



Sony Ericsson

# Component Replacement

## - electrical -



**S312**

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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 (elect)

Position	Component	Part no.	Comments
D301	Diode schot. 30V	1202-9472	P HA
D302	Diode Zener 20, V SOD-523	1202-9483	P HA
D303	Varistor	A/308-0000-00075	S HA BH⇒1
D304	Varistor	A/308-0000-00075	S HA BH⇒1
D401	Schottky Diode	A/309-0000-00133	P HA
D402	Schottky Diode	A/309-0000-00133	P HA
D403	Diode Protection 5.0 V SOD882	1211-8286	S HA⇒2
D404	Diode Protection 5.0 V SOD882	1211-8286	S HA⇒2
D405	Schottky Diode	A/309-0000-00133	P HA
D503	Varistor	A/308-0000-00130	S HA
D504	Varistor	A/308-0000-00130	S HA⇒2
D505	Varistor	A/308-0000-00130	P HA⇒4
D506	Varistor	A/308-0000-00130	P HA
D507	Varistor	A/308-0000-00130	P HA
D508	Varistor	A/308-0000-00130	S HA BH⇒1
D601	Varistor	A/308-0000-00130	S HA⇒2
D605	Varistor	A/308-0000-00130	S HA⇒2
D607	Varistor	A/308-0000-00130	S HA⇒2
D608	Varistor	A/308-0000-00130	S HA⇒2
D610	Varistor	A/308-0000-00130	S HA⇒2
D611	Varistor	A/308-0000-00130	S HA⇒2
D612	Varistor	A/308-0000-00130	S HA⇒2
D613	Varistor	A/308-0000-00130	S HA⇒2
D614	Varistor	A/308-0000-00130	S HA⇒2
D615	Varistor	A/308-0000-00130	S HA⇒2
D618	Varistor	A/308-0000-00130	S HA⇒2
D701	TVS Diode 24V 50pF	A/308-0000-00126	S HA⇒3
D702	Varistor	A/308-0000-00159	S HA⇒3
D706	Diode Protection 5.0 V SOD882	1211-8286	S HA⇒3
D707	Diode Protection 5.0 V SOD882	1211-8286	S HA⇒3
D708	TVS Diode 24V 50pF	A/308-0000-00126	S HA⇒3
D709	TVS Diode 12V 38pF	1201-4288	S HA⇒3
J301	BtB Connector	A/314-0000-00374	P HA/ST
J401	Battery connector	A/314-0000-00084	S HA/ST
J501	Microphone	RLC509429	P HA BH
J601	BtB Connector	A/314-0000-00374	S HA/ST
J904	RF Connector	A/314-0000-00372	S HA BH
J905	Spring Connector Antenna	A/314-0000-00229	S HA BH
J906	Spring Connector Antenna	A/314-0000-00229	S HA BH
LED301	Flash LED	A/309-0000-00129	S HA BH
U401	Charge IC	1203-8687	S HA⇒3
U402	IC Charging	1204-3124	S HA⇒3
U501	IC Amplifier 500mA	1203-4594	P HA
U701	Level Shifter	A/311-0000-00728	P HA
U703	EMI Filter	A/303-1000-00350	P HA⇒4
U803	FM RADIO	A/311-0000-00714	P HA
U904	IC reg 2V8	1202-2127	P HA
X102	Crystal 32.768 KHz	RTM501908/2	S HA

## 2 Component Placing

To access the Component Placing document, double-click the icon below.





## 3 Repair Actions

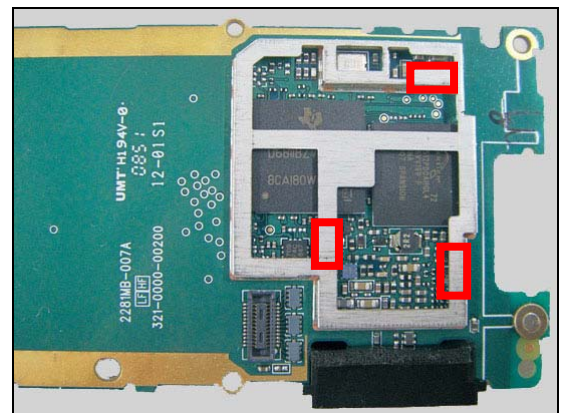
**Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!**

### 3.1 Shield Can Fence Modifications

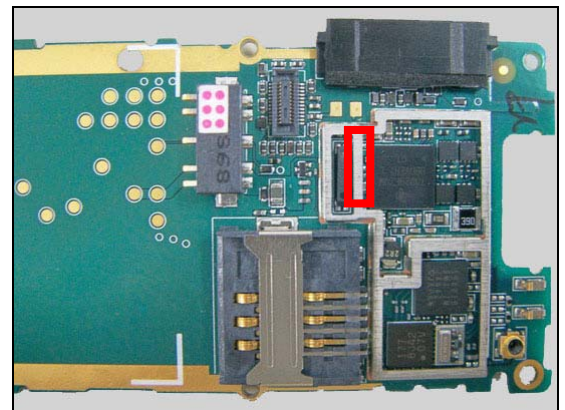
Refer to the pictures below of the primary and secondary sides for repairs that require the Shield Can Fence to be modified:

- 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*



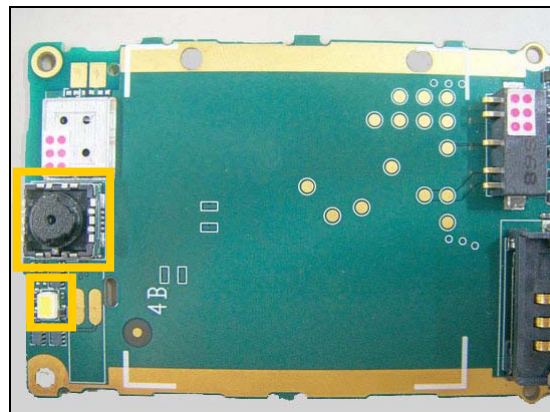
## Repair Actions

### 3.2 Additional Repair Info

1

D303, D304, D508

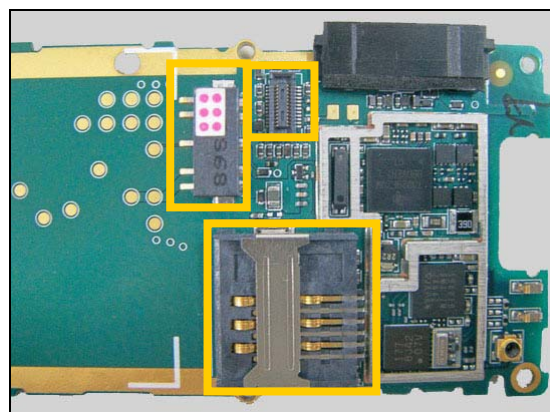
**Remove the Camera module and protect the Camera socket and Flash LED with capton tape.**



2

D403, D404, D504, D601, D605, D607, D608, D610, D611, D612, D613, D614, D615, D618

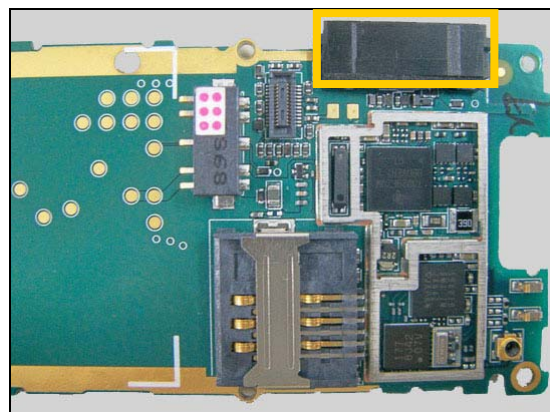
**Protect the SIM connector, Battery connector and BtB connector with capton tape.**



3

D701, D702, D706, D707, D708, D709, U401, U402

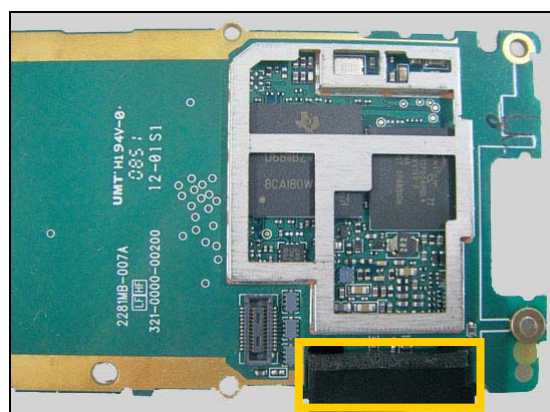
**Remove the System Connector and the System Connector Gasket.**



4

D505, U703

**Remove the System Connector and the System Connector Gasket.**







## 4 Revision History

Rev.	Date	Changes / Comments
1	2009-Jun-14	Initial release
2	2009-Jun-24	Added Component Placing document
3	2010-Feb-01	Updated X102 part number