



Sony Ericsson

# Component Replacement

- electrical -



*MT11i, MT11a*

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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



## 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

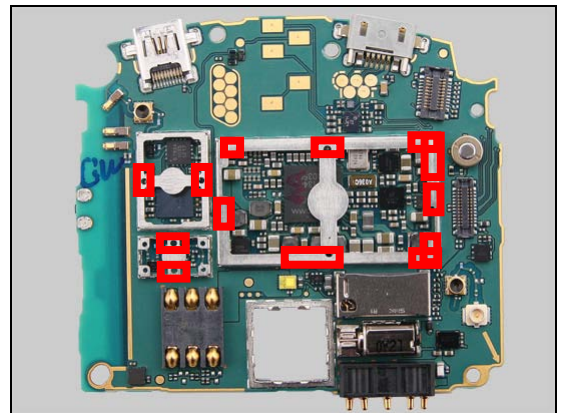
**Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!**

### 3.1 Shield Can Fence Modifications

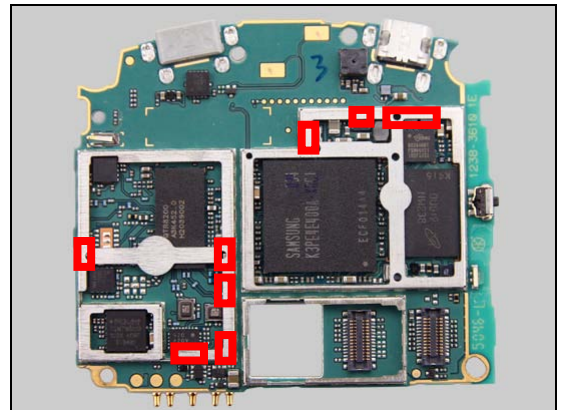
Refer to the pictures below of the primary and secondary sides for repairs that require the Shield Can Fence to be modified:

- 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*





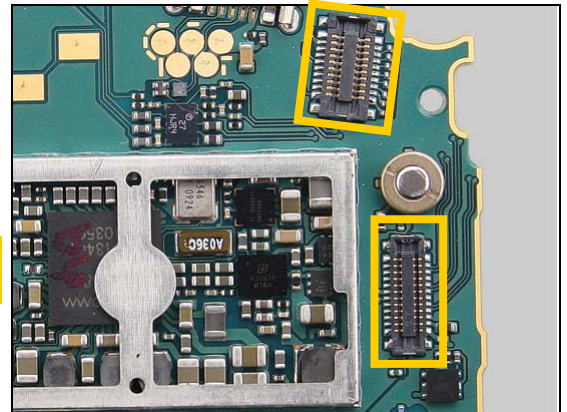
## Repair Actions

### 3.2 Additional Repair Info

1

B3503

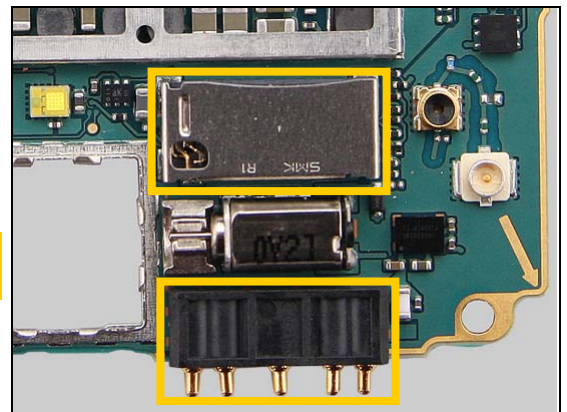
**Protect the connector and the BTB connector with capton tape!**



2

B5100

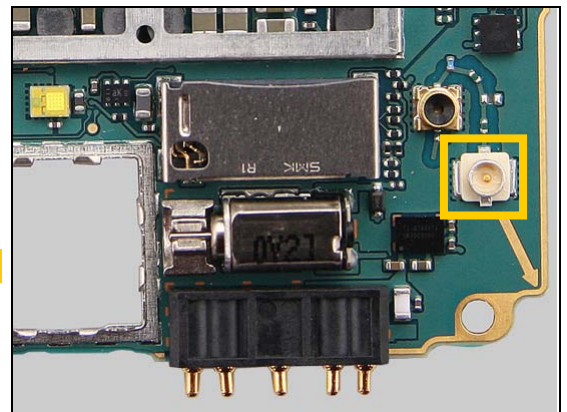
**Protect the Micro SD connector and the Pogopin connector with capton tape!**



3

C1312

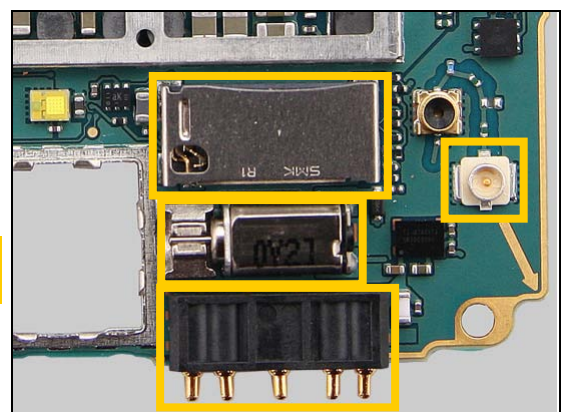
**Protect the connector with capton tape!**



4

N1302

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





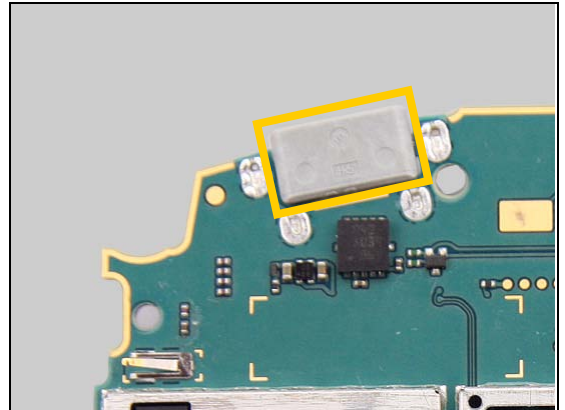


## Repair Actions: Additional Repair Info

5

N5000, X5303

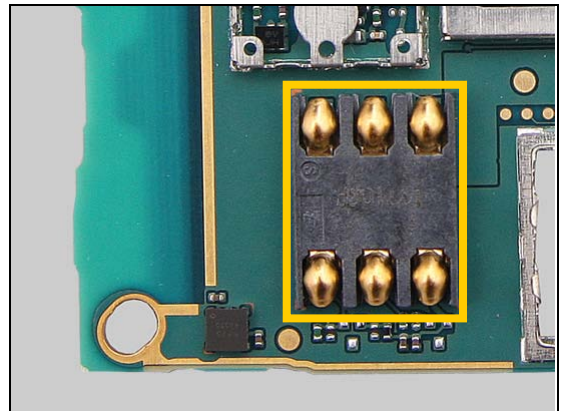
**Protect the Micro USB connector with capton tape!**



6

N5400

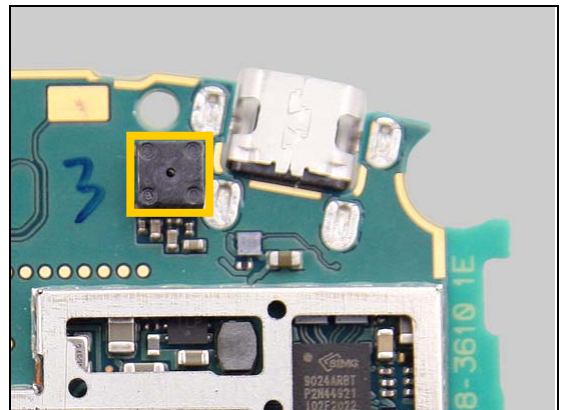
**Protect the SIM card connector with capton tape!**



7

N6507

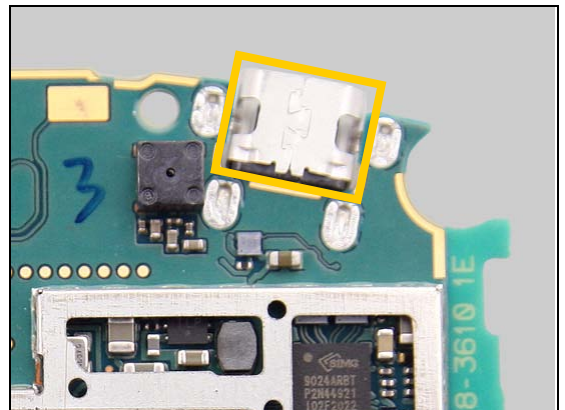
**Protect the camera with capton tape!**



8

X8001

**Protect the HDMI connector with capton tape!**



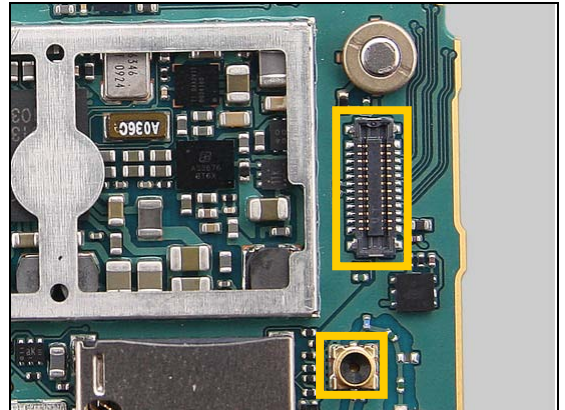


## Repair Actions: Additional Repair Info

9

V4100

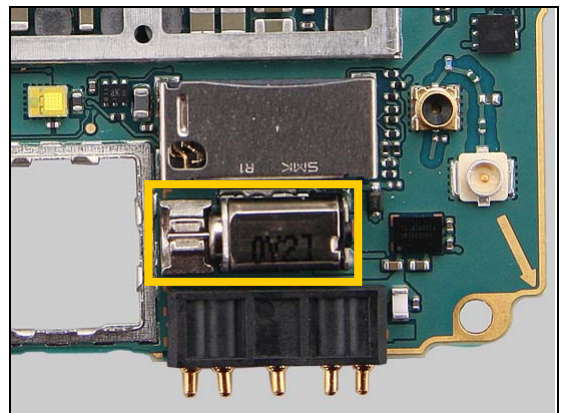
**Protect the Coax connector and the connector with capton tape!**



10

X1300, X4100

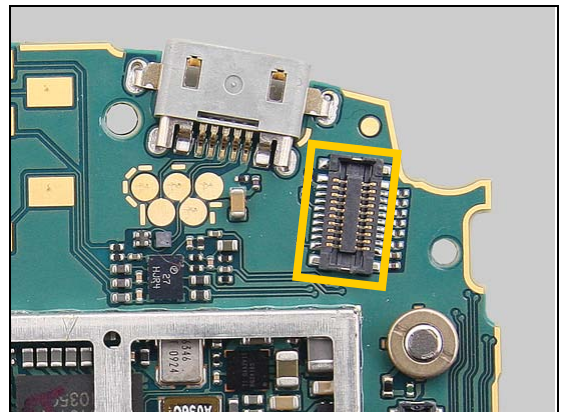
**Protect the vibrator with capton tape!**



11

X2200

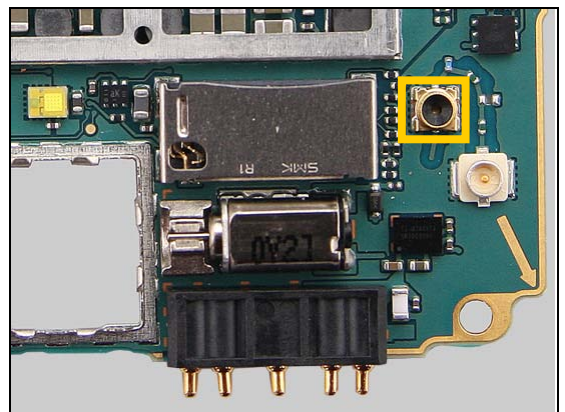
**Protect the BTB connector with capton tape!**



12

X2800

**Protect the Coax connector with capton tape!**



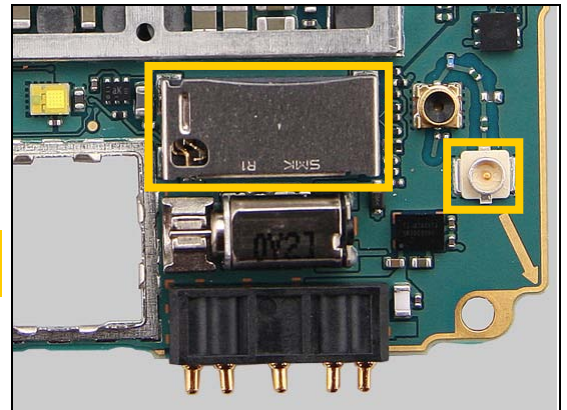


## Repair Actions: Additional Repair Info

13

X2801

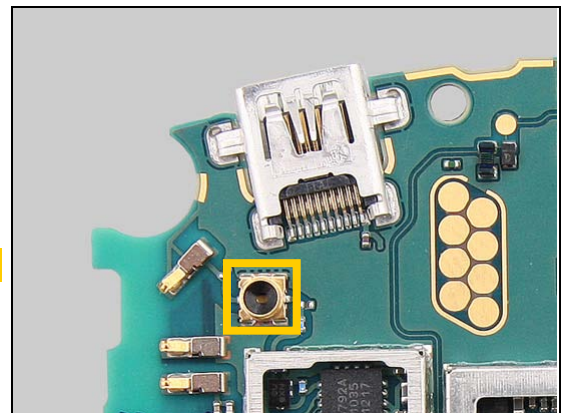
**Protect the connector and the Micro SD connector with capton tape!**



14

X6501, X8000, X8422, X8423

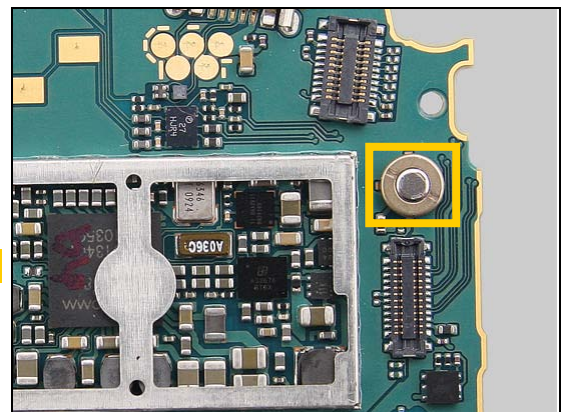
**Protect the Coax connector with capton tape!**



15

X7002

**Protect the Mic with capton tape!**





## 4 Revision History

Rev.	Date	Changes / Comments
1	2011-Oct-03	Initial release
2	2012-Apr-13	<i>Search function corrected</i>