



Sony Ericsson

Component Replacement

- electrical -



Sony Ericsson txt
CK13i

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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!



| Position | Component | Part no. | Comments |
|----------|--------------------------------|------------------|-----------|
| BAT201 | Capacitor 220.0 uF 4.0 V | 1205-9750 | P MSL3 HA |
| D401 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒1 |
| D402 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒1 |
| D403 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒2 |
| D404 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒3 |
| D405 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒3 |
| D406 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒3 |
| D407 | Diode Protection 24, V SOD-882 | 1203-9069 | P HA ⇒4 |
| D408 | Varistor | A/308-0000-00130 | P HA ⇒5 |
| D409 | Diode Protection 5.0 V SOD882 | 1208-0634 | P HA ⇒4 |
| D410 | Diode Protection 5.0 V SOD882 | 1208-0634 | P HA ⇒4 |
| D411 | Varistor_18V | A/308-0000-00210 | P HA ⇒5 |
| D412 | Varistor_18V | A/308-0000-00210 | P HA ⇒5 |
| D413 | Varistor_18V | A/308-0000-00210 | P HA ⇒5 |
| D414 | Varistor_18V | A/308-0000-00210 | P HA ⇒5 |
| D415 | Varistor_18V | A/308-0000-00210 | P HA ⇒5 |
| D416 | Varistor_18V | A/308-0000-00210 | P HA ⇒5 |
| D501 | Diode Protection 5, V SOD882 | 1211-8286 | S HA ⇒6 |
| D502 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒7 |
| D503 | Diode Protection 5, V SOD882 | 1211-8286 | S HA ⇒6 |
| D504 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒7 |
| D602 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒8 |
| D603 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒9 |
| D606 | Diode Protection 5, V SOD882 | 1211-8286 | S HA |
| D607 | Diode Protection 5, V SOD882 | 1211-8286 | S HA ⇒6 |
| D608 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒10 |
| D609 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒10 |
| D610 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒10 |
| D611 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒11 |
| D612 | Varistor | A/308-0000-00159 | P HA ⇒7 |
| D616 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒1 |
| D702 | Varistor | A/308-0000-00130 | S HA |
| D705 | Varistor | A/308-0000-00130 | P HA |
| D706 | Varistor | A/308-0000-00130 | P HA ⇒1 |
| D707 | Varistor | A/308-0000-00130 | P HA ⇒1 |
| D708 | Varistor | A/308-0000-00130 | P HA ⇒1 |
| D709 | Varistor | A/308-0000-00130 | P HA ⇒1 |
| D710 | Varistor | A/308-0000-00130 | P HA ⇒5 |
| D711 | Varistor | A/308-0000-00130 | P HA |
| D712 | Diode Protection 5, V SOD882 | 1211-8286 | S HA |
| D713 | Varistor | A/308-0000-00130 | P HA |
| D714 | Varistor | A/308-0000-00130 | P HA ⇒1 |
| D715 | Varistor | A/308-0000-00130 | P HA |
| D716 | Varistor | A/308-0000-00130 | P HA ⇒1 |
| D717 | Diode Protection 5, V SOD882 | 1211-8286 | S HA |
| D718 | Varistor | A/308-0000-00130 | P HA |
| D719 | Varistor | A/308-0000-00130 | S HA |
| D720 | Varistor | A/308-0000-00130 | P HA |
| D721 | Varistor | A/308-0000-00130 | P HA |
| D722 | Varistor | A/308-0000-00130 | P HA |
| D725 | Diode Protection 5, V SOD882 | 1211-8286 | P HA ⇒2 |
| D727 | Varistor | A/308-0000-00130 | P HA |
| FL401 | EMI Filter Dual | A/326-0000-00215 | P HA ⇒ 4 |



| Position | Component | Part no. | Comments |
|----------|-------------------------------------|------------------|--------------|
| J401 | SIM Card Connector | 1230-2848 | P BGA ⇨12 |
| J402 | Battery Connector | 1219-8423 | P BGA ⇨13 |
| J403 | Micro USB Connector | 1230-2857 | P BGA ⇨14 |
| J405 | Card Conn Micro SD | 1243-7302 | P BGA ⇨15 |
| J501 | Camera Socket | 1220-0574 | P BGA ⇨16 |
| J502 | Conn BtB | 1200-2529 | S BGA |
| J601 | Mic 4.0 Electret | 1224-0804 | S BGA |
| J606 | Conn Audio Jack Receptacle 6p | 1243-3068 | P BGA ⇨17,18 |
| J701 | Input Switch Side Push | 1235-0484 | P HA/ST ⇨19 |
| J702 | Input Switch Side Push | 1235-0484 | P HA/ST ⇨19 |
| J703 | Vibrator | 1218-9713 | P BGA ⇨20 |
| J901 | RF Connector | 1210-6691 | P BGA ⇨1 |
| J1001 | RF Connector | 1210-6691 | P BGA |
| LED701 | LED Red | 1000-7571 | S MSL3 HA/ST |
| LED702 | LED White 1.8*0.6mm, height 0.3mm | 1204-6085 | S MSL2 HA/ST |
| LED703 | LED White 1.8*0.6mm, height 0.3mm | 1204-6085 | S MSL2 HA/ST |
| LED704 | LED White 1.8*0.6mm, height 0.3mm | 1204-6085 | S MSL2 HA/ST |
| LED705 | LED White 1.8*0.6mm, height 0.3mm | 1204-6085 | S MSL2 HA/ST |
| LED707 | LED White 1.8*0.6mm, height 0.3mm | 1204-6085 | S MSL2 HA/ST |
| Q703 | Trans N-ch FET SOT416 | 1204-3154 | S HA |
| Q704 | Trans N-ch FET SOT416 | 1204-3154 | P HA ⇨7 |
| RN501 | Resistor | A/301-1000-00095 | P HA ⇨21 |
| RN502 | Resistor | A/301-1000-00095 | P HA ⇨21 |
| RN503 | Resistor | A/301-1000-00095 | P HA ⇨21 |
| U202 | Transistor | 1200-0145 | P HA |
| U401 | IC Overvoltage protection 5,85V | 1234-5393 | P MSL3 HA ⇨4 |
| U403 | IC Vreg 2.8V 300mA | 1248-6701 | P HA ⇨19 |
| U504 | EMI Filter | A/308-0000-00046 | P HA ⇨22 |
| U505 | EMI Filter | A/308-0000-00046 | P HA ⇨22 |
| U506 | EMI Filter | A/308-0000-00046 | P HA ⇨22 |
| U507 | IC Vreg Dual output 1.8V/2.8V 300mA | 1248-6750 | P HA ⇨21 |
| Z901 | Conn Leaf Spring 1p | 1202-1053 | P HA |
| Z903 | Conn Leaf Spring 1p | 1202-1053 | P HA |



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

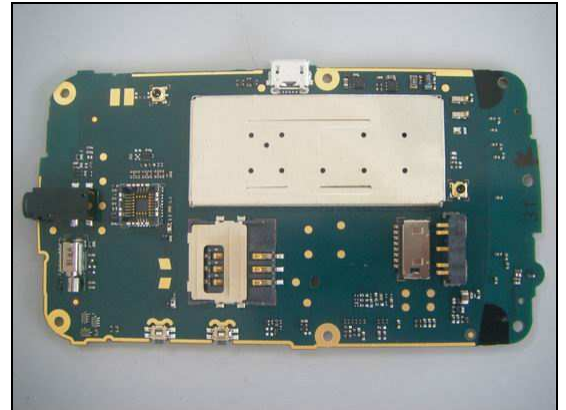
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

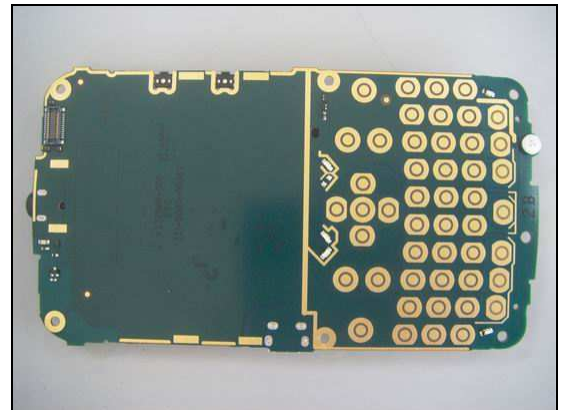
Refer to the pictures below of the primary and secondary sides for repairs that didn't require the Shield Can Fence to be modified:

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

Primary side



Secondary side





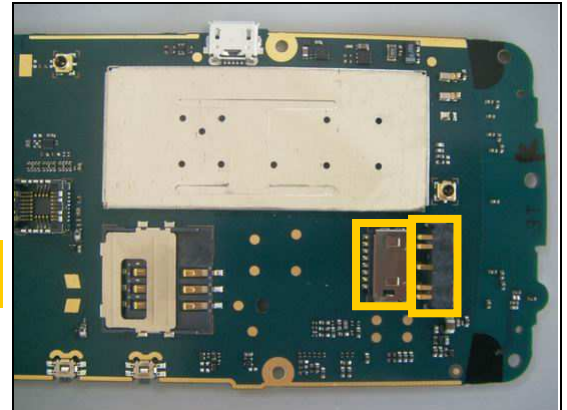
Repair Actions

3.2 Additional Repair Info

1

D401, D402, D616, D706, D707, D708, D709, D714, D716, J901

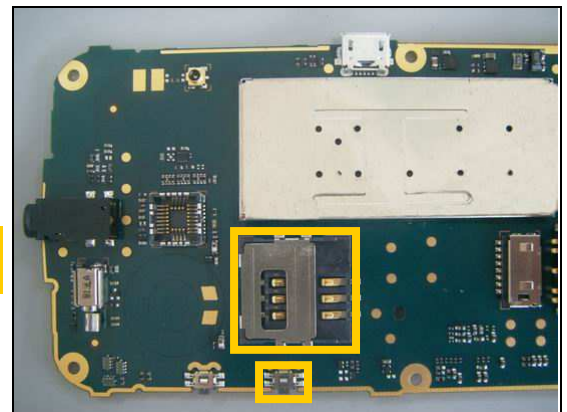
Protect the Battery Connector and Card Conn Micro SD with capton tape!



2

D403, D725

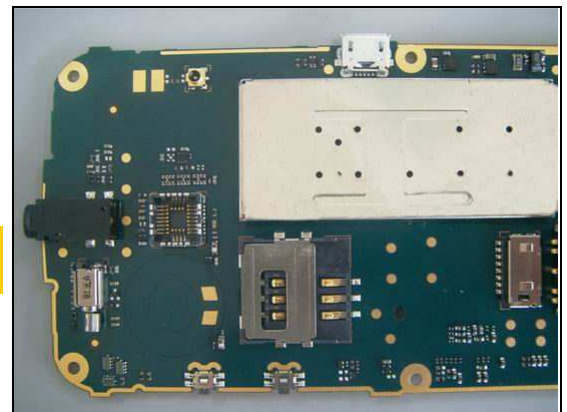
Protect the SIM Card Connector and Input Switch Side Push with capton tape!



3

D404, D405, D406

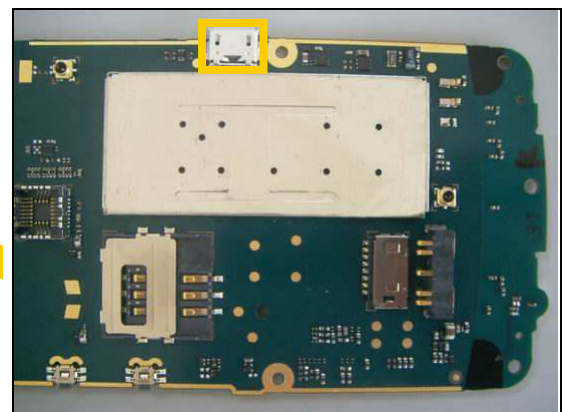
Remove the SIM Card Connector before replace these three parts!



4

D407, D409, D410, FL410, U401

Protect the Micro USB Connector with capton tape!



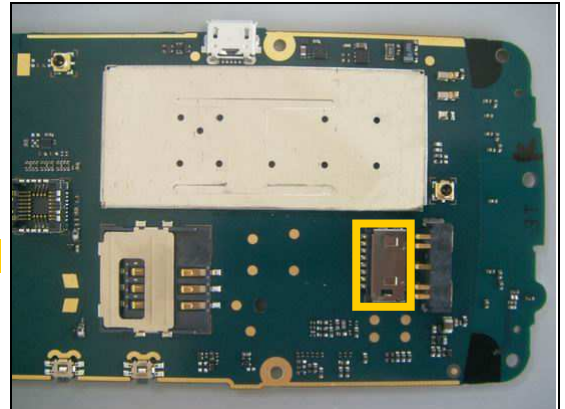


Repair Actions: Additional Repair Info

5

D408, D411, D412, D413, D414, D415, D416, D710

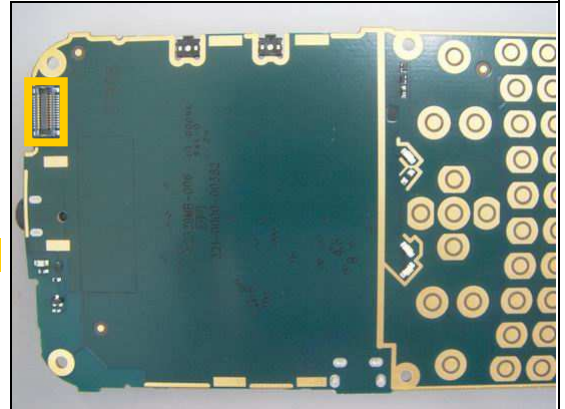
Protect the Card Conn Micro SD with capton tape!



6

D501, D503, D607

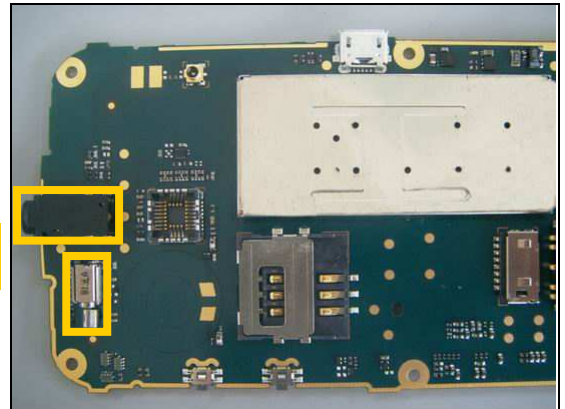
Protect the Conn BtB with capton tape!



7

D502, D504, D612, Q704

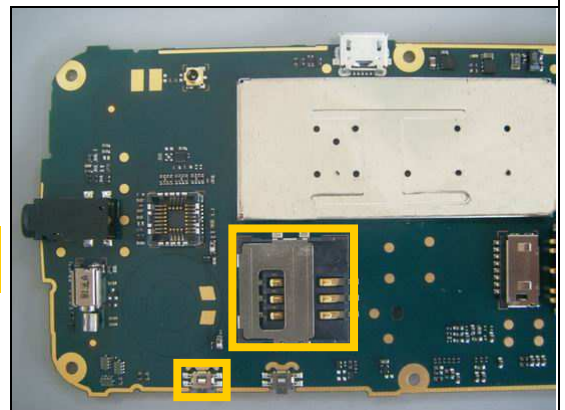
Protect the Conn Audio Jack and Vibrator with capton tape!



8

D602

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



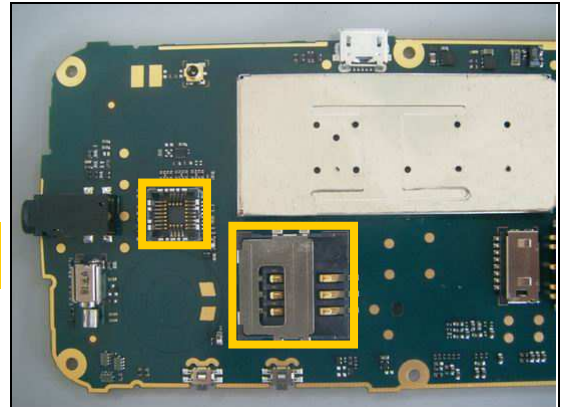


Repair Actions: Additional Repair Info

9

D603

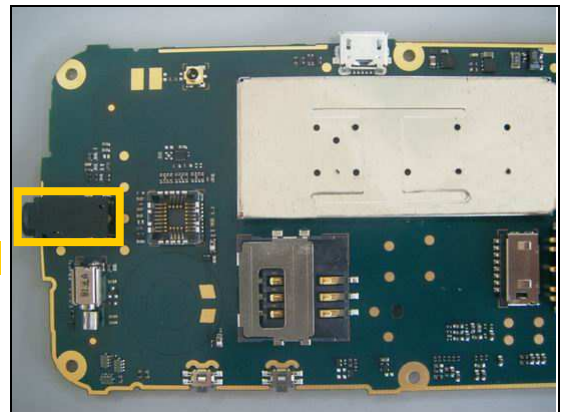
Protect the Camera Socket and SIM Card Connector with capton tape!



10

D608, D609, D610

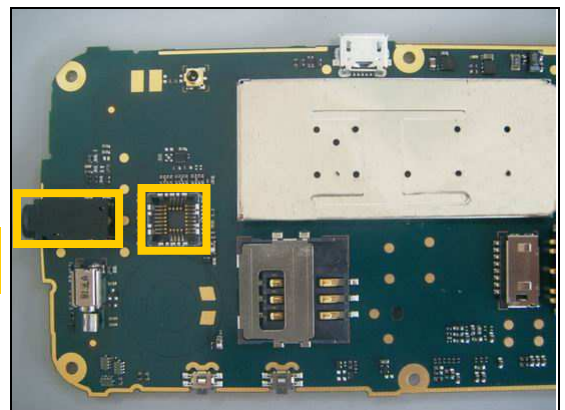
Protect the Conn Audio Jack with capton tape!



11

D611

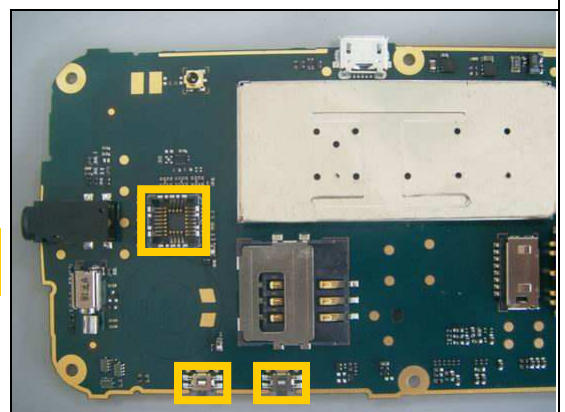
Protect the Conn Audio Jack and Camera Socket with capton tape!



12

J401

Protect the Camera Socket and two Input Switch Side Push with capton tape!



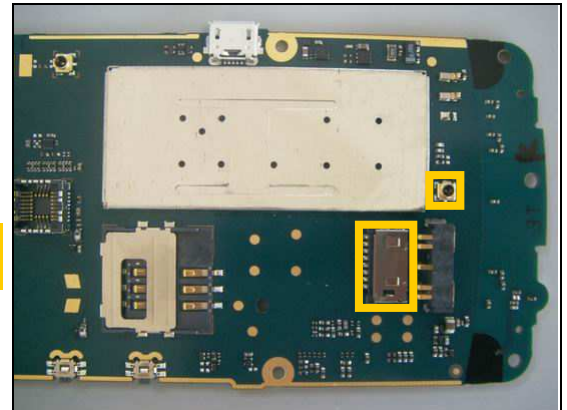


Repair Actions: Additional Repair Info

13

J402

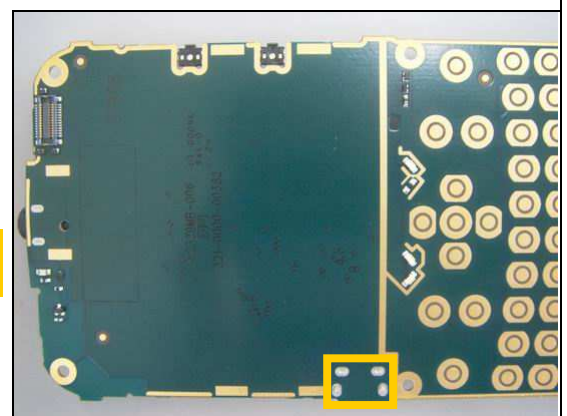
Protect the RF Connector and Card Conn Micro SD with capton tape!



14

J403

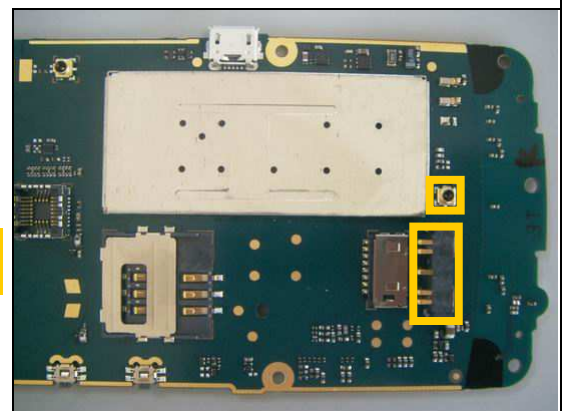
Add solder in the holes with Soldering Iron after mounting!



15

J405

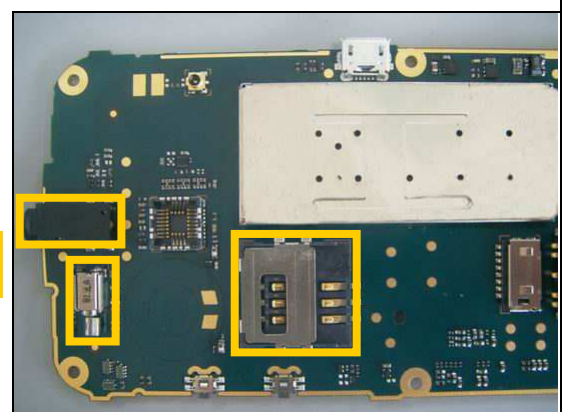
Protect the Battery Connector and RF Connector with capton tape!



16

J501

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



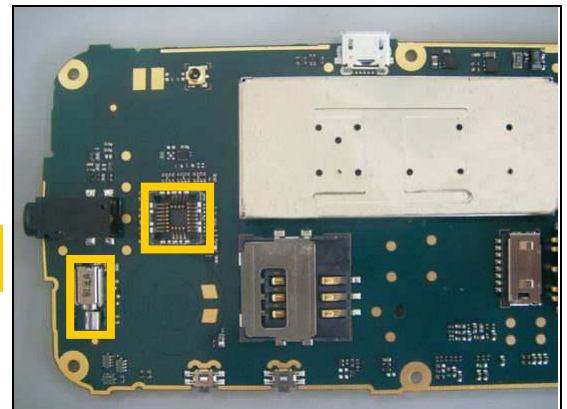


Repair Actions: Additional Repair Info

17

J606

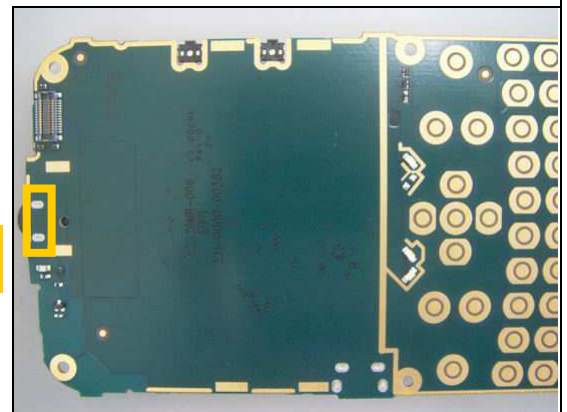
Protect the Vibrator and Camera Socket with capton tape!



18

J606

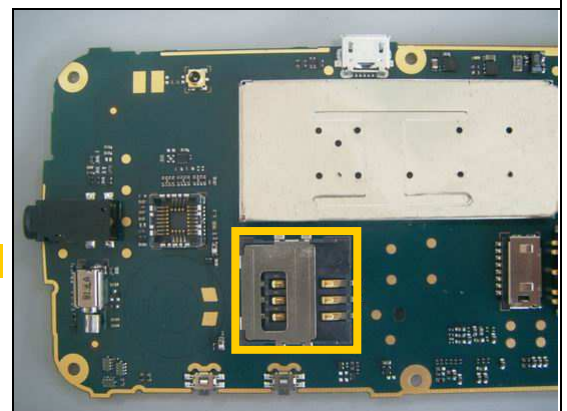
Add solder in the holes with Soldering Iron after mounting!



19

J701, J702, U403

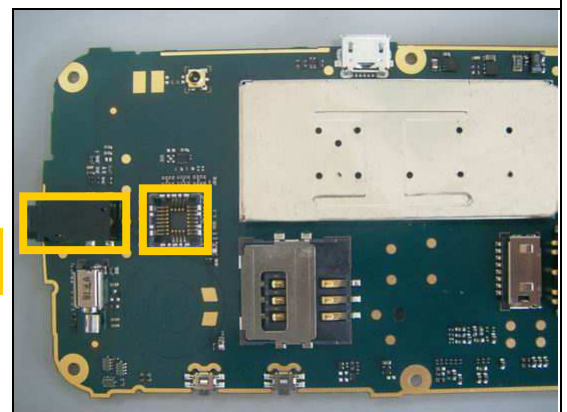
Protect the SIM Card Connector with capton tape!



20

J703

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



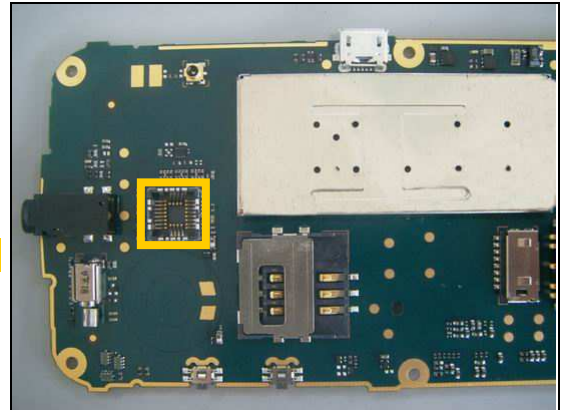


Repair Actions: Additional Repair Info

21

RN501, RN502, RN503, U507

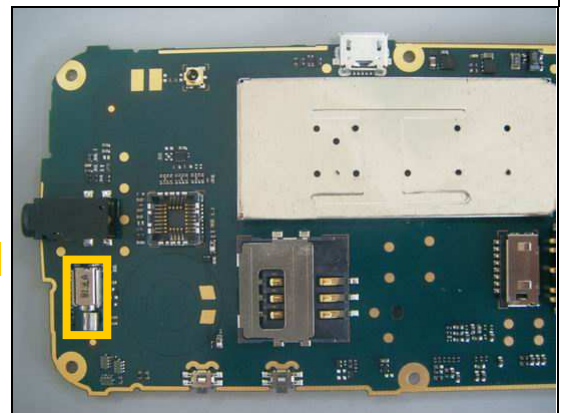
Protect the Camera Socket with capton tape!



22

U504, U505, U506

Protect the Vibrator with capton tape!





4 Revision History

| Rev. | Date | Changes / Comments |
|------|--------------|--------------------|
| 1 | 2011-Sept-09 | Initial release |