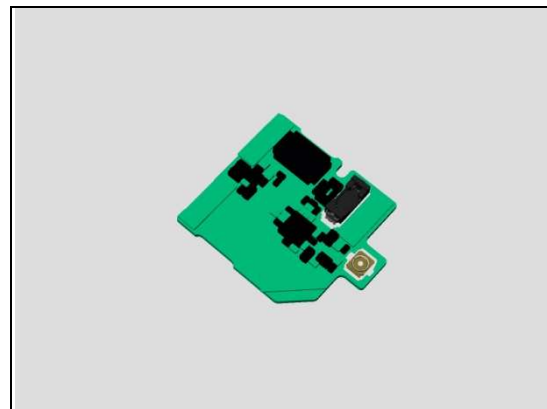
Action:

1. If not properly contacted – reassemble the Sub PBA and Holder Vibrator.
2. If dirty or oxidized – clean them



Problem Areas: Network & Signal

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



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

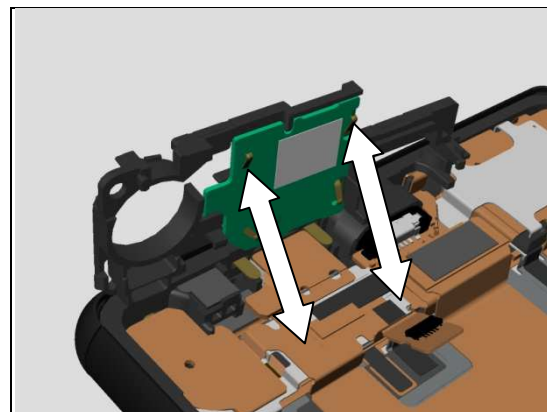


Check:

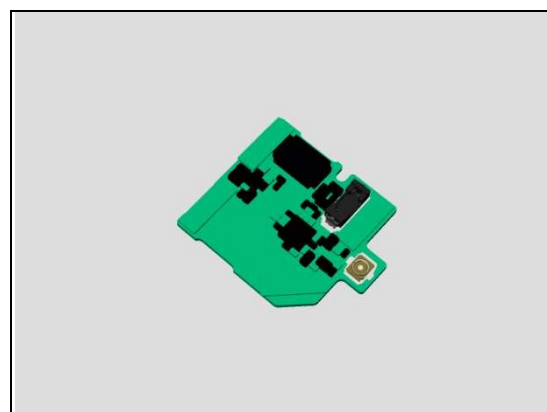
Inspect if the contact spring on the Sub PBA is connected to the contact pad on the Relay_L Flex module and if the other contact spring is connected to the Shield FPC LCD Sub Assy.

Action:

1. If not properly contacted – reassemble the Sub PBA and Holder Vibrator.
2. If dirty or oxidized – clean them



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



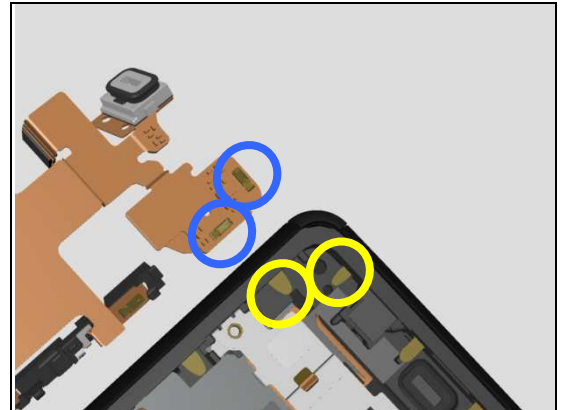
Problem Areas: Network & Signal

Check:

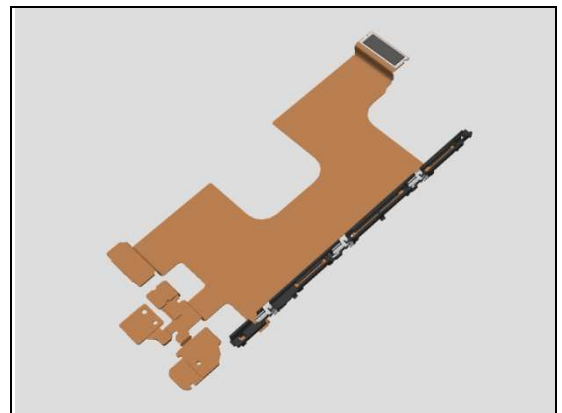
Inspect the contact springs on the Relay_L Flex module and contact pads on the Display Frame Assy.

Action:

1. If not properly contacted – reassemble the Relay_L Flex module.
2. If dirty or oxidized – clean them



3. If the contact springs or Relay_L Flex module are damaged – replace the Relay_L Flex module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.



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

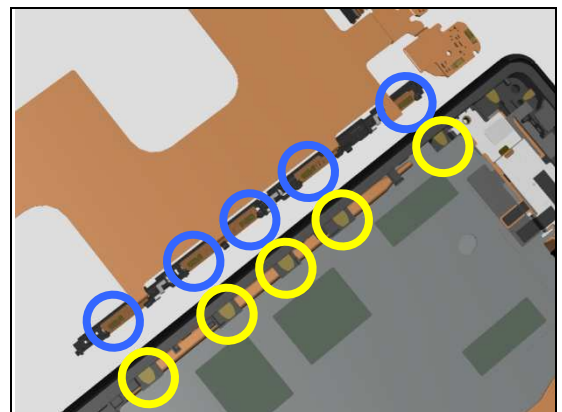


Check:

Inspect the contact springs on the Relay_L Flex module and contact pads on the Display Frame Assy.

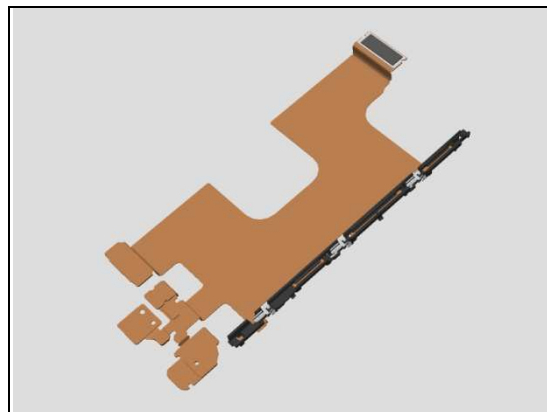
Action:

1. If not properly contacted – reassemble the Relay_L Flex module.
2. If dirty or oxidized – clean them



Problem Areas: Network & Signal

3. If the contact springs on Relay_L Flex module are damaged – replace the Relay_L Flex module, Cap Mic 1st Sub Assy and Sheet WR Mic 1st.



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

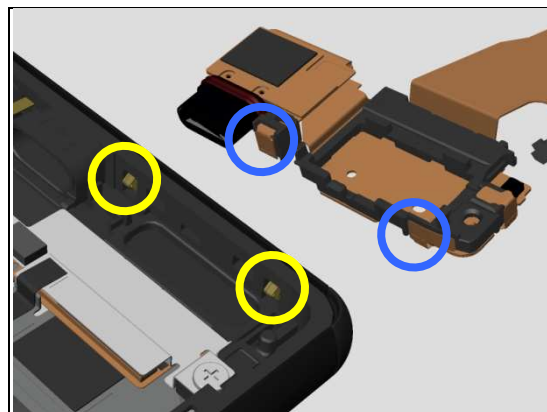


Check:

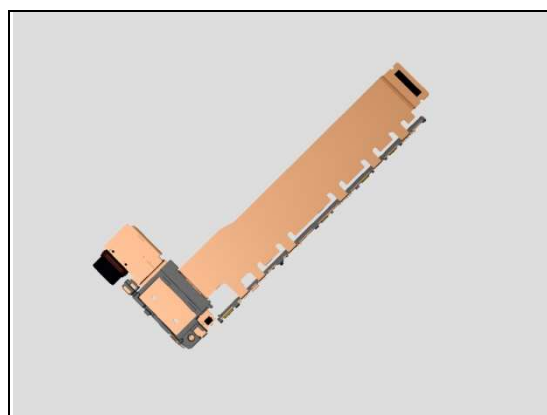
Inspect the contact pads on the Relay_U Flex module and contact springs on the Display Frame Assy.

Action:

1. If not properly contacted – reassemble the Relay_U Flex module.
2. If dirty or oxidized – clean them



3. If the contact pads on Relay_U Flex module are damaged – replace the Relay_U Flex module.



Problem Areas: Network & Signal

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

Check:

Inspect the contact pads on the Relay_U Flex module and contact springs on the Display Frame Assy.

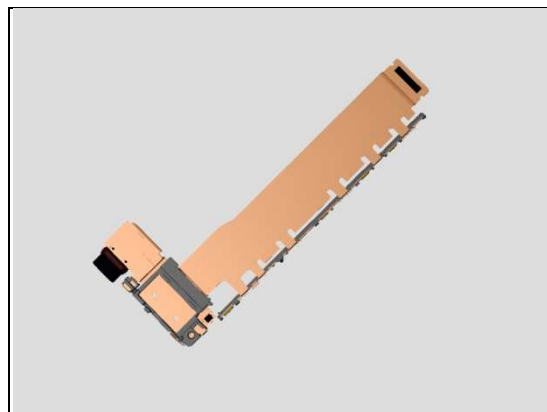
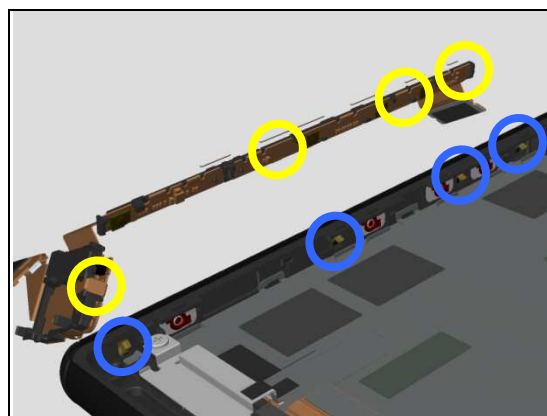
Action:

1. If not properly contacted – reassemble the Relay_U Flex module.
2. If dirty or oxidized – clean them

3. If the contact pads on Relay_U Flex module are damaged – replace the Relay_U Flex module.

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

5. Replace Main PBA.



Problem Areas: Network & Signal

Check:

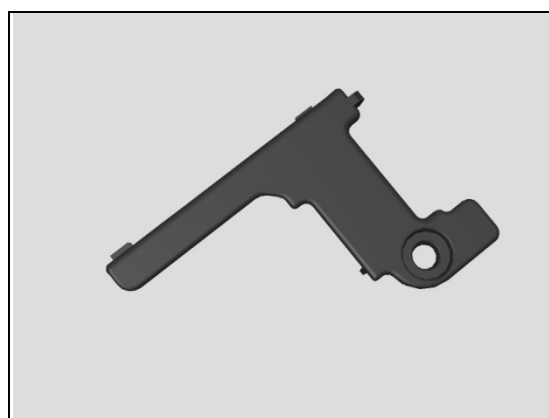
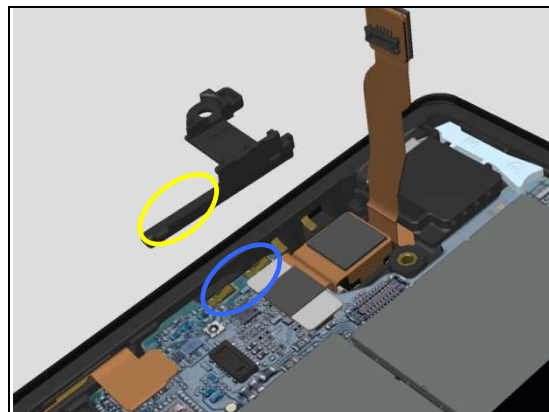
Inspect the Antenna Diversity contact pads and the contact pins on main PBA.

Action:

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

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

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

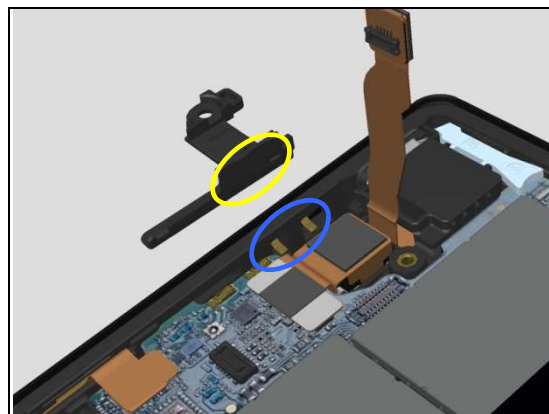


Check:

Inspect the Antenna Diversity contact pads and the contact pins on Display Frame Assy.

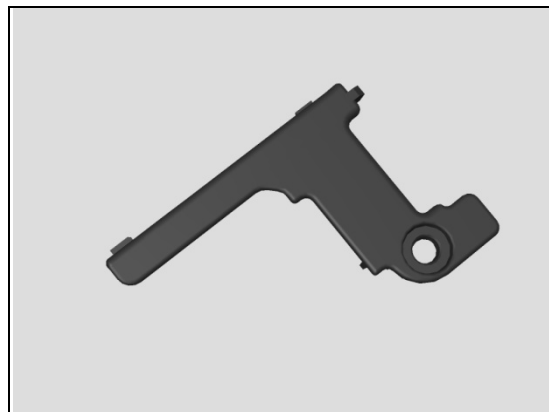
Action:

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



Problem Areas: Network & Signal

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



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



Problem Areas

1.33 SIM (E6553)

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.

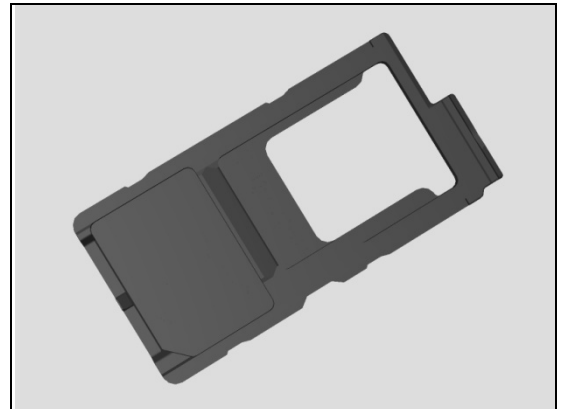


Check:

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

Action:

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



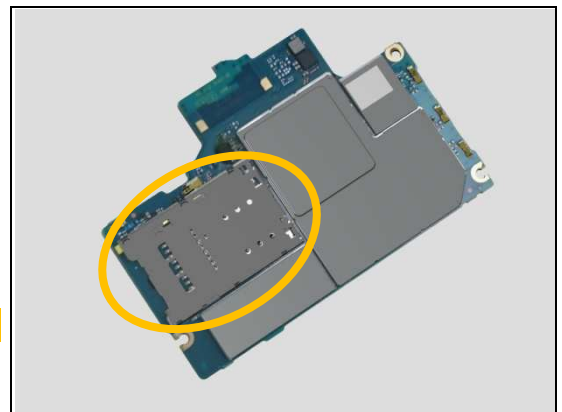
Check:

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 (E6533)

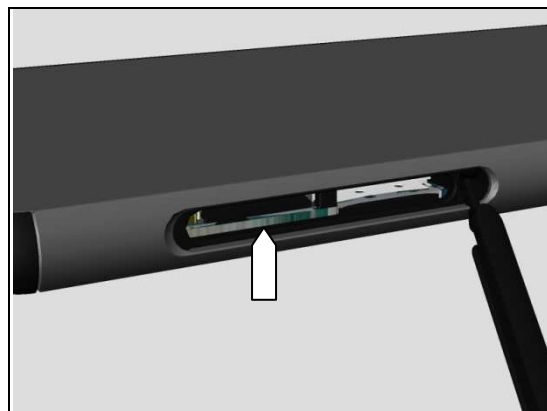
1.34.1 SIM not detected

Check:

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

Action:

If dirty or clogged – clean the external port.

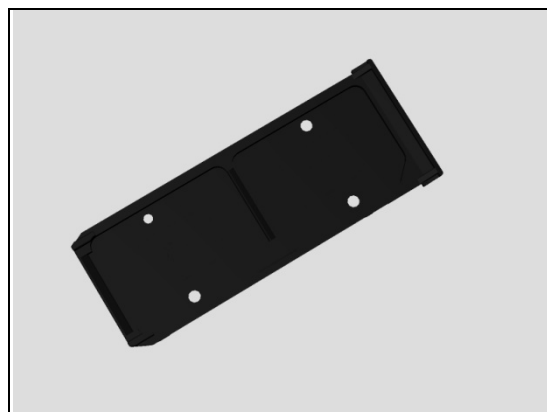


Check:

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

Action:

1. If not properly assembled – reassemble it.
2. If damaged – Replace Tray Dual Nano SIM DS.

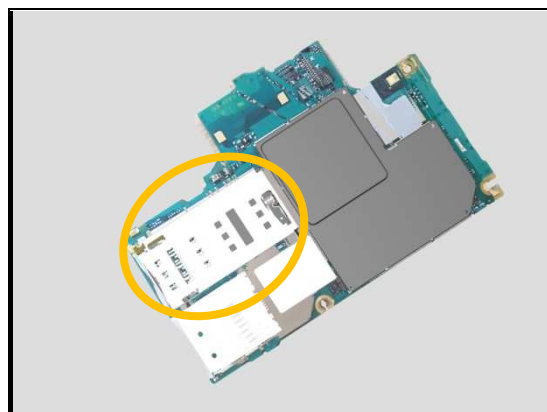


Check:

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:

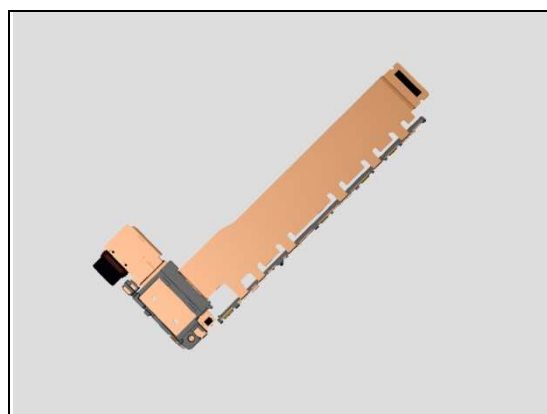
Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.



2. If USB connector is damaged – replace Relay_U Flex module.

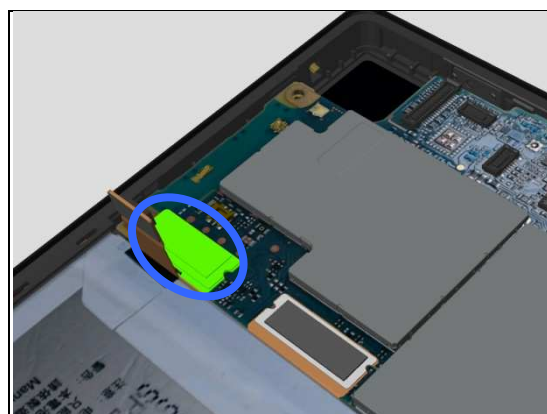


Check:

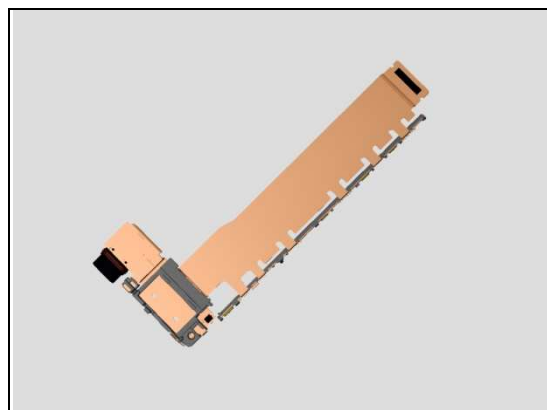
Inspect the BtB connector of Relay_U Flex module to Main PBA.

Action:

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



3. If USB connector is damaged – replace Relay_U Flex module.



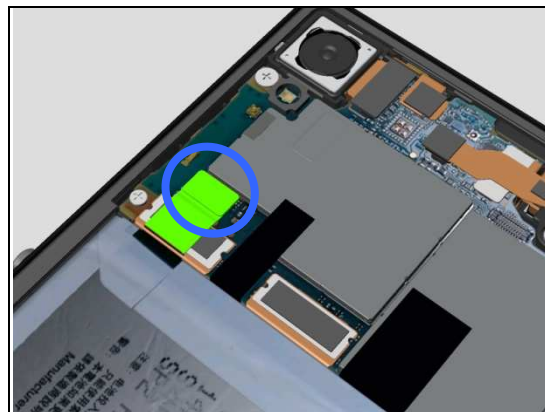
Problem Areas: Charging

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.

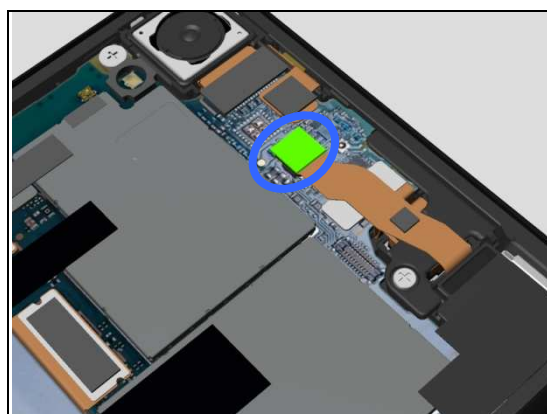


Check:

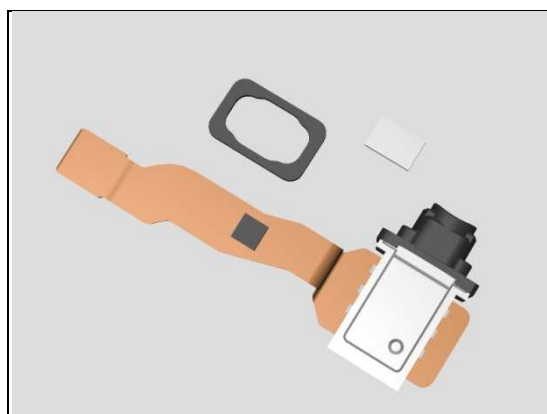
Inspect the BtB connector of Audio Jack to Main PBA.

Action:

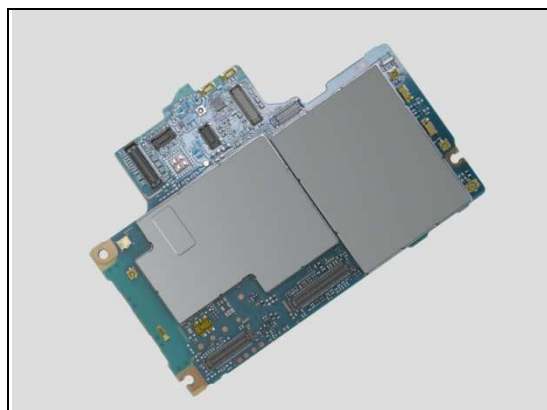
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector or Audio Jack is damaged – replace the Spacer Audio Jack, Audio Jack and Adhesive WP Audio Jack.



4. Replace Main PBA.



Problem Areas

1.37 Data Communication

1.37.1 Data transfer via System Connector fails

Check:

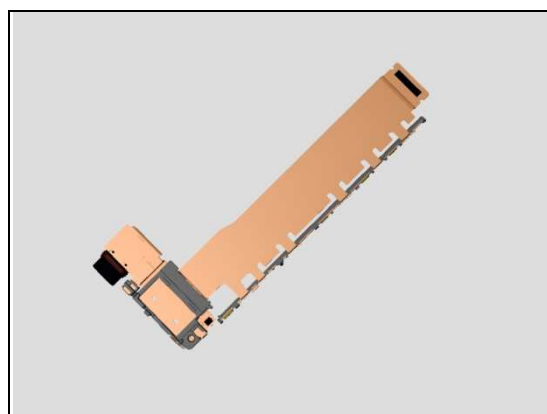
Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.



2. If USB connector is damaged – replace Relay_U Flex module.



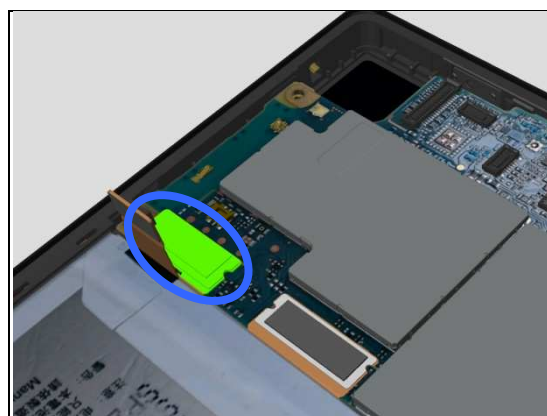
Check:

Inspect the BtB connector of Relay_U Flex module to Main PBA.

Action:

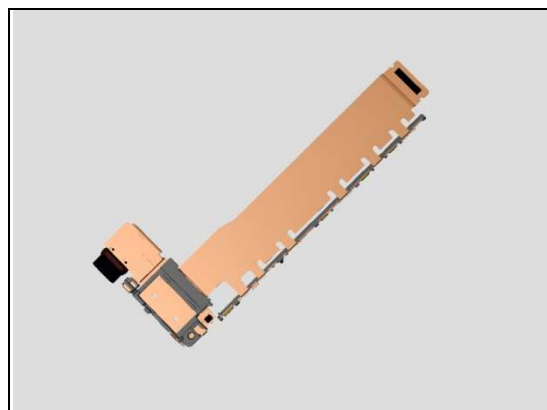
1. If not properly connected – disconnect and reconnect it.

2. If dirty or oxidized – clean it.



3. If Relay_U Flex module is damaged – replace it.

4. Replace Main PBA.



2 Revision History

Rev.	Date	Changes / Comments
1	2015-May-27	Initial release