

Troubleshooting Guide

- mechanical -



ST26i, ST26a

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1 Problem Areas

1.1 Power

1.1.1 Will not power on or will switch off randomly

Check:

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

Action:

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



Check:

Inspect the contact pads on the battery.

Action:

1. If dirty or oxidized – clean the pads.
2. If damaged – replace the battery.



Check:

Inspect the battery contact pins.

Action:

1. If dirty or oxidized – clean the contact pins.
2. If adhesive is detected on the contact pins, use an eraser to gently rub off the adhesive.
3. If damaged – replace board.



Check:

Inspect the on/off key.

Action:

1. Refer to section 1.2.3 'Key On/Off'.
2. Replace board.



Problem Areas

1.2 Keys

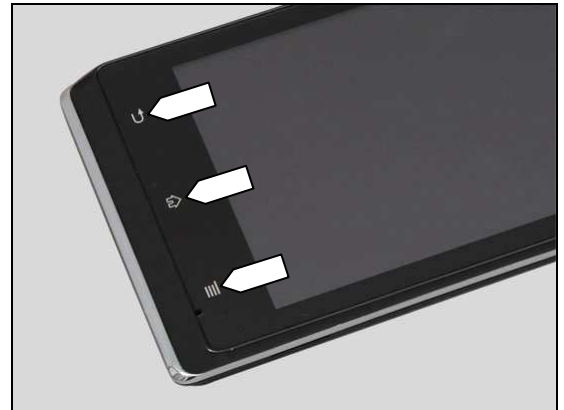
1.2.1 Menu/Home/Back Keys

Check:

Inspect the Menu/Home/Back keys on the Front Cover Display Assembly.

Action:

1. Refer to the section 1.3 'Touch Screen'.
2. Replace board.



1.2.2 Volume Key

Check:

Inspect the external area of the volume key.

Action:

If dirty – clean it.

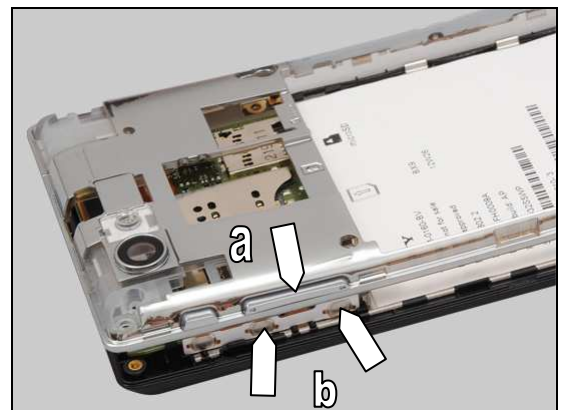


Check:

Inspect the volume key (a) and the volume key push switch (b).

Action:

1. If dirty – clean them.



2. If the volume key is damaged – replace the Side Key.



Problem Areas: Keys

Check:

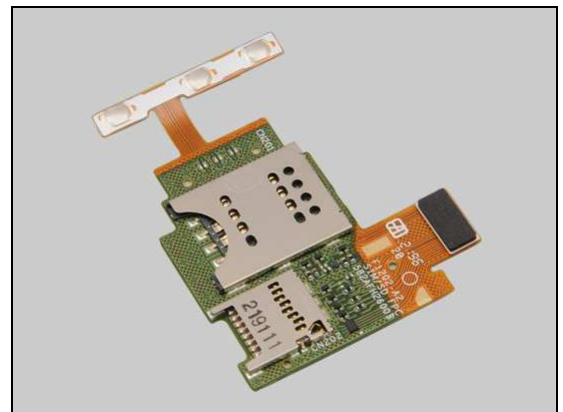
Inspect the BtB connector of the SIM SD Side Key FPC to the main PBA.

Action:

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



3. If the BtB connector or the volume key push switch is damaged – replace the SIM SD Side Key FPC.
4. Replace board.



1.2.3 On/Off Key

Check:

Inspect the external area of the on/off key.

Action:

If dirty – clean it.

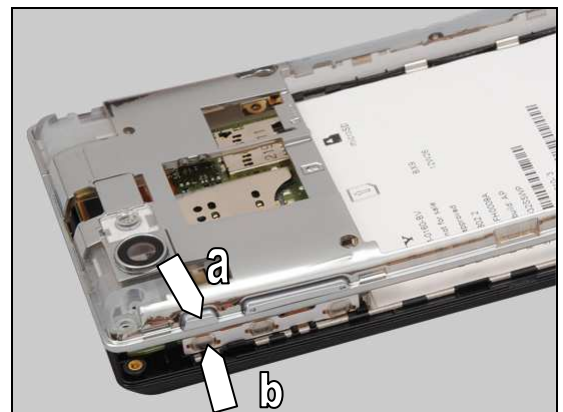


Check:

Inspect the on/off key (a) and the on/off key push switch (b).

Action:

1. If dirty – clean them.



Problem Areas: Keys

2. If the on/off key is damaged – replace the Side Key.

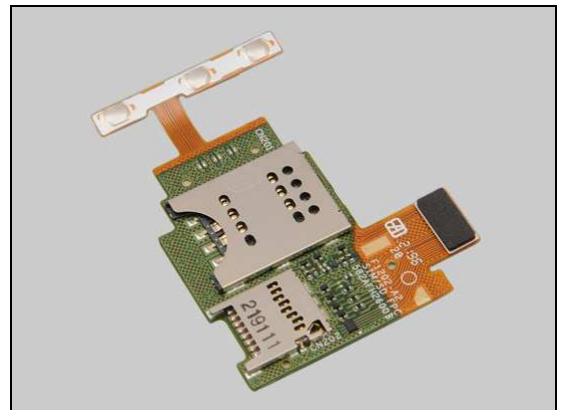
Check:

Inspect the BtB connector of the SIM SD Side Key FPC to the main PBA.

Action:

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

3. If the BtB connector or the on/off key push switch is damaged – replace the SIM SD Side Key FPC.
4. Replace board.



Problem Areas

1.3 Touch Screen

1.3.1 Touch Screen malfunction

Check:

Inspect the touch screen on the Front Cover Display Assembly.

Action:

If dirty – clean it.

If: The end user has complained about unexpected behavior of the touch screen or the touch keys.

Action: Calibrate the Touch Panel 1270-6729 Trouble Shooting Application – mechanical.

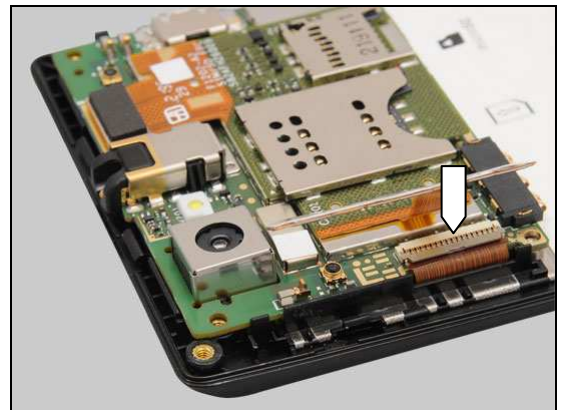


Check:

Inspect the ZIF connector of the Front Cover Display Assembly to the main PBA.

Action:

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

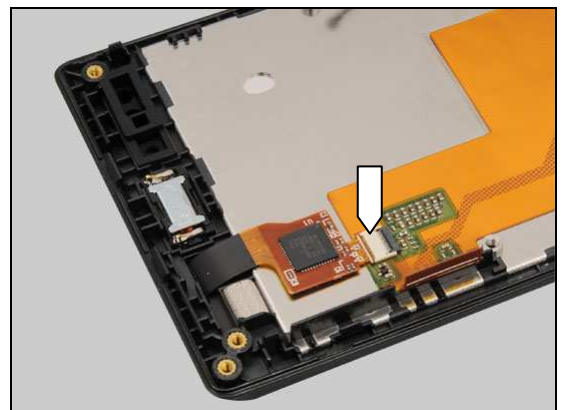


Check:

Inspect the ZIF connector of the touch panel FPC to the display FPC.

Action:

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



3. If the touch screen or the FPC of the Front Cover Display Assembly is damaged – replace the Front Cover Display Assembly.
4. Replace board.

Note: Calibrate the Touch Panel 1270-6729 Trouble Shooting Application – mechanical after replacements of action 3 or action 4.



Problem Areas

1.4 Display

1.4.1 Graphics & Illumination

Check:

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

Action:

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

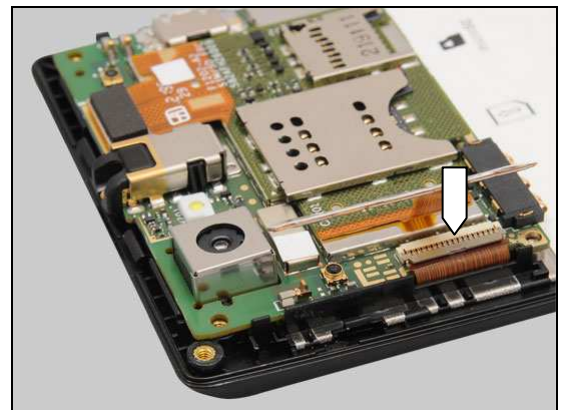


Check:

Inspect the ZIF connector of the Front Cover Display Assembly to the main PBA.

Action:

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



3. If the display or the FPC of the Front Cover Display Assembly is damaged – replace the Front Cover Display Assembly.
4. Replace board.



Problem Areas

1.5 LED/Illumination

1.5.1 LED/Illumination

Check:

Inspect the external window area of the RGB LED on the Front Cover Display Assembly.

Action:

1. If dirty – clean it.



2. If the external window area is damaged – replace the Front Cover Display Assembly.

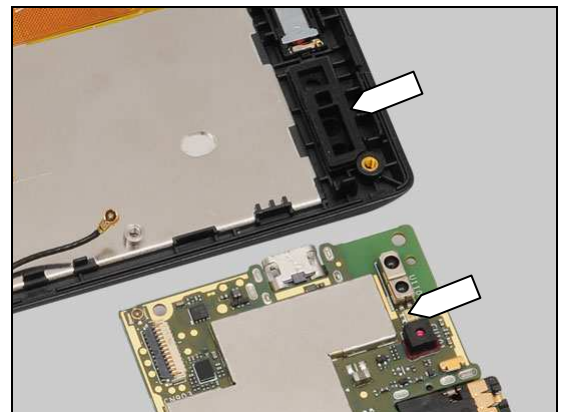


Check:

Inspect the RGB LED on the main PBA and the Proximity rubber on the Front Cover Display Assembly.

Action:

1. If dirty or clogged – clean them.



2. If the Proximity rubber is damaged – replace it.

3. Replace board.



Problem Areas: Illumination

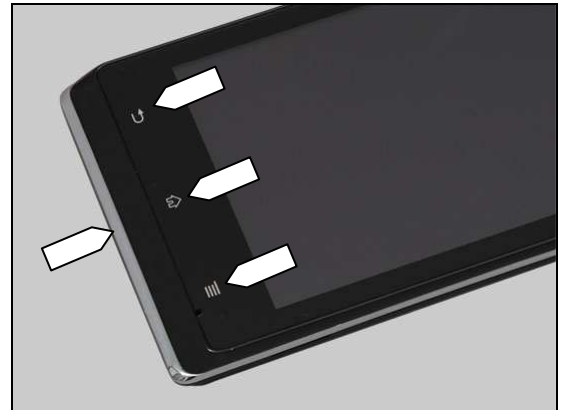
1.5.2 Menu/Home/Back Keys Illumination

Check:

Inspect the illumination window of the Menu/Home/Back keys on the Front Cover Display Assembly.

Action:

1. If dirty – clean them.



2. If the illumination window is damaged – replace the Front Cover Display Assembly.



Check:

Inspect the ZIF connector of the Link FPC to the Sub Board Assembly.

Action:

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

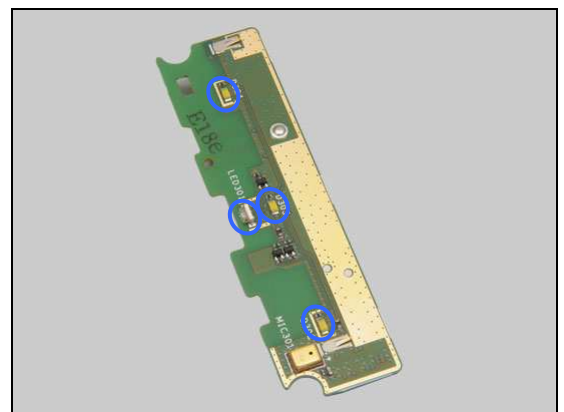


Check:

Inspect the LEDs on the Sub Board Assembly.

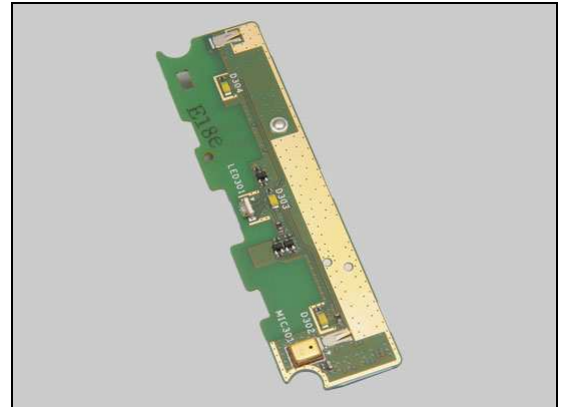
Action:

1. If dirty– clean them.



Problem Areas: Illumination

2. If the ZIF connector or the LEDs of the Sub Board Assembly is damaged – replace the Sub Board Assembly.

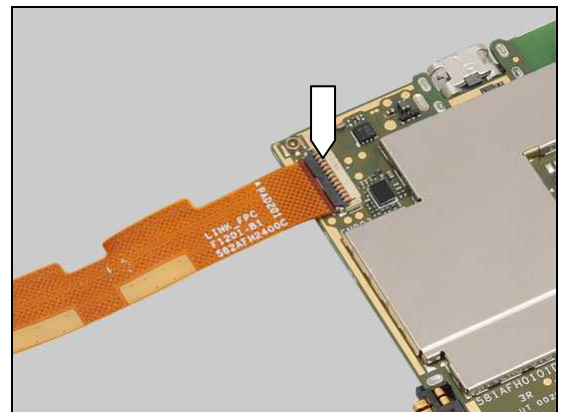


Check:

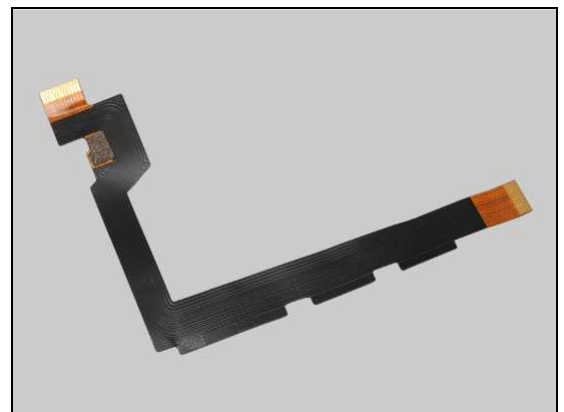
Inspect the ZIF connector of the Link FPC to the main PBA.

Action:

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



2. If the Link FPC is damaged – replace it.
3. Replace Board.



Problem Areas

1.6 Speaker

1.6.1 Speaker

Check:

Inspect the Loudspeaker's external port on the Battery Cover.

Action:

1. If the Loudspeaker external port is clogged – clean it.

2. If the Loudspeaker external port is damaged – replace the Battery Cover.



Check:

Inspect the mesh of the Loudspeaker on the Rear Cover.

Action:

1. If dirty – clean it.

2. If the mesh is damaged – replace the Rear Cover.



Problem Areas: Speaker

Check:

Inspect the Loudspeaker's pins and the pads on the Sub Board Assembly.

Action:

1. If dirty – clean them.

2. If the pins of the Loudspeaker are damaged – replace the Loudspeaker.

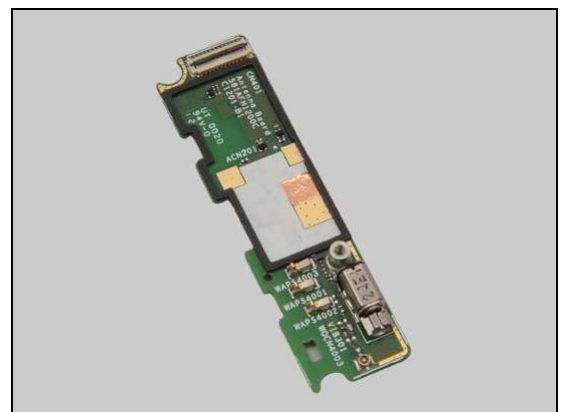
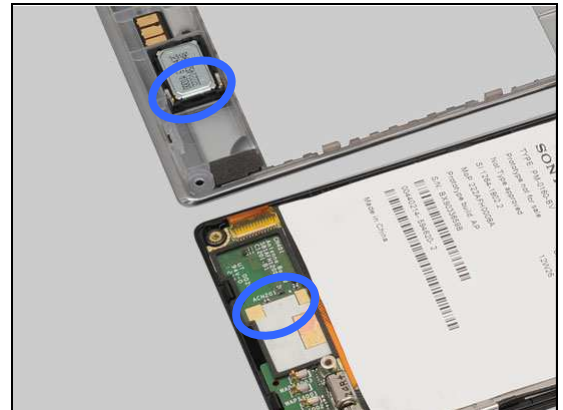
Check:

Inspect the ZIF connector of the Link FPC to the Sub Board Assembly.

Action:

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

3. If the pads or the ZIF connector of the Sub Board Assembly is damaged – replace the Sub Board Assembly.



Problem Areas: Speaker

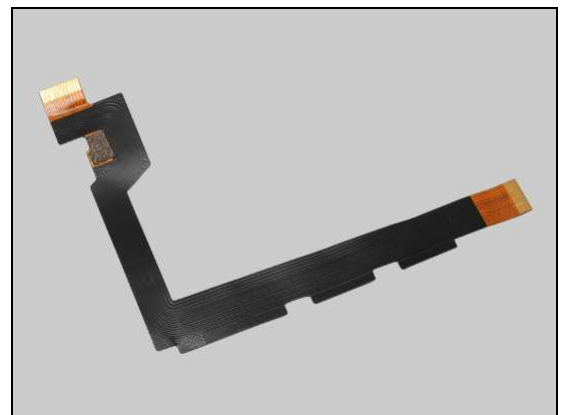
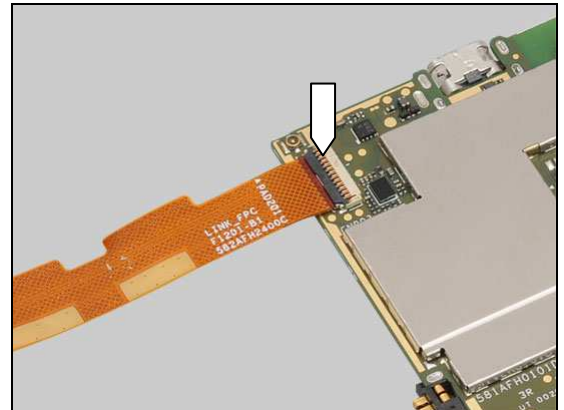
Check:

Inspect the ZIF connector of the Link FPC to the main PBA.

Action:

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

3. If the ZIF connector or the FPC of the Link FPC is damaged – replace the Link FPC.
4. Replace board.



Problem Areas

1.7 Earphone

1.7.1 Earphone

Check:

Inspect the Receiver's external port on the Front Cover Display Assembly.

Action:

1. If clogged – clean it.



2. If the port is damaged – replace the Front Cover Display Assembly.

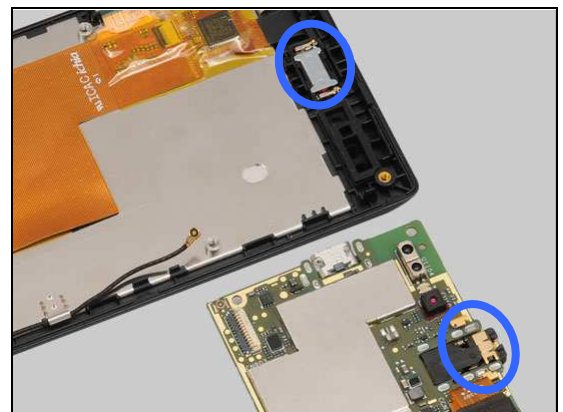


Check:

Inspect the Receiver's pins and the contact pins on the main PBA.

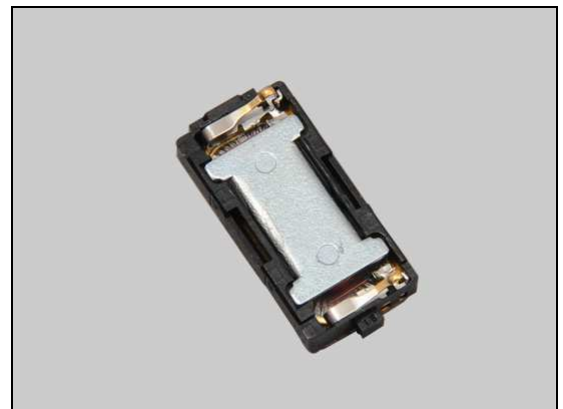
Action:

1. If dirty – clean them.



2. If the pins of the Receiver are damaged – replace the Receiver.

3. Replace board.



Problem Areas

1.8 Microphone

1.8.1 Microphone

Check:

Inspect the Microphone's external port on the Front Cover Display Assembly.

Action:

If clogged – clean the port.

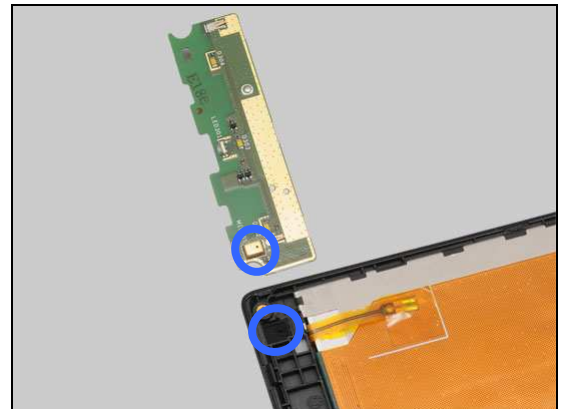


Check:

Inspect the microphone on the Sub Board Assembly and the rubber on the Front Cover Display Assembly.

Action:

1. If dirty – clean them.



2. If the external port or the rubber is damaged – replace the Front Cover Display Assembly.



Check:

Inspect the ZIF connector of the Link FPC to the Sub Board Assembly.

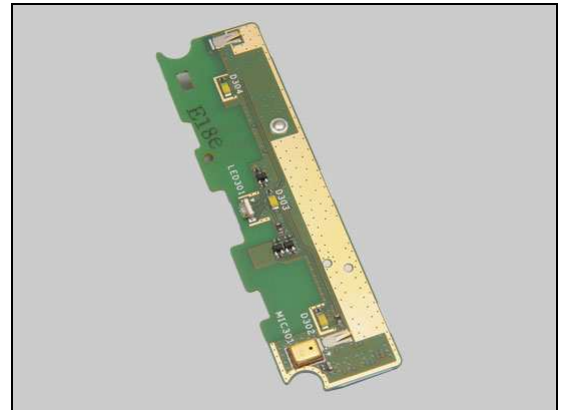
Action:

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



Problem Areas: Microphone

3. If the microphone or the ZIF connector of the Sub Board Assembly is damaged – replace the Sub Board Assembly.

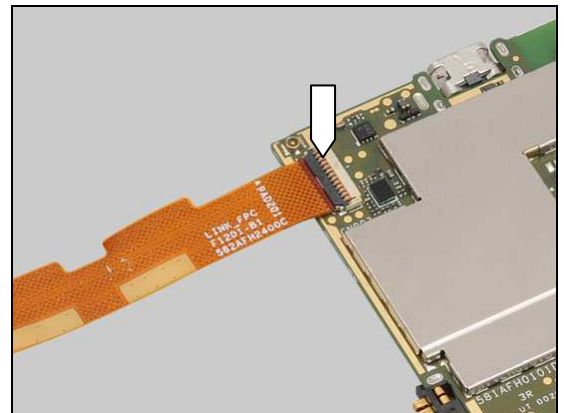


Check:

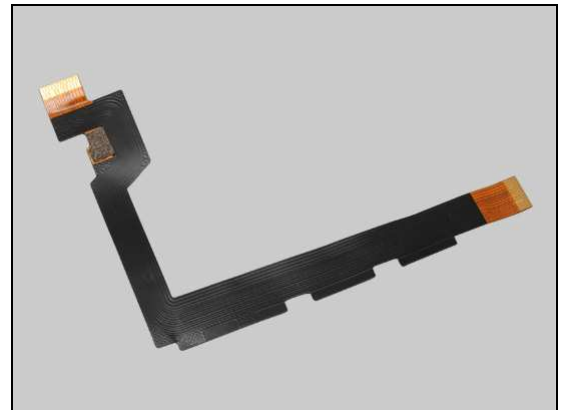
Inspect the ZIF connector of the Link FPC to the main PBA.

Action:

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



3. If the ZIF connector or the FPC of the Link FPC is damaged – replace the Link FPC.
4. Replace board.



Problem Areas

1.9 Vibrator

1.9.1 Vibrator not generating alerts

Check:

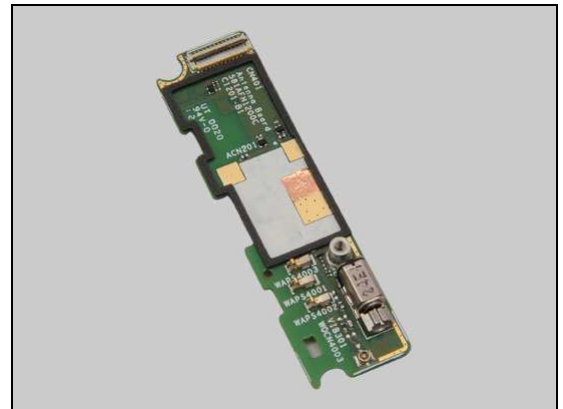
Inspect the ZIF connector of the Link FPC to the Sub Board Assembly.

Action:

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



3. If the vibrator or the ZIF connector on the Sub Board Assembly is damaged – replace the Sub Board Assembly.

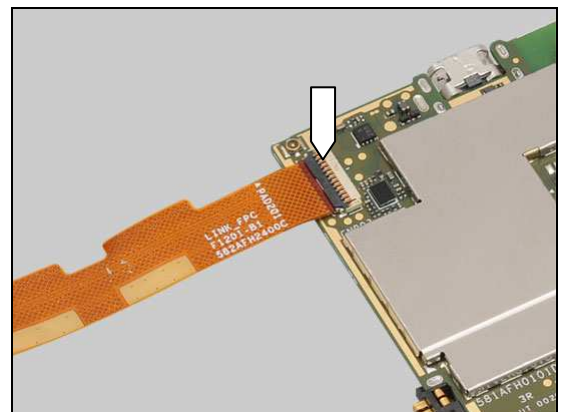


Check:

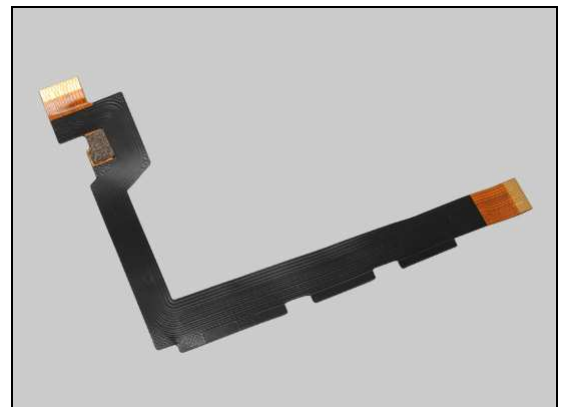
Inspect the ZIF connector of the Link FPC to the main PBA.

Action:

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



3. If the ZIF connector or the FPC of the Link FPC is damaged – replace the Link FPC.
4. Replace board.



Problem Areas

1.10 Camera

1.10.1 Camera defects

Check:

Inspect the external area of camera window.

Action:

1. If dirty – clean it.



2. If the camera window scratched or damaged – replace the Rear Cover.

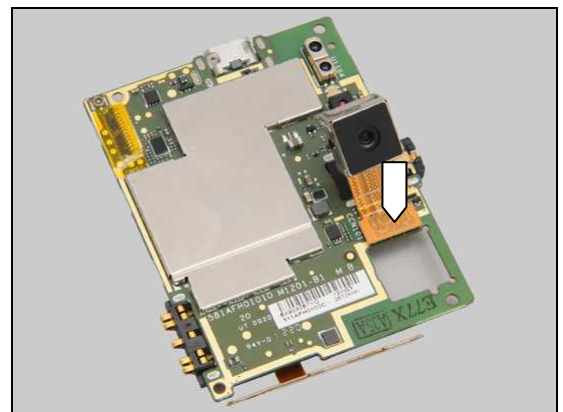


Check:

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

Action:

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

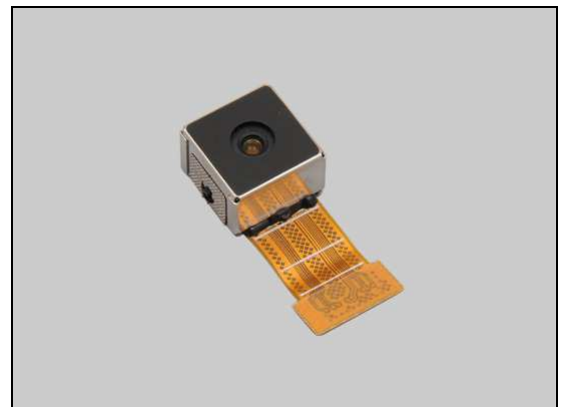


Check:

Inspect the Main Camera.

Action:

1. If the Main Camera is damaged – replace it.
2. Replace board.



Problem Areas

1.10.2 Video Call Camera defects

Check:

Inspect the external area of the video camera window.

Action:

1. If dirty – clean it.



2. If scratched or damaged – replace the Front Cover Display Assembly.

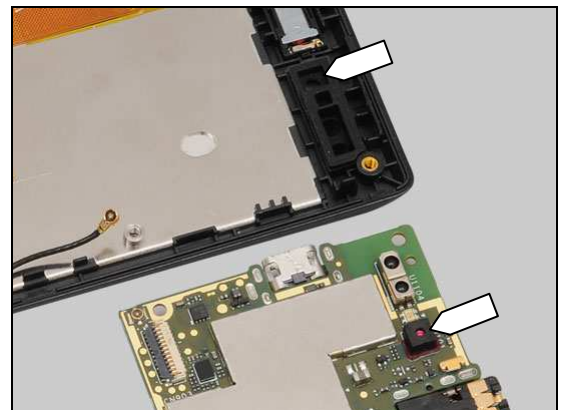


Check:

Inspect the video camera on the main PBA and the Proximity rubber on the Front Cover Display Assembly.

Action:

1. If dirty or clogged – clean them.



2. If the Proximity rubber is damaged – replace it.

3. Replace board.



Problem Areas

1.11 Flash LED

1.11.1 Flash LED not flashing

Check:

Inspect the external area of the flash LED window.

Action:

1. If the flash LED window is dirty – clean it.



2. If the flash LED window scratched or damaged – replace the Rear Cover.

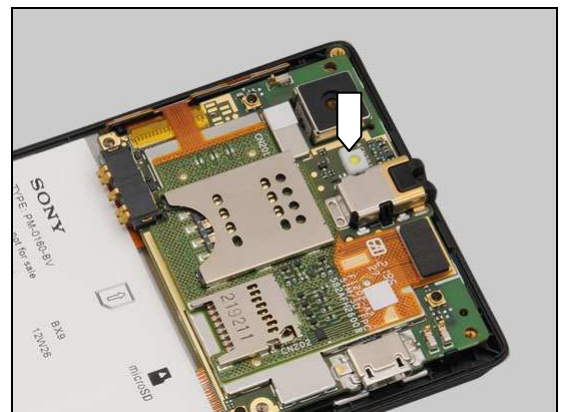


Check:

Inspect the Rubber Flash Led White.

Action:

1. If the Rubber Flash Led White is not properly mounted – remounted it



2. If the Rubber Flash Led White is damaged – replace it.



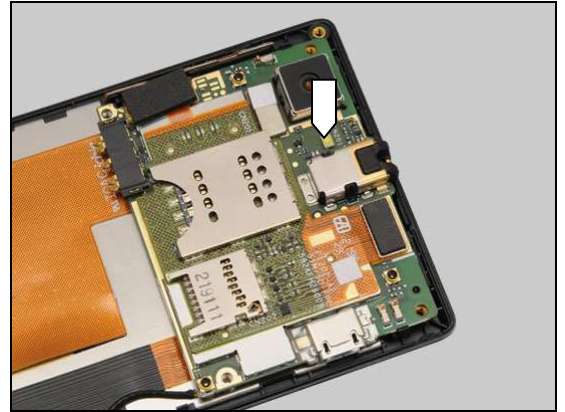
Problem Areas: Flash LED

Check:

Inspect the flash LED on the main PBA.

Action:

1. If dirty or clogged – clean it.
2. Replace board.



Problem Areas

1.12 Bluetooth and WLAN

1.12.1 Bluetooth or WLAN connection failure

Check:

Inspect the Antenna BT WIFI on the Rear Cover.

Action:

1. If dirty – clean it.



2. If the antenna is damaged – replace the Antenna BT WIFI.



Check:

Inspect the contact pads on the Antenna BT WIFI and the contact pins on the main PBA.

Action:

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



2. If the pads are damaged – replace the Antenna BT WIFI.
3. Replace board.



Problem Areas

1.13 GPS

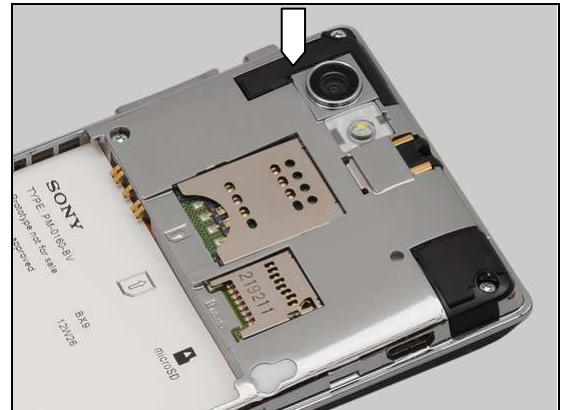
1.13.1 GPS malfunctions

Check:

Inspect the Antenna GPS on the Rear Cover.

Action:

1. If dirty – clean it.



2. If the antenna is damaged – replace the Antenna GPS.



Check:

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

Action:

1. If dirty or oxidized – clean them.



2. If the pad is damaged – replace the Antenna GPS.

3. Replace board.



Problem Areas

1.14 Compass

1.14.1 Compass fails

Action:

Replace board.

Problem Areas

1.15 Accelerometer

1.15.1 Accelerometer test fails

Action:

Replace board.

Problem Areas

1.16 Proximity Switch

1.16.1 Proximity switch malfunctions

Check:

Inspect the proximity switch window area and the proximity sensor window area on the Front Cover Display Assembly.

Action:

1. If dirty – clean them.

2. If scratched or damaged – replace the Front Cover Display Assembly.

Check:

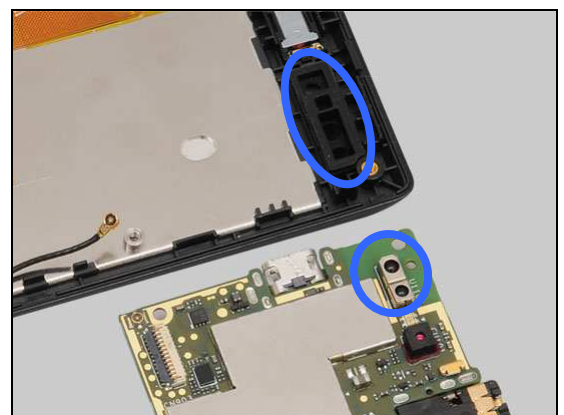
Inspect the proximity sensor and proximity switch on the main PBA and the Proximity rubber on the Front Cover Display Assembly.

Action:

1. If dirty or clogged – clean them.

2. If the Proximity rubber is damaged – replace it.

3. Replace board.



Problem Areas

1.17 Real Time Clock

1.17.1 Real Time Clock test fails

Action:

Replace board.

Problem Areas

1.18 Total call time

1.18.1 Total call time fails

Action:

Replace board.

Problem Areas

1.19 External Memory

1.19.1 Memory Card not detected

Check:

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

Action:

If dirty or clogged – clean the external port.

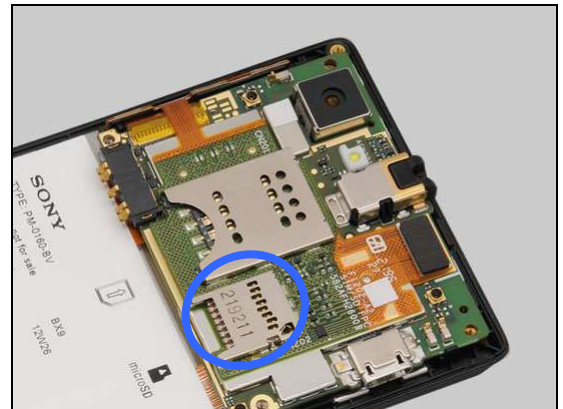


Check:

Inspect the memory card holder of the SIM SD Side Key FPC.

Action:

If dirty or clogged – clean the holder.



Check:

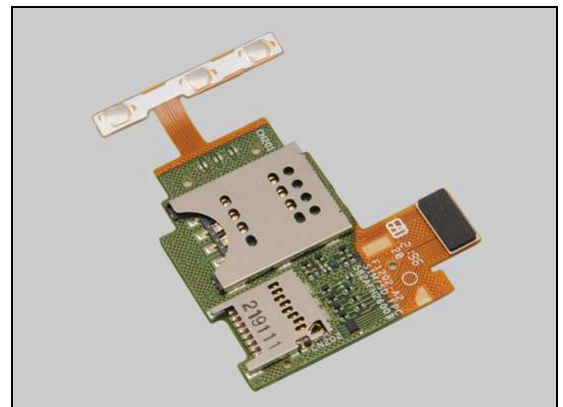
Inspect the BtB connector of the SIM SD Side Key FPC to the main PBA.

Action:

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



3. If the BtB connector or the memory holder of the SIM SD Side Key FPC is damaged – replace the SIM SD Side Key FPC.
4. Replace board.



Problem Areas

1.20 Security

1.20.1 Security fails

Action:

Replace board.

Problem Areas

1.21 FM Radio

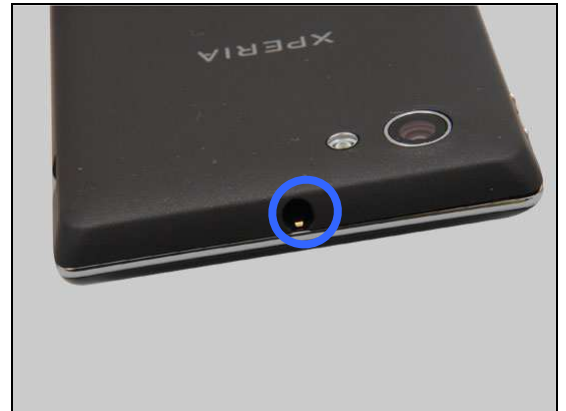
1.21.1 No/Poor FM Radio reception

Check:

Inspect the external port of the audio jack.

Action:

If dirty or oxidized – clean it.

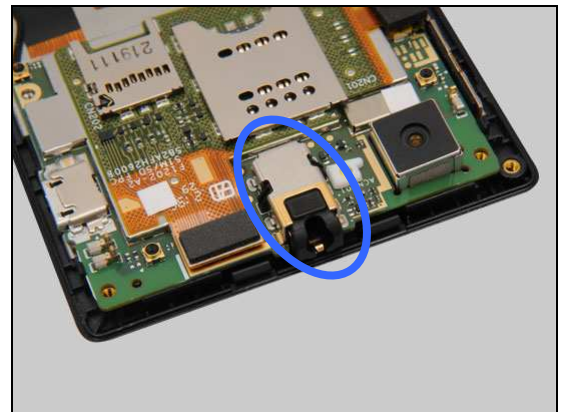


Check:

Inspect the audio jack on the main PBA.

Action:

1. If dirty or oxidized – clean it.
2. If damaged – replace board.



Problem Areas

1.22 Verify Certificates

1.22.1 Verify certificates fails

Action:

Replace board.

Problem Areas

1.23 Network & Signal

1.23.1 No/Poor signal

Check:

Inspect the Antenna Main on the Rear Cover.

Action:

If dirty – clean it.



Check:

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

Action:

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



2. If the pads are damaged – replace the Antenna Main.



Check:

Inspect the ZIF connector of the Link FPC to the Sub Board Assembly.

Action:

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



Problem Areas: Network & Signal

Check:

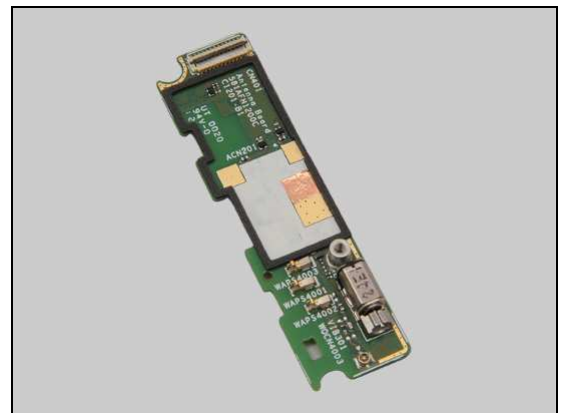
Inspect the connector of Coaxial Cable to the Sub Board Assembly.

Action:

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



2. If the ZIF connector or the coaxial connector the Sub Board Assembly is damaged – replace the Sub Board Assembly.

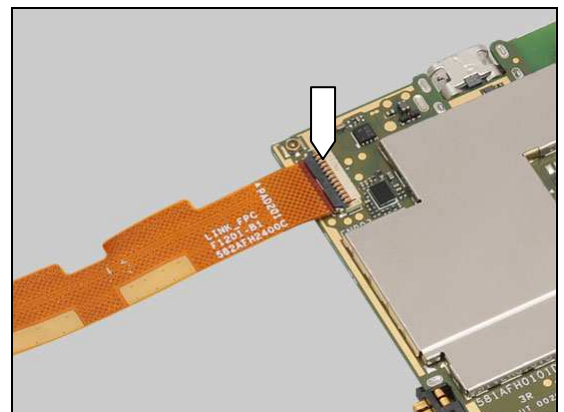


Check:

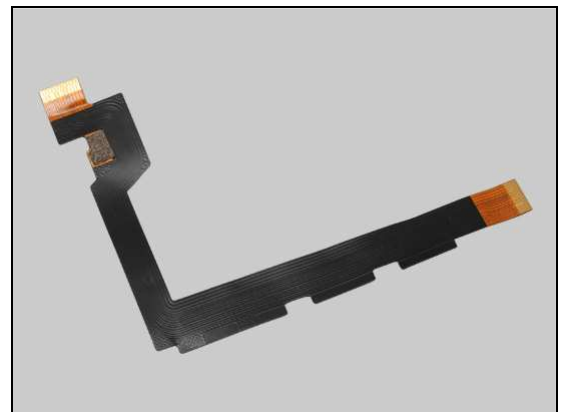
Inspect the ZIF connector of the Link FPC to the main PBA.

Action:

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



3. If the ZIF connector of the Link FPC is damaged – replace the Link FPC



Problem Areas: Network & Signal

Check:

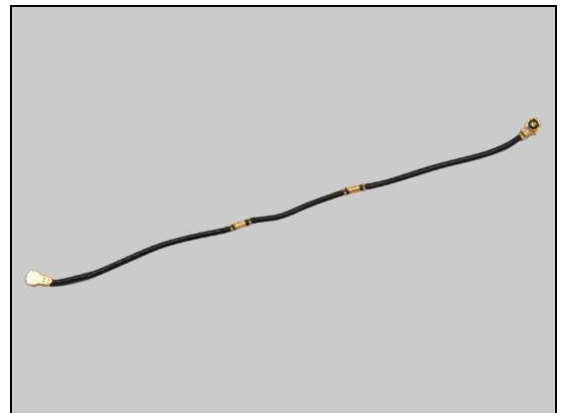
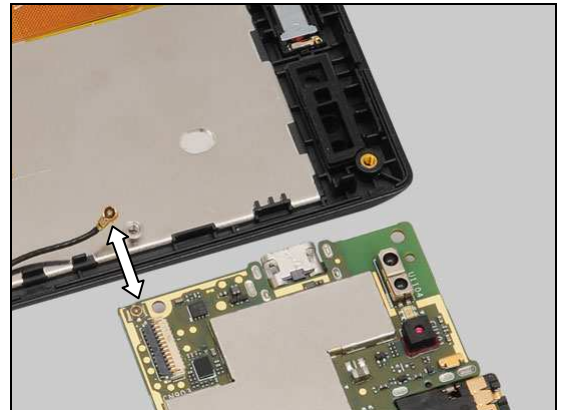
Inspect the connector of Coaxial Cable to the main PBA.

Action:

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

2. If the Coaxial Cable or its two connectors is damaged – replace the Coaxial Cable.

3. Replace board.



Problem Areas

1.24 SIM

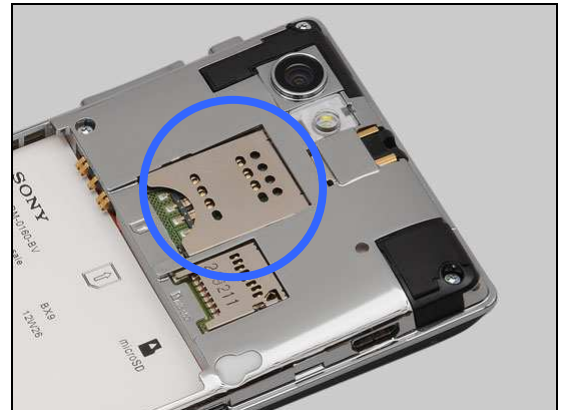
1.24.1 SIM not detected

Check:

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

Action:

If dirty or clogged – clean the external port.

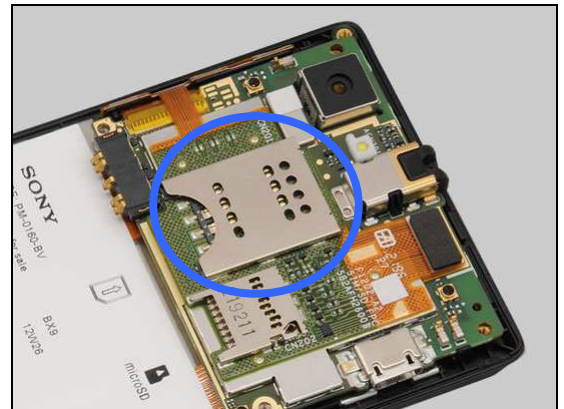


Check:

Inspect the SIM card holder on the main PBA.

Action:

If dirty or clogged – clean the holder.



Check:

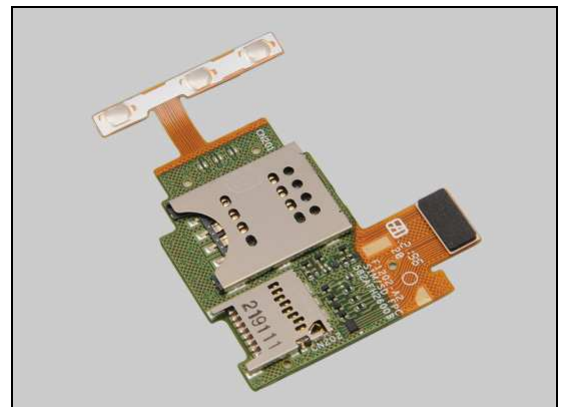
Inspect the BtB connector of the SIM SD Side Key FPC to the main PBA.

Action:

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



3. If the BtB connector or the SIM card holder of the SIM SD Side Key FPC is damaged – replace the SIM SD Side Key FPC.
4. Replace board.



Problem Areas: SIM

1.24.2 Incorrect SIM-Card adapter

Check:

Check the SIM-Card adapter is from ST26 or not if the Micro SIM card is used.

Note: Only ST26 micro-SIM adapter (1257-9796) can be used in ST26 Phone. Other supplier's SIM-Card adapter or incompatible SIM-Card adapter will damage the SIM Card connector!

Action:

1. Use a proper ST26 micro-SIM adapter (1257-9796).
2. If SIM Card connector is damaged, deal with it according to local directive.

Check:

Check whether the SIM-Card adapter is used correctly.

Action:

1. Peel off the protection tape from SIM-Card adapter.

2. Assemble the Micro SIM card onto SIM-Card adapter.
3. Replace board.

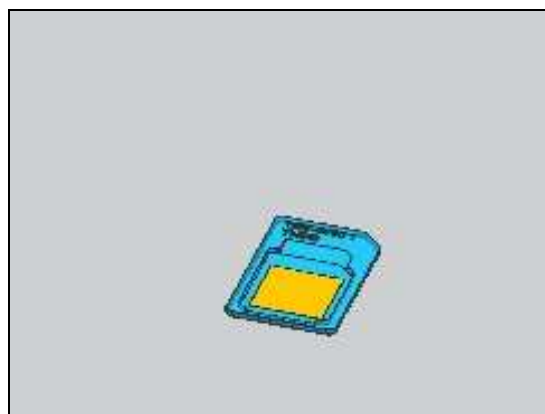
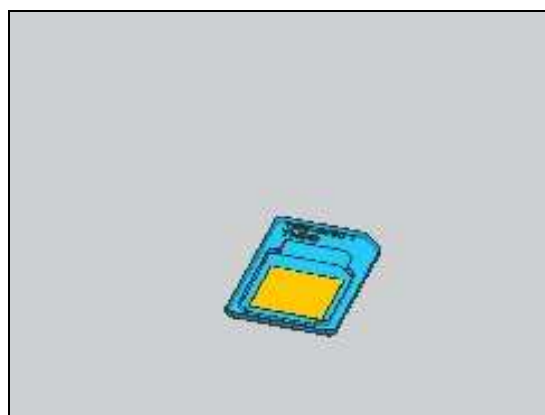
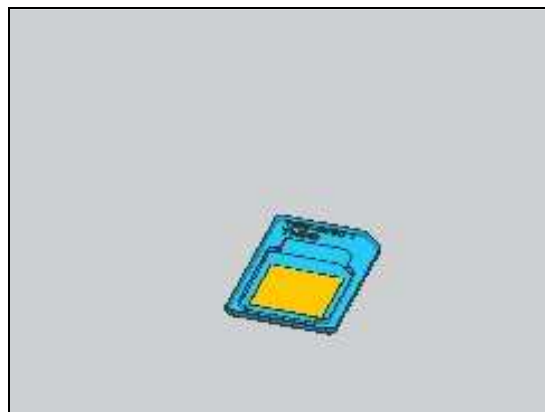
1.24.3 Incorrect SIM indicated

Check:

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

Action:

1. Use a proper operator SIM or test SIM.
2. Replace board.



Problem Areas

1.25 Charging

1.25.1 Battery will not charge

Check:

Inspect the contact pads of the Battery.

Action:

1. If dirty or oxidized – clean the pads.
2. If damaged – replace the Battery.



Check:

Inspect the battery contact pins.

Action:

1. If dirty or oxidized – clean the contact pins.
2. If adhesive is detected on the contact pins – use an eraser to gently rub off the adhesive.



Check:

Inspect the USB connector.

Action:

If dirty or oxidized – clean the connector.



Check:

Inspect the USB connector.

Action:

If dirty or oxidized – clean the connector.



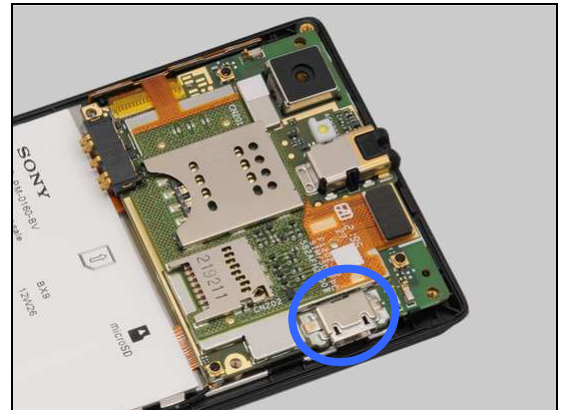
Problem Areas: Charging

Check:

Inspect the USB connector on the main PBA.

Action:

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



Problem Areas

1.26 HandsFree by Wire

1.26.1 Connection to Portable HandsFree fails

Check:

Inspect the external port of the audio jack.

Action:

If dirty or oxidized – clean the connector.

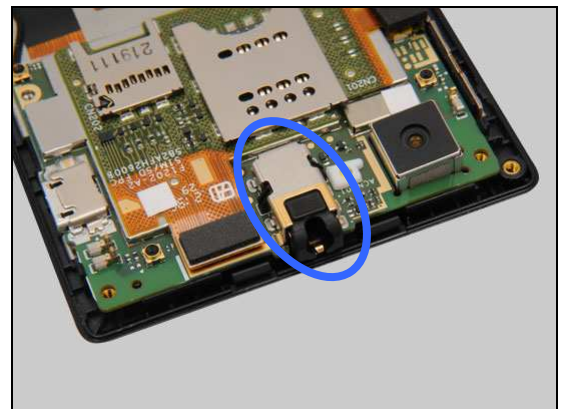


Check:

Inspect the audio jack on the main PBA.

Action:

1. If dirty or oxidized – clean it.
2. If damaged – replace board.



Problem Areas

1.27 Data Communication

1.27.1 Data transfer via System Connector fails

Check:

Inspect the USB connector.

Action:

If dirty or oxidized – clean the connector.



Check:

Inspect the USB connector.

Action:

If dirty or oxidized – clean the connector.



Check:

Inspect the USB connector on the main PBA.

Action:

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



2 Revision History

Rev.	Date	Changes / Comments
1	2012-Oct-9	Initial release
2	2012-Oct-11	Add Touch Panel calibration information after its replacement in chapter1.3 Update Micro-SIM adapter to 1257-9796 in chapter1.24.2
3	2012-Oct-15	Update Touch Panel calibration application P/N to 1270-6729.