



Sony Ericsson

Component Replacement

- electrical -



Mix, WT13i

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***For general information about electrical repair related issues, refer to
1220-1336: Generic Repair Manual - electrical***



1 Replaceable Components

EXPLANATION OF ABBREVIATIONS USED IN THE COLUMN 'COMMENTS' BELOW

COMPONENT LOCATION

P = Primary side

S = Secondary side

MOISTURE SENSITIVITY LEVEL

MSLX (X = 1, 2, 2A, 3, 4, 5, 5A or 6)

For more information on moisture sensitivity levels:

Refer to 1220-1336: Generic Repair Manual – electrical, section 'Moisture & Baking'!

REPAIR METHOD

HA = Hot Air (removal & mounting)

ST = Soldering Tool (removal & mounting)

HA/ST = Hot Air for removal - Soldering Tool for mounting

BGA = BGA Station

BH = Bottom Heater

ADDITIONAL INFORMATION

⇒1 (2, 3, 4, etc.) = Proceed to 'Additional Repair Info' for further instructions in the indicated section(s).

CALIBRATION

C = Calibration of the phone is required after replacing the component

Calibration to be done by authorized centers only!



Component Replacement Repair Drawing Electrical/

Position	Component	Part no.	Comments
BAT201	Capacitor 220.0 uF 4.0 V	1205-9750	P MSL3 HA ⇒1
D401	Diode Protection 5, V SOD882	1211-8286	P HA ⇒2
D402	Diode Protection 5, V SOD882	1211-8286	P HA ⇒2
D403	Diode Protection 5, V SOD882	1211-8286	P HA ⇒3
D408	Varistor	A/308-0000-00130	P HA ⇒4
D411	Varistor_18V	A/308-0000-00210	P HA
D412	Varistor_18V	A/308-0000-00210	P HA
D413	Varistor_18V	A/308-0000-00210	P HA
D414	Varistor_18V	A/308-0000-00210	P HA ⇒4
D415	Varistor_18V	A/308-0000-00210	P HA ⇒4
D416	Varistor_18V	A/308-0000-00210	P HA ⇒4
D601	Varistor	A/308-0000-00130	P HA ⇒5
D602	Diode Protection 5.0 V SOD-923	1206-8883	P HA
D603	Diode Protection 5.0 V SOD-923	1206-8883	P HA
D604	Diode Protection 5.0 V SOD-923	1206-8883	P HA
D605	Diode Protection 5.0 V SOD-923	1206-8883	P HA
D606	Diode Protection 5, V SOD882	1211-8286	P HA ⇒6
D607	Diode Protection 5, V SOD882	1211-8286	P HA ⇒6
D608	Diode Protection 5, V SOD882	1211-8286	P HA ⇒6
D609	Diode Protection 5, V SOD882	1211-8286	P HA ⇒7
D610	Diode Protection 5.0 V SOD882	1208-0634	P HA ⇒6
D611	Diode Protection 5.0 V SOD882	1208-0634	P HA ⇒8
D612	Varistor	A/308-0000-00159	P HA ⇒9
D613	Varistor	A/308-0000-00130	P HA ⇒5
D703	LED	1223-3002	S MSL2 HA
D705	Varistor	A/308-0000-00130	P HA
D708	LED White	1201-1391	S MSL2 HA
D710	Varistor	A/308-0000-00130	P HA
FL401	EMI Filter	A/308-0000-00198	P HA ⇒10
J401	SIM Card Connector	1230-2848	P BGA ⇒11
J402	Battery Connector	1236-1296	P BGA ⇒12
J403	Micro USB Connector	1230-2857	P BGA ⇒13
J405	Card Conn Micro SD	1243-7302	P BGA ⇒14
J501	Camera Socket	1220-0574	P BGA ⇒15
J502	Connector FPC	1230-4120	P BGA ⇒16
J503	BtB Connector	1217-9902	S BGA
J601	Microphone	1206-4070	S BGA
J602	Speaker Connector	1234-7425	P HA
J603	Speaker Connector	1234-7425	P HA ⇒17
J604	Speaker Connector	1234-7425	P HA ⇒1
J605	Speaker Connector	1234-7425	P HA ⇒18
J606	Conn Audio Jack Receptacle	1244-2169	P BGA ⇒19
J702	Vibrator	1218-9713	P BGA ⇒20
J901	RF Connector	1210-6691	P BGA ⇒21
J1001	RF Connector	1210-6691	P BGA
LED701	LED Red	1000-7571	S MSL2 HA
LED703	LED ORANGE(605NM)	1200-3605	P MSL2 HA ⇒7
LED704	LED ORANGE(605NM)	1200-3605	P MSL2 HA ⇒9
Q701	Diode	1223-2957	S MSL2 HA
Q708	IC Switch EMT6	1243-1295	P HA ⇒6
Q709	IC Switch EMT6	1243-1295	P HA ⇒22



Component Replacement Repair Drawing Electrical/

Position	Component	Part no.	Comments
RN501	Resistor	A/301-1000-00095	P HA ⇒22
RN502	Resistor	A/301-1000-00095	P HA ⇒23
RN503	Resistor	A/301-1000-00095	P HA ⇒23
SW701	Side Key Switch	A/315-0000-00047	P HA/ST + BH ⇒24
SW702	Side Key Switch	A/315-0000-00047	P HA/ST + BH ⇒25
SW703	Side Key Switch	A/315-0000-00047	P HA/ST + BH ⇒18
SW704	Side Key Switch	A/315-0000-00047	P HA/ST + BH ⇒21
SW707	Side Key Switch	A/315-0000-00047	P HA/ST + BH ⇒22
SW708	Side Key Switch	A/315-0000-00047	P HA/ST + BH ⇒6
U202	Transistor	1200-0145	P HA
U401	IC Overvoltage protection 5,85V	1234-5393	P MSL3 HA
U402	IC Vreg DFN1216	1243-0353	P HA ⇒26
U502	IC IF QFN-32	1239-9840	P HA
U503	IC Vreg DFN 1212-6	1226-5618	P HA ⇒22
U504	EMI Filter	A/308-0000-00046	P HA ⇒4
U505	EMI Filter	A/308-0000-00046	P HA ⇒4
U506	EMI Filter	A/308-0000-00046	P HA ⇒4
U701	IC LGA-16	1241-6962	P MSL3 HA ⇒2
U702	IC 8-pin QFN	1217-4125	P HA ⇒6
Z901	Conn Leaf Spring 1p	1202-1053	P HA ⇒1
Z902	Conn Leaf Spring 1p	1202-1053	P HA ⇒1
Z903	Conn Leaf Spring 1p	1202-1053	P HA ⇒1

2 Component Placing

To access the Component Placing document, double-click the icon below.
Applicable for on-screen viewing only – icon not shown on hard-copies.





3 Repair Actions

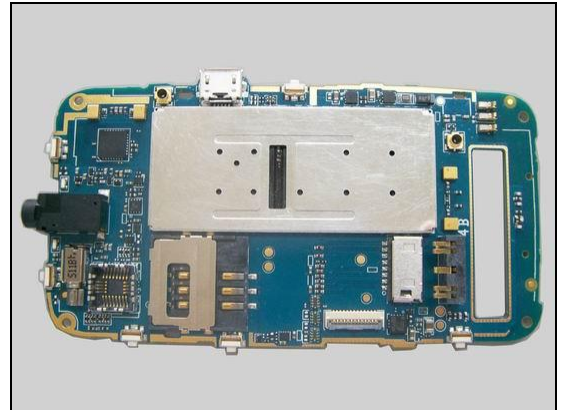
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

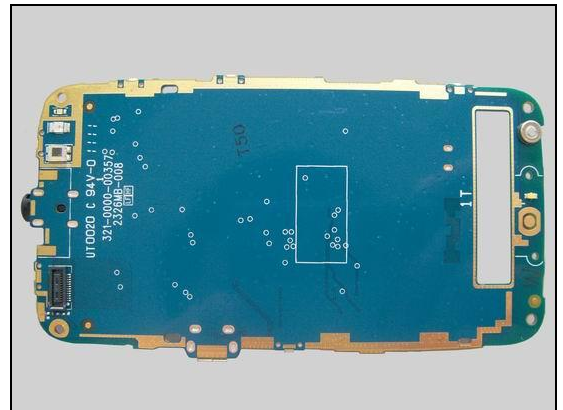
Refer to the pictures below of the primary and secondary sides for repairs that didn't require the Shield Can Fence to be modified:

- after rework the height of the frame should not be affected

Primary side



Secondary side





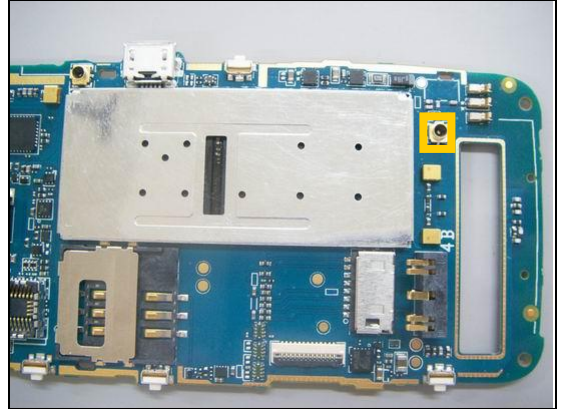
Repair Actions

3.2 Additional Repair Info

1

BAT201, J604, Z901, Z902, Z903

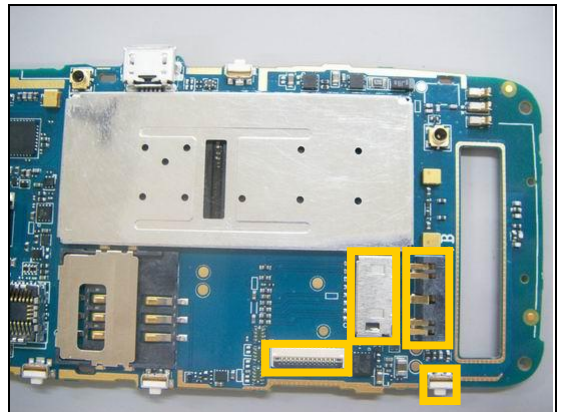
Protect the RF Connector with capton tape!



2

D401, D402, U701

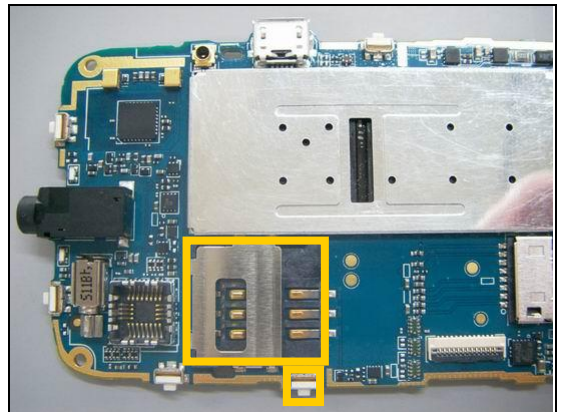
Protect the Battery Connector, Connector FPC, Side Key Switch and Card Conn Micro SD with capton tape!



3

D403

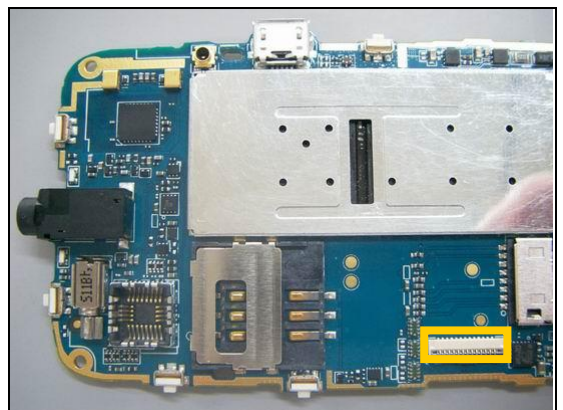
Protect the Side Key Switch and SIM Card Connector with capton tape!



4

D408, D414, D415, D416, U504, U505, U506

Protect the Connector FPC with capton tape!



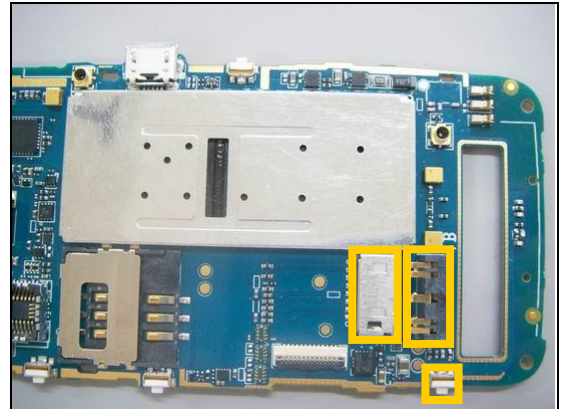


Repair Actions: Additional Repair Info

5

D601, D613

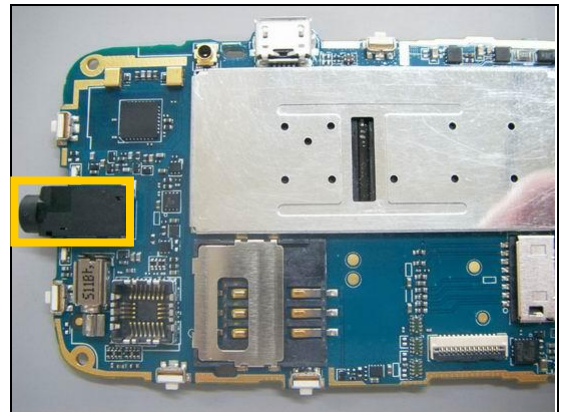
Protect the Battery Connector, Card Conn Micro SD, and Side Key Switch with capton tape!



6

D606, D607, D608, D610, Q708, U702, SW708

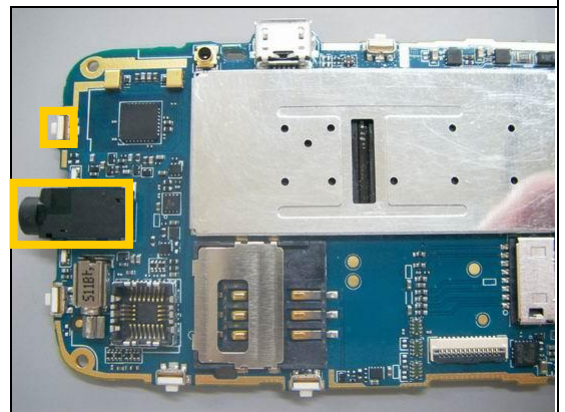
Protect the Conn Audio Jack with capton tape!



7

D609, LED703

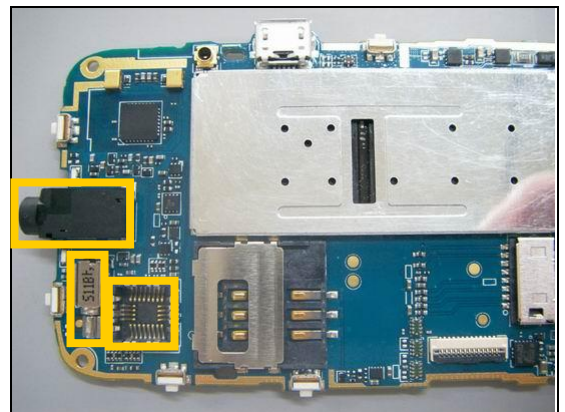
Protect the Conn Audio Jack and Side Key Switch with capton tape!



8

D611

Protect the Conn Audio Jack, Vibrator and Camera Socket with capton tape!



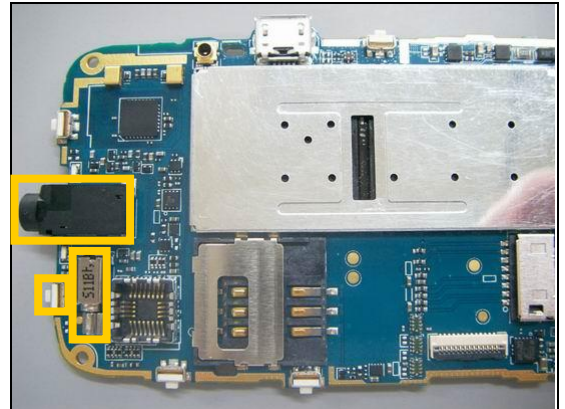


Repair Actions: Additional Repair Info

9

D612, LED704

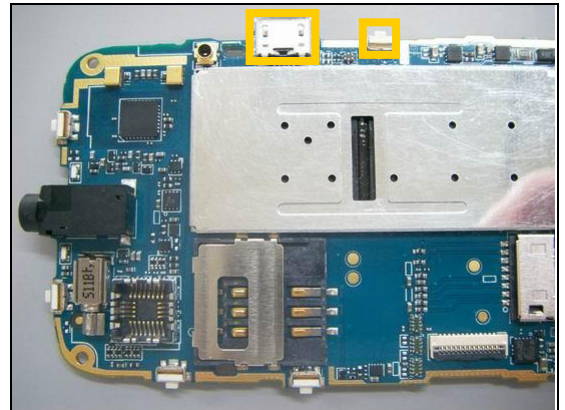
Protect the Conn Audio Jack, Vibrator and Side Key Switch with capton tape!



10

FL401

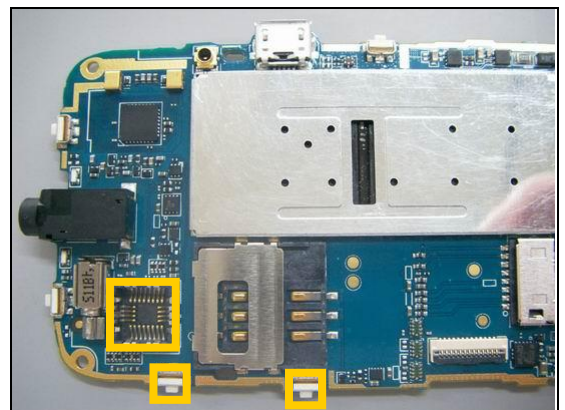
Protect the Side Key Switch and Micro USB Connector with capton tape!



11

J401

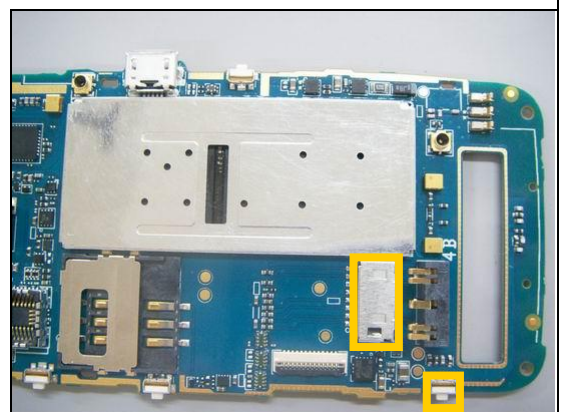
Protect the Side Key Switch and Camera Socket with capton tape!



12

J402

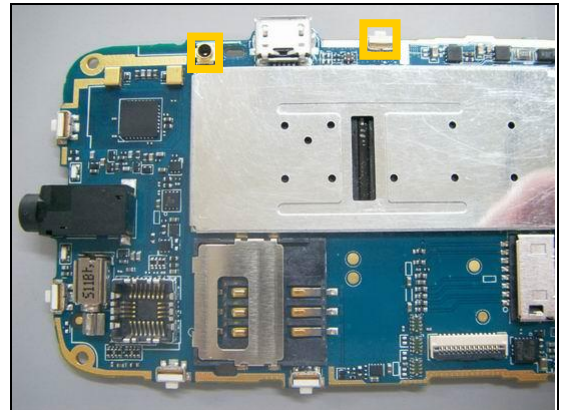
Protect the Card Conn Micro SD and Side Key Switch with capton tape!



Repair Actions: Additional Repair Info

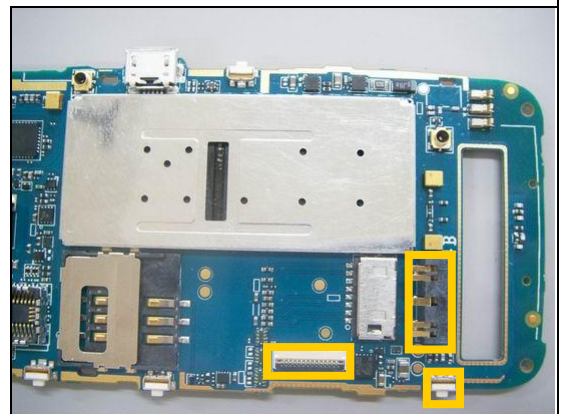
13
J403

Protect the RF Connector and Side Key Switch with capton tape!



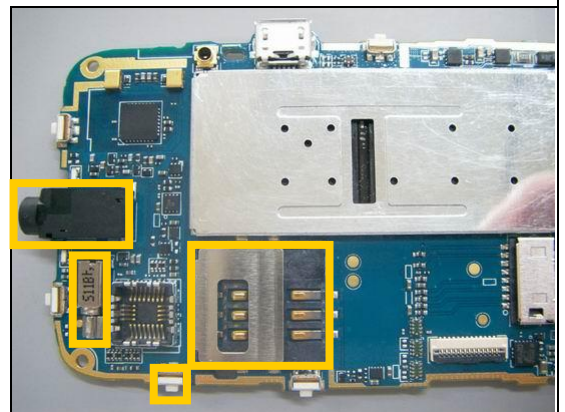
14
J405

Protect the Battery Connector, Side Key Switch and Connector FPC with capton tape!



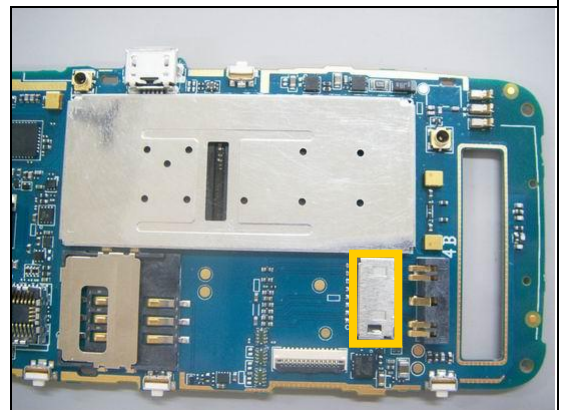
15
J501

Protect the Side Key Switch, Vibrator, Conn Audio Jack and SIM Card Connector with capton tape!



16
J502

Protect the Card Conn Micro SD with capton tape!



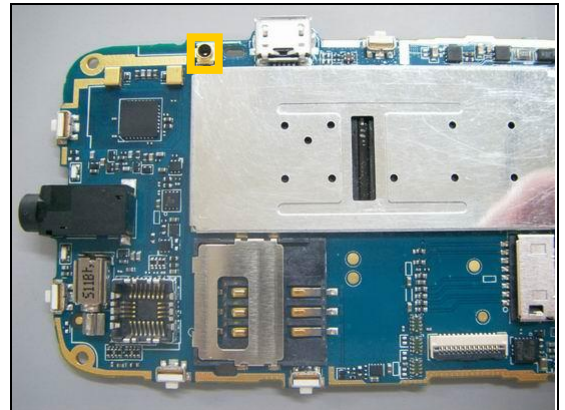


Repair Actions: Additional Repair Info

17

J603

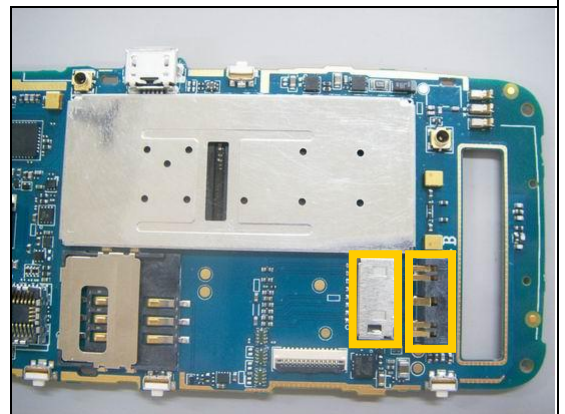
Protect the RF Connector with capton tape!



18

J605, SW703

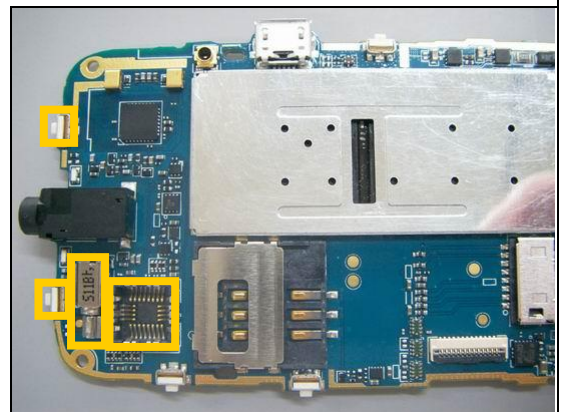
Protect the Battery Connector and Card Conn Micro SD with capton tape!



19

J606

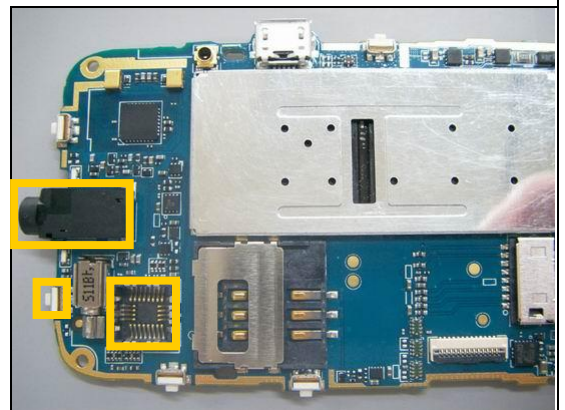
Protect the Vibrator, Camera Socket and Side Key Switch capton tape!



20

J702

Protect the Conn Audio Jack, Side Key Switch and Camera Socket with capton tape!



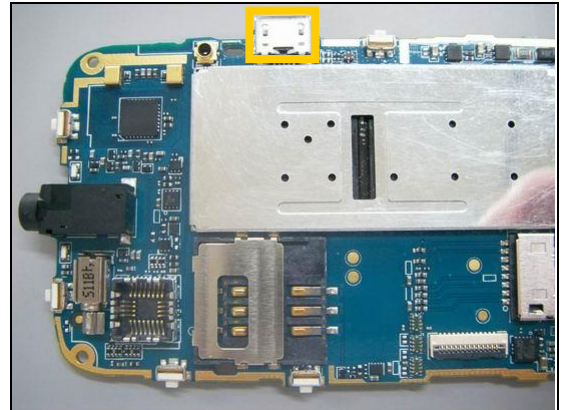


Repair Actions: Additional Repair Info

21

J901, SW704

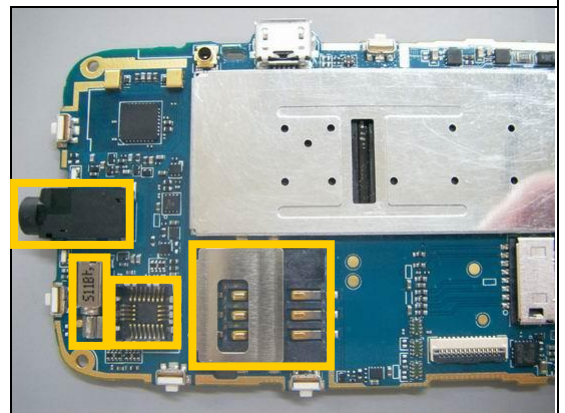
Protect the Micro USB Connector with capton tape!



22

Q709, RN501, U503, SW707

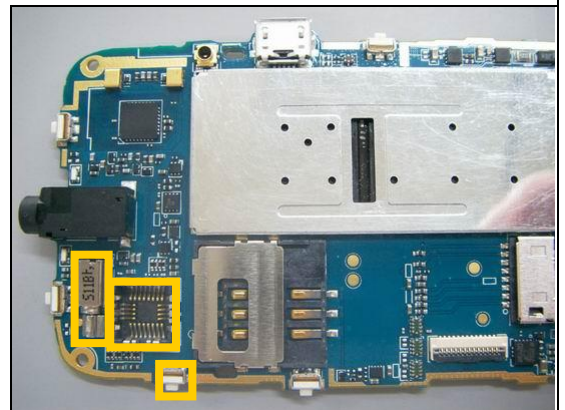
Protect the Conn Audio Jack, Vibrator and Camera Socket with capton tape!



23

RN502, RN503

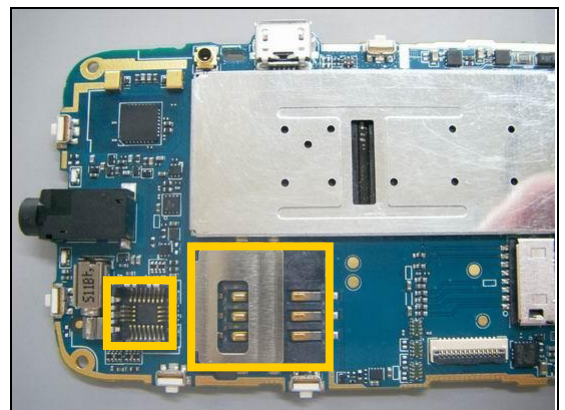
Protect the Camera Socket, Vibrator and Side Key Switch with capton tape!



24

SW701

Protect the Camera Socket and SIM Card Connector with capton tape!



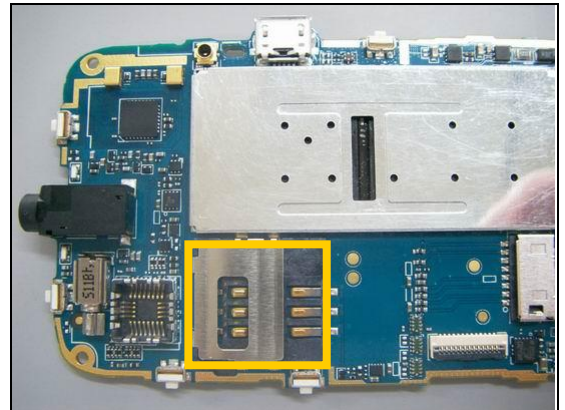


Repair Actions: Additional Repair Info

25

SW702

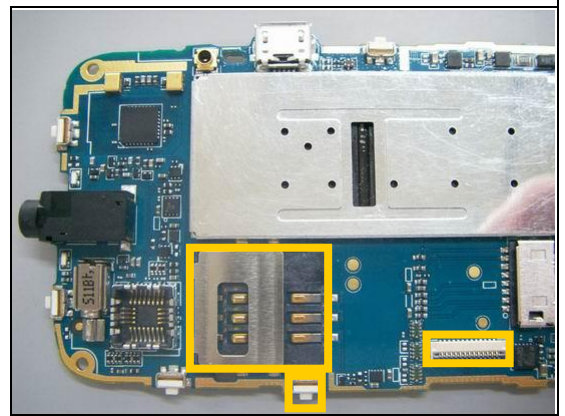
Protect the SIM Card Connector with capton tape!



26

U402

Protect the SIM Card Connector, Side Key Switch and Connector FPC with capton tape!





4 Revision History

Rev.	Date	Changes / Comments
1	2011-Aug-05	Initial release
2	2011-Aug-31	Change "μ" to "u"
3	2011-Oct-19	Add MSL