



Sony Ericsson

Component Replacement

- electrical -



MT15i

MT15a

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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
B3503	Microphone	1206-4070	P BGA ⇒1
B5100	Vibrator Bar Sanyo SMD	1208-0601	P BGA ⇒2
C1312	Capacitor 100.0 nF	1000-6848	P HA ⇒3
C1317	Capacitor 1.0 uF +/-10% 25.0 V K0603	1000-0076	P HA
C1324	Capacitor 1.0 uF +/-10% 25.0 V K0603	1000-0076	P HA
C7603	Capacitor Ceramic 4.7 uF	1200-1678	P HA
C7605	Capacitor 1.5 nF +/-10% 50.0 V K0402	1000-6548	P HA
L1000	Ind WW 2.2 uH	1232-8769	P HA
L1001	Ind WW 2.2 uH	1232-8769	P HA
L1002	Ind Chip 2.2 uH	1234-7293	P HA
L1003	Ind WW 2.2 uH	1232-8769	P HA
L1004	Ind WW 2.2 uH	1232-8769	P HA
L1300	Ind Chip 1.0 uH	1225-8646	P HA
L2400	Ind WW 2.2 uH	1232-8769	S HA
L3100	Ind Chip 120.0 nH	1236-1090	P HA
L3500	Ferrite B 0.0 0.0 600ohm 0402 0.3A 0.7ohm Bead	1000-0132	S HA
L3501	Ferrite B 0.0 0.0 600ohm 0402 0.3A 0.7ohm Bead	1000-0132	S HA
L3600	Filter 0.0	1000-2609	P HA
L3601	Filter 0.0	1000-2609	P HA
L3602	Ferrite B 1.8 kOhm	1237-6064	P HA
L3603	Ferrite B 1.8 kOhm	1237-6064	P HA
L3604	Ferrite B 1.8 kOhm	1237-6064	P HA
L7600	Ind WW 10.0 uH	1000-3331	P HA
L7610	Ferrite B 1.8 kOhm 200.0 mA 0402	1237-6064	P HA
L7801	Ind WW 1, uH 30% VLS252012T_2.5x2	1208-8270	P HA
N1302	IC Linear Fuel Gauge	1237-9687	P HA ⇒4
N1303	ASIC PM Charger with OTG	1237-3321	P HA
N1304	IC Vreg R1154x	1245-5261	P HA
N2200	IC ESD Prot	1227-8675	P HA
N2401	IC Lin Converter Step Down	1227-6376	S HA
N2800	ASIC RF Transceiver QTR-8200 308-NSP	1228-2273	S BGA C
N2801	Mod PA QUAD GSM850/GSM900/DCS/ EDGE	1232-2928	S BGA C
N2803	RF Antenna Switch GSM and UMTS/CDMA Dual	1237-2994	S HA C
N2900	Mod PA WCDMA 824-849 MHz	1237-1770	S HA C For Band 5
N2900	Mod PA WCDMA 880-915 MHz	1237-1771	S HA C For Band 8
N2902	Mod PA WCDMA 1850-1910 MHz	1237-1768	S HA C For Band 2
N2903	Mod PA WCDMA 1920-1980 MHz	1237-1765	S HA C For Band 1
N3501	IC Amplifier 500mA	1203-4594	S HA
N3600	ASIC Tjatte3 CSP20	1000-0198	P HA
N5400	MEMS Compass Analog	1228-7182	P HA ⇒6
N6500	ASIC Si HDMI	1235-9574	S HA
N6501	IC Lin CS-12 Regulator Boost, Switched Capacitor	1227-6796	P HA
N6504	IC IF WCSP-4	1212-7867	S HA
N6505	IC ESD Prot CSP-10-0.4 (1.6x1.1x0.605mm)	1216-3063	S HA
N6506	IC ESD Prot CSP-10-0.4 (1.6x1.1x0.605mm)	1216-3063	S HA
N6507	IC ESD Prot CSP-9-0.4 (1.2*1.2*0.605 mm)	1216-2989	S HA ⇒7
N7600	IC WL-CSP 6x4 balls	1212-7979	P HA
N8101	Mod PA WLAN 3.0x3.0x0.5mm	1239-7071	P HA
N8102	IC Vreg	1232-0901	S HA
N8401	IC Amp	1218-0656	P HA
R3611	Resistor 16.0 kOhm +/-1% 50.0 mW K0201	1000-4150	P HA
R3616	Resistor 33.0 kOhm	1000-4154	P HA
S5207	Input Switch Side Push	1200-9861	S HA/ST

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Component Replacement Repair Drawing Electrical/

Position	Component	Part no.	Comments
V1304	Trans N-ch FET 1.0X0.6X0.38	1200-8301	S HA
V1305	IC Switch	1244-3833	S HA
V3100	Diode Protection 0.7 V SOD-882	1201-2253	P HA
V3502	Dual ESD protection diode	1000-0399	S HA
V4100	Trans P-ch FET WDFN6	1200-1780	P HA ⇒9
V5107	LED Multi-color	1220-0747	S HA/ST
V7601	Trans N-ch FET 1.6x1.6x0.55mm	1235-2707	P HA
X1000	Conn Leaf Spring Plug 1p	1238-5861	S HA
X1300	Conn Pogopin 5p	1226-4176	P BGA ⇒10
X2200	Conn USB micro AB Receptacle 5p Splash Proof	1237-1932	P BGA ⇒11
X2800	Connector	1000-8175	P BGA ⇒12
X2801	Conn Coax Receptacle 0p test switch	1221-6477	P BGA ⇒13
X4000	Serena - SIM Reader	1200-0767	P BGA
X4100	Conn Micro SD	1235-5781	P BGA ⇒10
X5200	Conn BtB 24p	1201-5017	S BGA
X5303	Conn BtB 20p	1200-7140	P BGA ⇒5
X6501	Conn HDMI Receptacle 19p D-type, midmount	1236-4208	P BGA ⇒14
X7002	Conn Other Receptacle 24p	1210-3896	P BGA ⇒15
X7301	Conn BtB	1200-2529	S BGA
X8000	Conn Leaf Spring Plug 1p Antenna/GND	1239-2123	P HA ⇒14
X8001	Conn Coax Receptacle 0p test switch	1221-6477	P BGA ⇒8
X8422	Conn Leaf Spring Plug 1p Antenna/GND	1239-2123	P HA ⇒14
X8423	Conn Leaf Spring Plug 1p Antenna/GND	1239-2123	P HA ⇒14
Z2200	Filter Ceramic 100.0 MHz	1235-3014	P HA
Z2800	Filter 0.0	1236-7960	S HA
Z8001	Filter SAW 2.4 GHz 1.35*1.05*0.5	1217-3397	P HA
Z8401	Filter SAW 1.57 GHz	1207-2628	P HA
Z8403	Filter 1.575 GHz	1236-2944	S 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

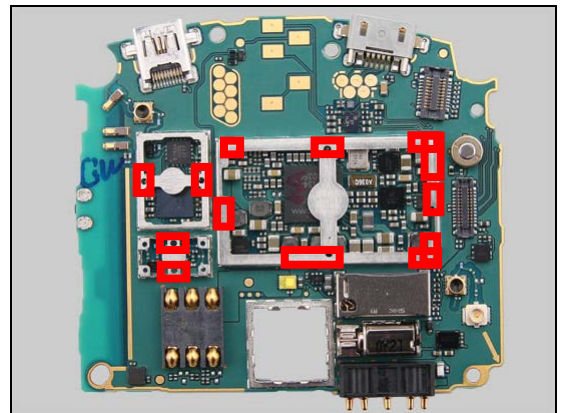
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

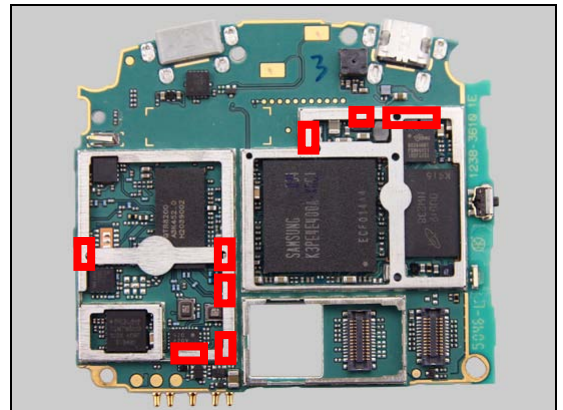
Refer to the pictures below of the primary and secondary sides for repairs that require the Shield Can Fence to be modified:

- 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



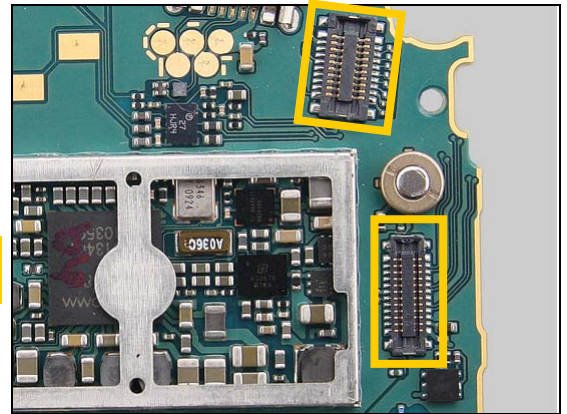
Repair Actions

3.2 Additional Repair Info

1

B3503

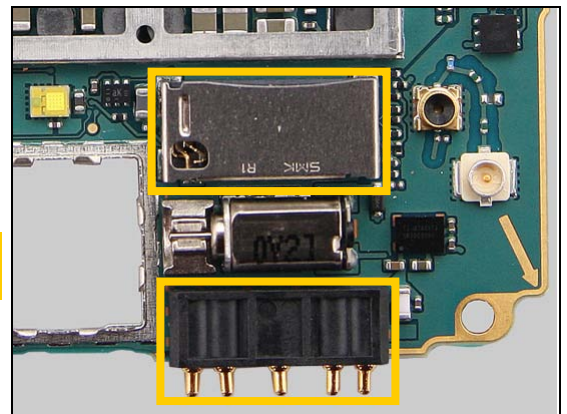
Protect the connector and the BTB connector with capton tape!



2

B5100

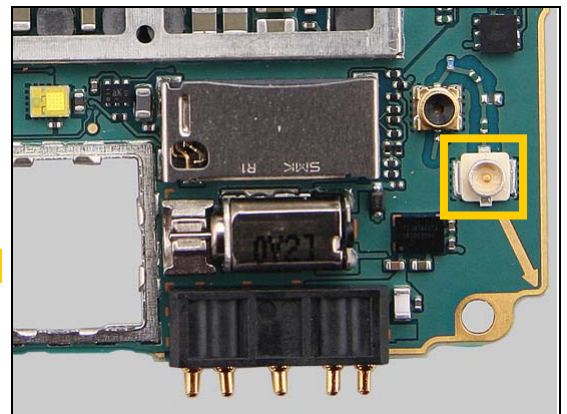
Protect the Micro SD connector and the Pogopin connector with capton tape!



3

C1312

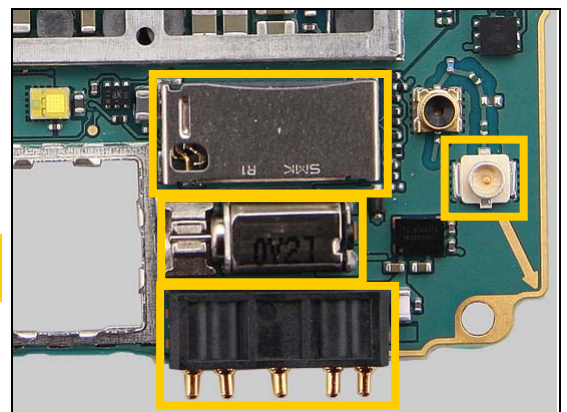
Protect the connector with capton tape!



4

N1302

Protect the Micro SD connector, vibrator and the two connectors with capton tape!



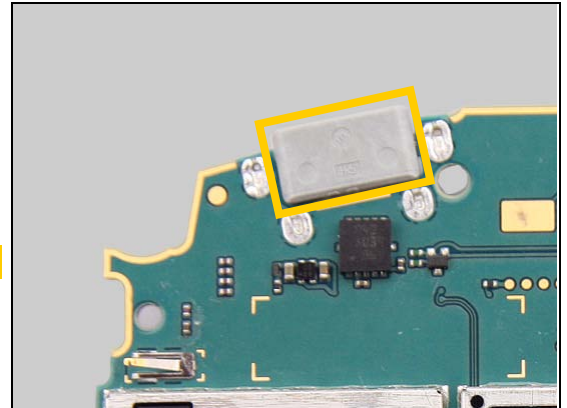


Repair Actions: Additional Repair Info

5

N5000, X5303

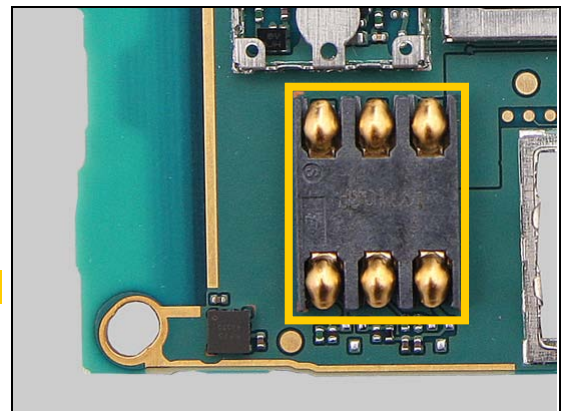
Protect the Micro USB connector with capton tape!



6

N5400

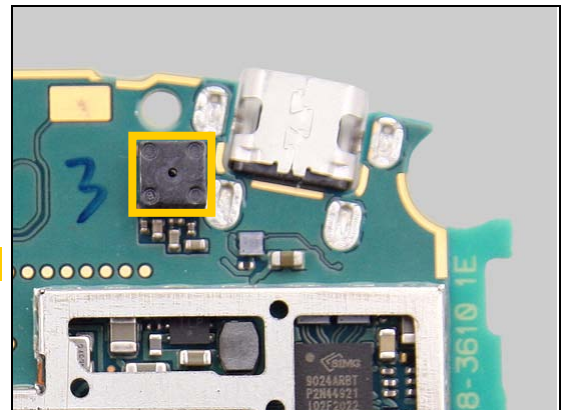
Protect the SIM card connector with capton tape!



7

N6507

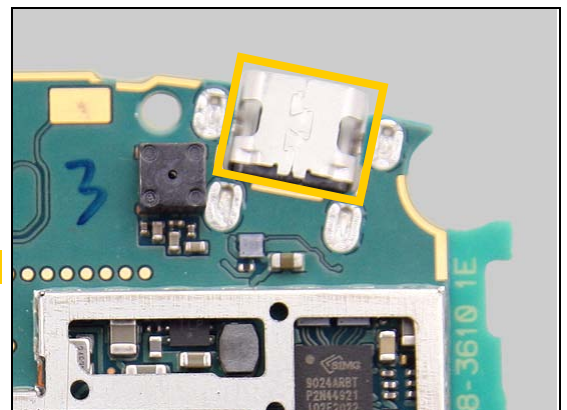
Protect the camera with capton tape!



8

X8001

Protect the HDMI connector with capton tape!

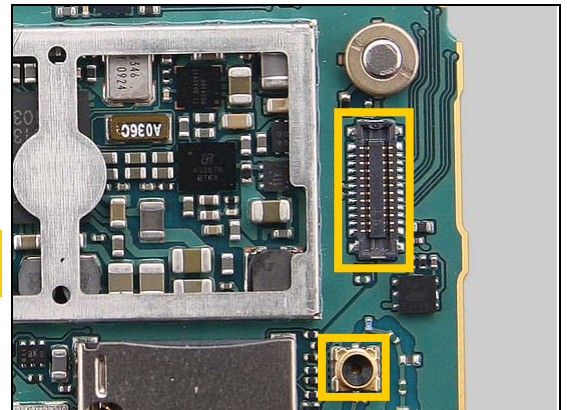


Repair Actions: Additional Repair Info

9

V4100

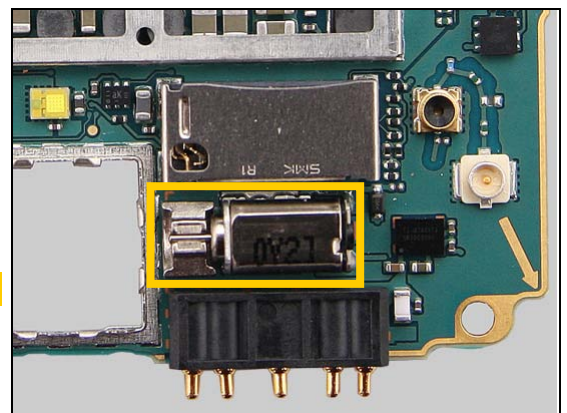
Protect the Coax connector and the connector with capton tape!



10

X1300, X4100

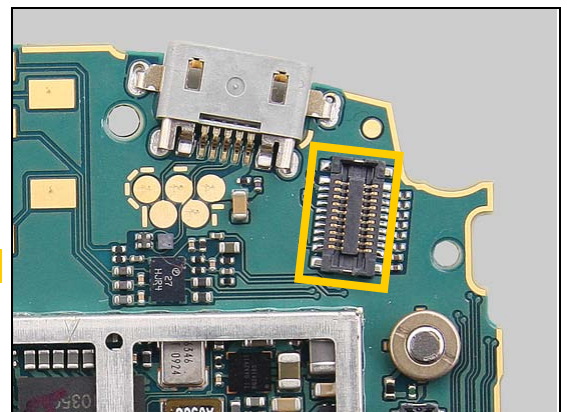
Protect the vibrator with capton tape!



11

X2200

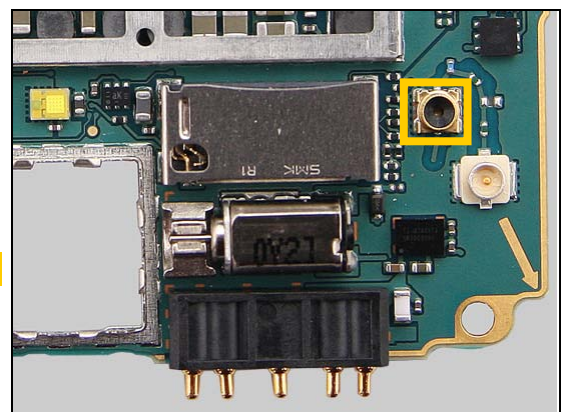
Protect the BTB connector with capton tape!



12

X2800

Protect the Coax connector with capton tape!



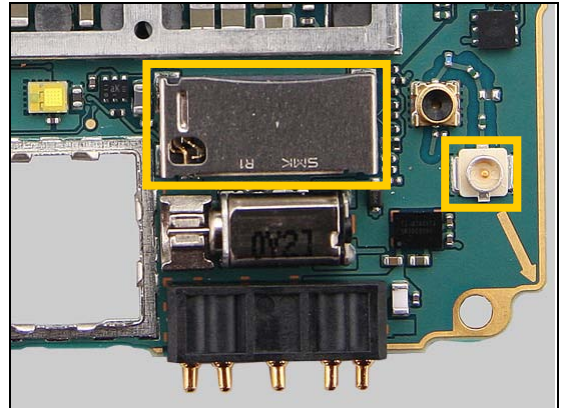


Repair Actions: Additional Repair Info

13

X2801

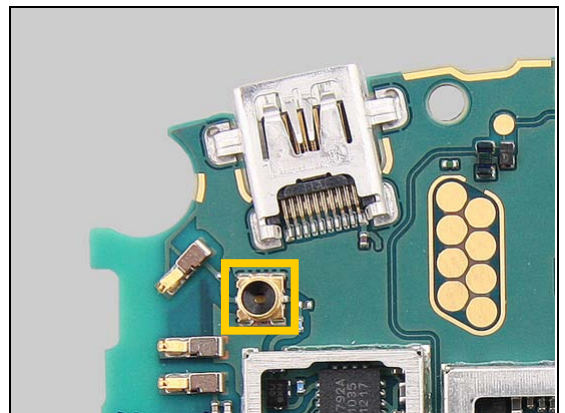
Protect the connector and the Micro SD connector with capton tape!



14

X6501, X8000, X8422, X8423

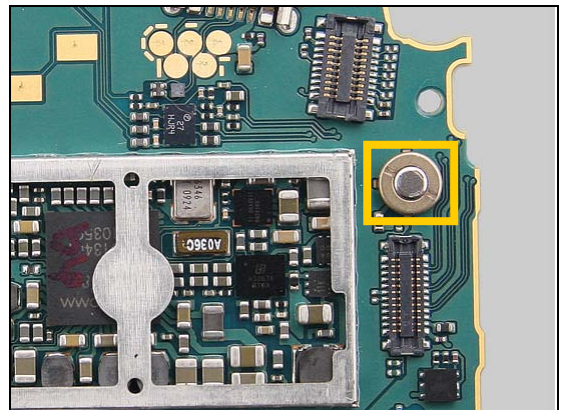
Protect the Coax connector with capton tape!



15

X7002

Protect the Mic with capton tape!





4 Revision History

Rev.	Date	Changes / Comments
1	2011-Mar-23	Initial release
2	2012-Apr-13	Search function corrected