



Sony Ericsson

Component Replacement

- electrical -



XPERIA arc, LT15i, LT15a, SO-01C

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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 Additional Soldering Process/

Position	Component	Part no.	Comments
B3502	Mic 0.0 Electret G705	1210-7410	P BGA
C2200	Capacitor 1.0 uF +/-10% 10.0 V K0402	1200-0879	P HA
L1000	Ind WW 2.2 uH +/-20% 2520	1232-8769	S HA
L1001	Ind WW 2.2 uH +/-20% 2520	1232-8769	S HA
L1002	Ind WW 2.2 uH +/-20% 2520	1232-8769	S HA
L1003	Ind WW 2.2 uH +/-20% 2520	1232-8769	S HA
L1004	Ind WW 2.2 uH +/-20% 2520	1232-8769	S HA
L2400	Ind WW 2.2 uH +/-20% 2520	1232-8769	S HA
L2852	Ferrite B 1.8 kOhm 200.0 mA 0402	1237-6064	P HA ⇒ 5
L2853	Ferrite B 1.8 kOhm 200.0 mA 0402	1237-6064	P HA ⇒ 2
L3100	Ferrite B 220.0 Ohm 700.0 mA K0402	1200-6898	S HA
L3602	Ferrite B 1.8 kOhm 200.0 mA 0402	1237-6064	P HA ⇒ 3
L3603	Ferrite B 1.8 kOhm 200.0 mA 0402	1237-6064	P HA ⇒ 3
L3604	Ferrite B 1.8 kOhm 200.0 mA 0402	1237-6064	P HA ⇒ 3
L7600	Ind WW 10.0 uH	1000-3331	P HA
L7801	Ind WW 1, uH 30% VLS252012T_2.5x2	1208-8270	P HA
N1302	IC Lin 2,61 x1,96 x0.5 mm Fuel Gauge	1237-9687	P HA
N1310	IC Vreg	1245-5261	P HA ⇒ 1
N2401	IC Lin UDFN6 Converter Step Down Adjustable	1227-6376	S HA
N2800	ASIC RF Transceiver QTR-8200 308-NSP	1228-2273	S BGA
N2801	Mod PA GSM 5x5x0.6 QUAD Band	1232-2928	S BGA
N2803	GSM850/GSM900/DCS/PCS Linear EDGE PAM SP10T Antenna Switch GSM and UMTS/CDMA Dual Mode	1237-2994	S BGA
N2900	Mod PA WCDMA	1237-1770	S HA
N2900	Mod PA WCDMA	1237-1771	S HA
N2902	Mod PA WCDMA	1237-1768	S HA
N2903	Mod PA WCDMA	1237-1765	S HA
N5400	MEMS Compass 3 Axis Analog Magnetometer	1228-7182	S HA
N5500	IC	1237-6823	P HA ⇒ 5
N6502	IC Lin CS-12 Regulator Boost, Switched Capacitor	1227-6796	S HA
N6504	IC IF WCSP-4	1212-7867	S HA
N6505	IC ESD Prot CSP-10-0.4 (1.6x1.1x0.605mm) HDMI	1216-3063	S HA
N6506	IC ESD Prot CSP-10-0.4 (1.6x1.1x0.605mm) HDMI	1216-3063	S HA
N6507	IC ESD Prot CSP-9-0.4 (1.2*1.2*0,605 mm) HDMI	1216-2989	S HA ⇒ 4
N8100	Mod Radio Bluetooth + FM	1237-3816	S BGA
N8101	Mod PA WLAN 3.0x3.0x0.5mm	1239-7071	S HA
N8102	IC Vreg CSP-6	1232-0901	S HA
N8400	IC Amp TSLP-7-1(2x1.3x0.4mm)	1218-0656	P HA
R9805	Fuse	1234-5250	P HA ⇒ 19
S5203	Input Switch Side Push SKSC ALPS	1201-6555	S HA/ST
S5204	Input Switch Side Push SKSC ALPS	1201-6555	S HA/ST
V3100	Diode Protection 0,7 V SOD-882	1201-2253	S HA
V3500	Diode Zener 5.0 V SOT-723	1203-0201	S HA
V3502	Diode Protection 3.3 V SOT723	1000-0399	S HA
V4000	Diode Protection 3.3 V SOT723	1000-0399	P HA ⇒ 5
V4001	Diode Protection 3.3 V SOT723	1000-0399	P HA ⇒ 5
V4100	IC Switch	1244-3833	S HA
V5107	LED Red/Green/Blue 1,6x1,6x0,35 LED whith full color	1230-2194	S HA/ST ⇒ 4
V7601	Trans N-ch FET 1.6x1.6x0.55mm	1235-2707	P HA
V9830	IC Switch	1244-3833	P HA ⇒ 7



Component Replacement Repair Drawing Additional Soldering Process/

Position	Component	Part no.	Comments
X1300	Conn Leaf Spring Plug 5p	1237-4694	P BGA ⇒ 8
X2200	Conn USB micro AB Receptacle 5p Splash Proof, Midmount	1237-1932	P BGA ⇒ 6
X2801	Conn Coax Receptacle 1p test switch	1221-6477	P BGA ⇒ 9
X2802	Conn 0p	1001-0637	P BGA
X4000	Card Conn SIM SIM reader	1202-0528	P BGA ⇒ 10
X4100	Card Conn Micro SD	1220-3717	P BGA ⇒ 11
X5303	Conn Other Receptacle 12p	1225-1055	P BGA
X6501	Conn HDMI Receptacle 19p D-type, 2 DIP	1235-4648	S BGA
X7002	Conn Other Receptacle 24p	1210-3896	P BGA ⇒ 12
X7301	Conn Other Receptacle 24p	1210-3896	P BGA ⇒ 13
X8401	Conn Coax Receptacle 0p test switch	1221-6477	P BGA ⇒ 12
X8402	Conn Pogopin 1p	1240-8397	P BGA ⇒ 12
X8404	Conn Leaf Spring 1p	1201-4841	S HA
X8405	Conn Leaf Spring 1p	1201-4841	S HA
X8406	Conn Leaf Spring 1p	1201-4841	S HA
X8407	Conn Leaf Spring 1p	1201-4841	S HA
X8408	Conn 0p	1238-6785	P HA ⇒ 14
X9800	Conn Other Receptacle 24p	1210-3896	P BGA ⇒ 15
X9801	Conn Other Receptacle 24p	1210-3896	P BGA ⇒ 16
Z2800	Filter 0.0	1236-7960	S HA
Z8001	Filter SAW 2.4 GHz 1.35*1.05*0.5	1217-3397	S HA
Z8401	Filter SAW 1.57 GHz 1.35X1.05X0.6	1207-2628	P HA
Z8402	Filter 1.575 GHz	1238-0509	P HA ⇒ 17
Z8403	Filter 1.575 GHz	1236-2944	S HA
Z9800	Filter Ceramic 100.0 MHz 0,85*0,65*0,45	1235-3014	P HA
Z9801	Filter Ceramic 100.0 MHz 0,85*0,65*0,45	1235-3014	P HA ⇒ 18
Z9802	Filter Ceramic 100.0 MHz 0,85*0,65*0,45	1235-3014	P HA ⇒ 18
Z9803	Filter Ceramic 100.0 MHz 0,85*0,65*0,45	1235-3014	P HA ⇒ 1
Z9804	Filter Ceramic 100.0 MHz 0,85*0,65*0,45	1235-3014	P HA ⇒ 1
Z9805	Filter Ceramic 100.0 MHz 0,85*0,65*0,45	1235-3014	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

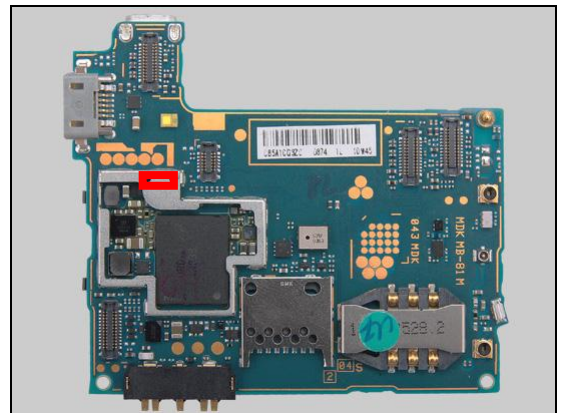
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

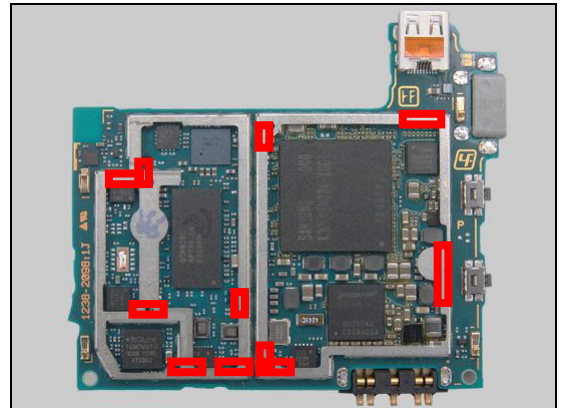
Refer to the pictures below of the primary and secondary sides for repairs that require the Shield Can Fence to be modified:

- the shield can lid has to be removed
- the red symbols show where the frame should be cut to enable rework
- after rework the height of the frame should not be affected
- it should not be visible that rework has been carried out when the lid has been mounted

Primary side



Secondary side





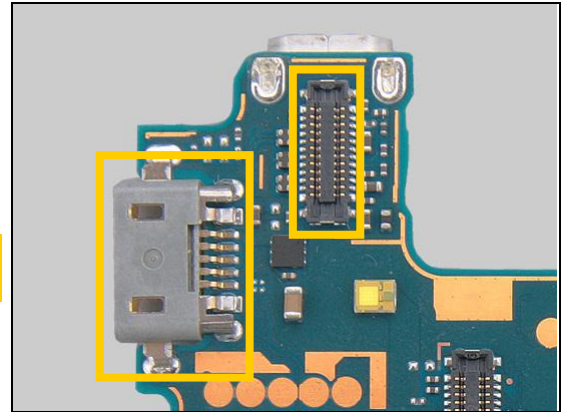
Repair Actions

3.2 Additional Repair Info

1

C2200, N1310, Z9803, Z9804, Z9805

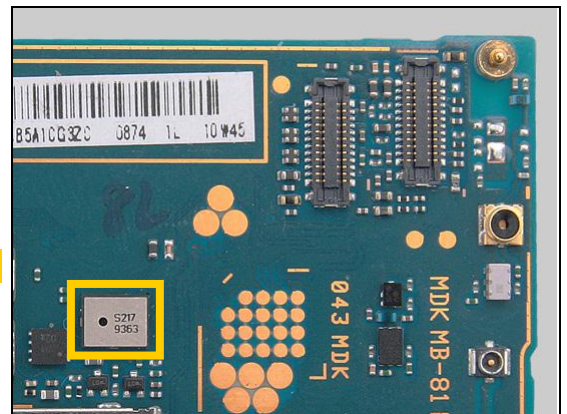
Protect the Micro USB connector and the BTB connector with capton tape!



2

L2853

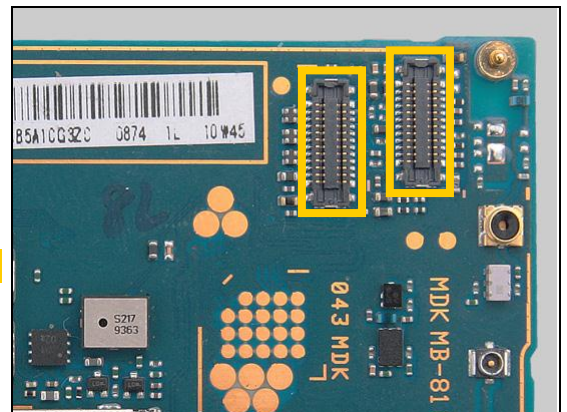
Protect the Mic with capton tape!



3

L3602, L3603, L3604

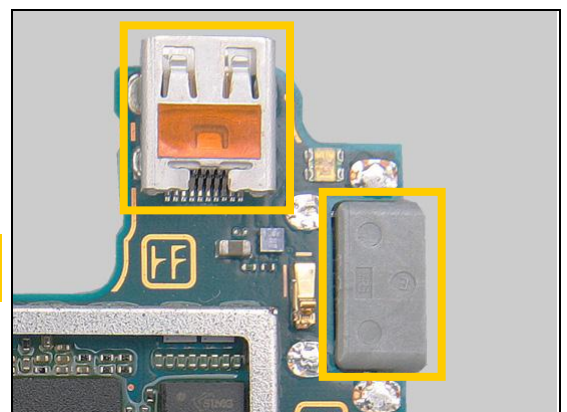
Protect the two BTB connectors with capton tape!



4

N6507, V5107

Protect the Micro USB connector and the HDMI connector with capton tape!



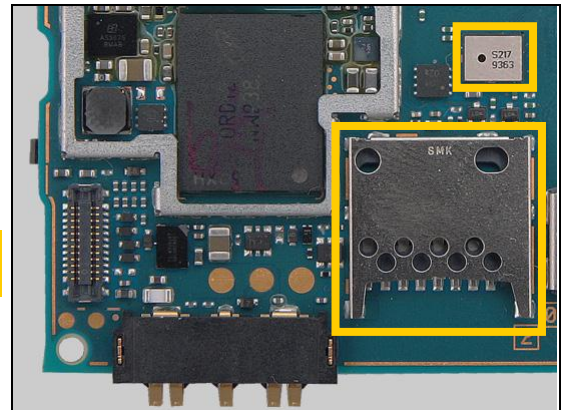


Repair Actions: Additional Repair Info

5

L2852, N5500, V4000, V4001

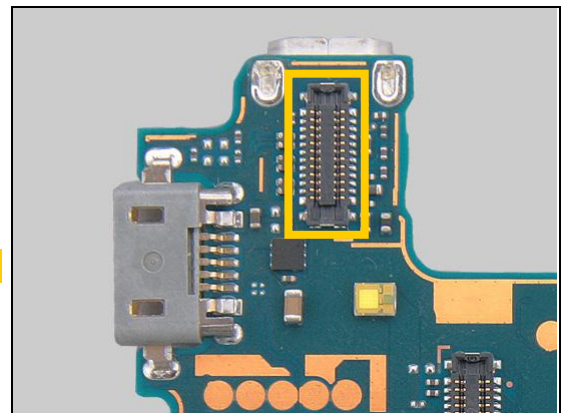
Protect the Micro SD connector and the Mic with capton tape!



6

X2200

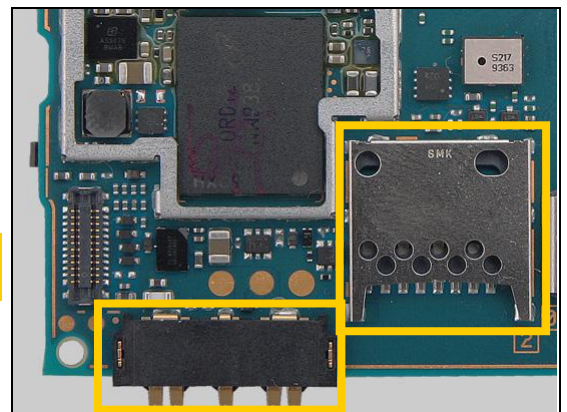
Protect the BtB connector with capton tape!



7

V9830

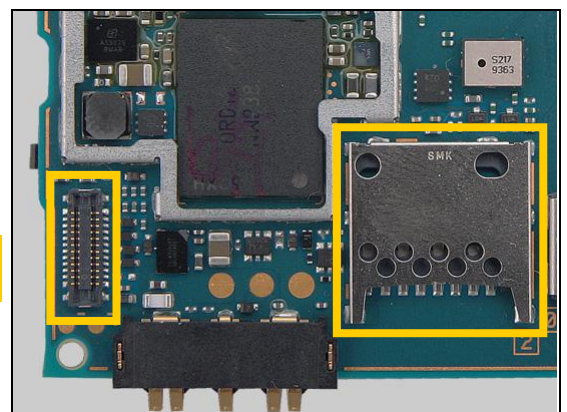
Protect the Micro SD connector and the connector with capton tape!



8

X1300

Protect the Micro SD connector and the BtB connector with capton tape!



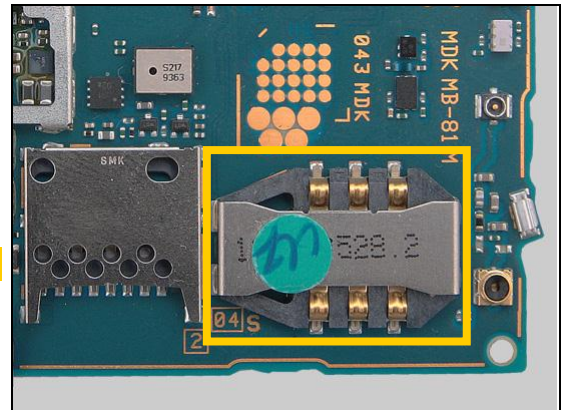


Repair Actions: Additional Repair Info

9

X2801

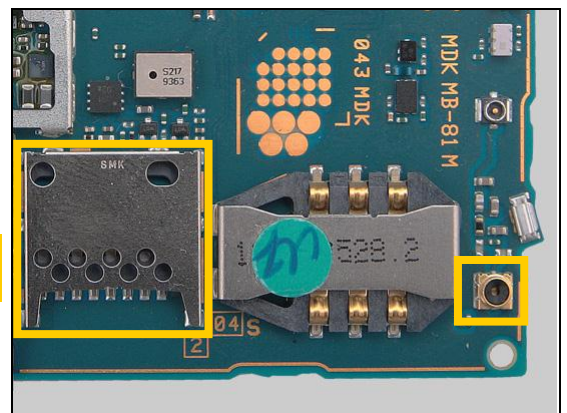
Protect the SIM connector with capton tape!



10

X4000

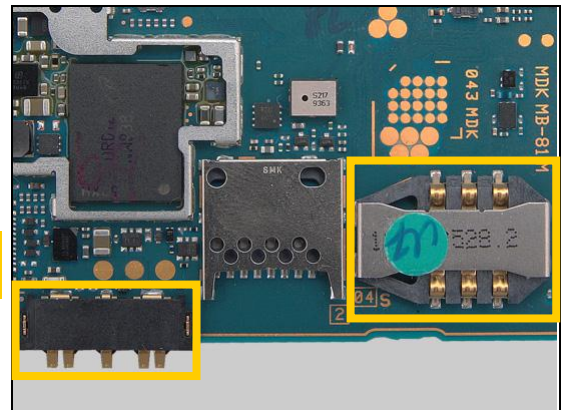
Protect the Micro SD connector and the Coax Connector with capton tape!



11

X4100

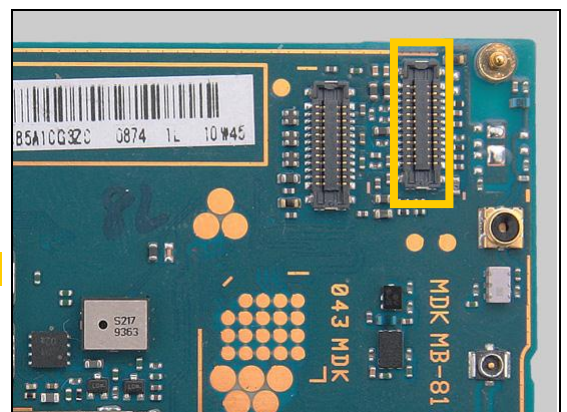
Protect the SIM connector and the connector with capton tape!



12

X7002, X8401, X8402

Protect the BtB connector with capton tape!



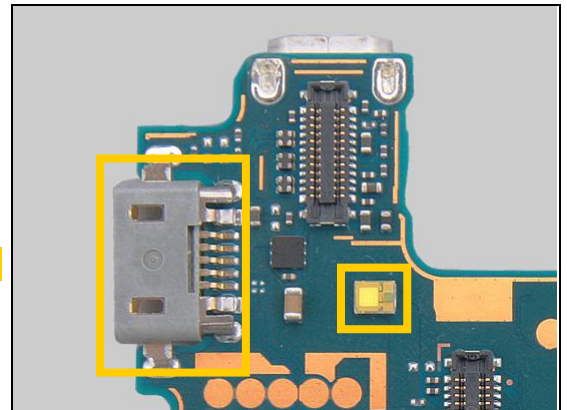


Repair Actions: Additional Repair Info

13

X7301

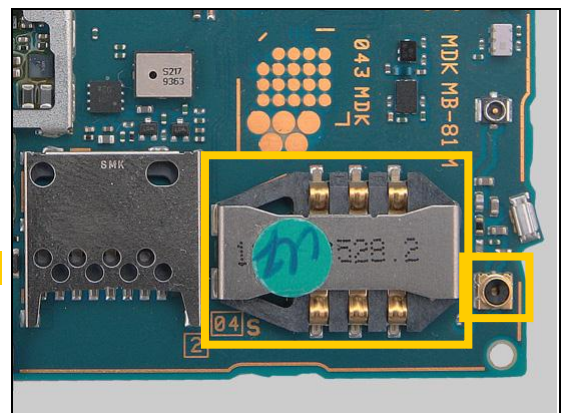
Protect the Micro USB connector with capton tape!



14

X8408

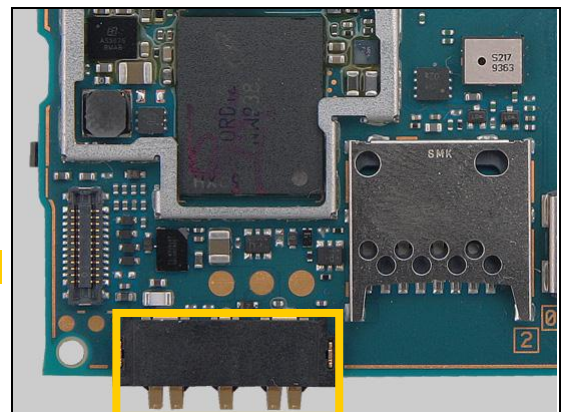
Protect the SIM connector with capton tape!



15

X9800

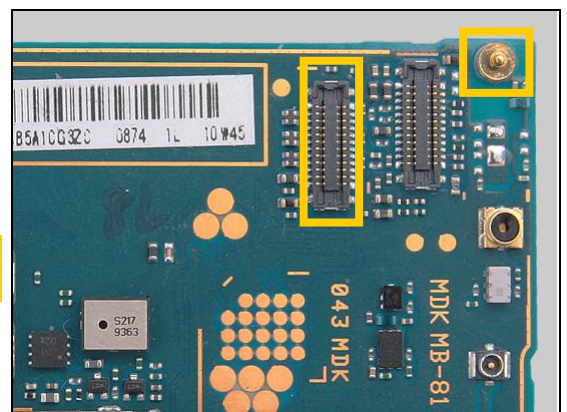
Protect the connector with capton tape!



16

X9801

Protect the BtB connector and the Pogopin connector with capton tape!



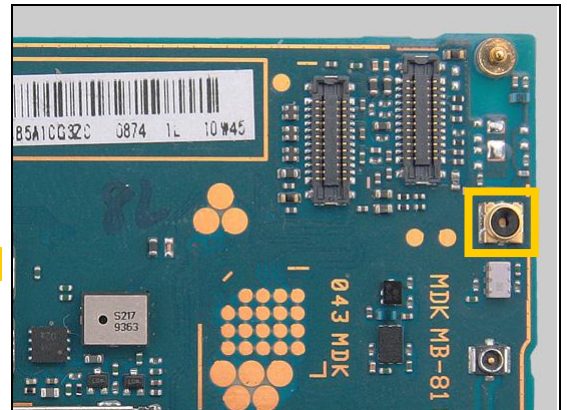


Repair Actions: Additional Repair Info

17

Z8402

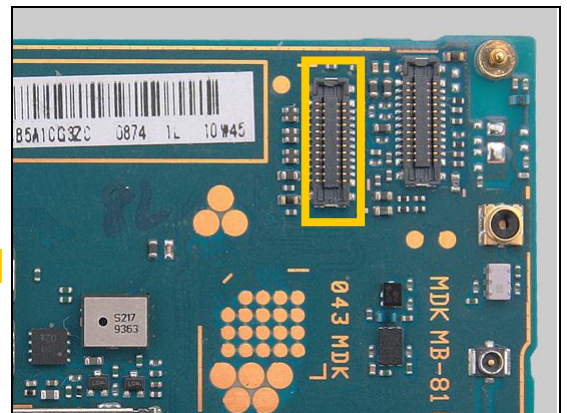
Protect the Coax connector with capton tape!



18

Z9801, Z9802

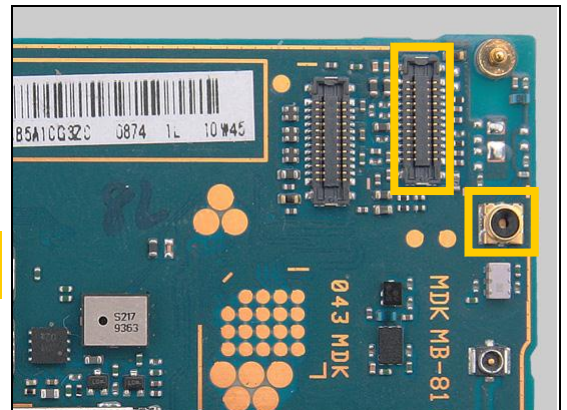
Protect the BtB connector with capton tape!



19

R9805

Protect the BtB connector and the Coax connector with capton tape!





4 Revision History

Rev.	Date	Changes / Comments
1	2011-Mar-09	Initial release
2	2011-Apr-19	Correct search function
3	2011-May-19	Add component "R9805"
4	2011-Jun-08	Add component "1221-6477 Conn Coax Receptacle 0p test switch X8401"