



Sony Ericsson

Component Replacement

- electrical -



Zyl0
W20, W20i

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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
B2100	Crystal 32768Hz	1000-8271	P HA C
B3101	Mic 4.0 Electret	1224-0804	P BGA
C2225	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	1000-0076	P HA ⇒1
C2228	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	1000-0076	P HA ⇒1
C4006	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	1000-0076	P HA
C4007	Capacitor Ceramic 2.2 uF +/-10% 10.0 V K	1000-6872	P HA
C2246	Capacitor Ceramic 10,0 uF +/-20% 6,3 V K	1000-0061	P HA
E2400	Shield Can Closed BT	1231-5423	S HA
L1200	Ind Chip 2,2 uH 20% K2520	1200-2913	S HA ⇒2
L2200	Ind WW 4,7 uH 20% 3.0X3.0X1.0	1200-2190	P HA
L2202	Ind Chip 2.2 uH 20% K2520	1200-2028	P HA
L2401	Inductor	1200-0317	P HA ⇒1
L2403	Inductor	1200-0317	P HA ⇒1
L2404	Inductor	1200-0317	P HA ⇒1
L2405	Inductor	1200-0317	P HA ⇒1
L3100	Ferrite B 1.5 kOhm 100.0 mA 0402	1001-1223	P HA ⇒3
L3301	Inductor 120nH 5% 0402 0.11A	1001-2140	S HA ⇒4
L3302	Chip Inductor 2.2uH +/-20% 0603	1001-0744	P HA ⇒1
L3500	Inductor Chip	1203-8594	P HA
L3501	Inductor Chip	1203-8594	P HA
L3502	Inductor Chip	1203-8594	P HA ⇒5
L3503	Inductor Chip	1203-8594	P HA ⇒5
L3504	Inductor Chip	1203-8594	P HA
L3505	Inductor Chip	1203-8594	P HA
L4200	Inductor	1000-3333	P HA
N1200	Pre-bumped Tiger 1	1218-1887	S BGA C ⇒6
N1200	Pre-bumped Tiger II Band 1,8	1218-1888	S BGA C ⇒6
N1210	IC Lin 16-pin WLP (2x2mm)	1227-3531	S HA
N1211	IC Vreg PLP1820-6	1204-5903	S HA
N1300	ASIC MS WLCSP61 STLC2690 Cut 4.1	1230-5044	S HA ⇒2
N2207	IC Voltage Regulator	1224-8749	P HA
N2401	IC Lin CSP-9	1216-7892	P HA ⇒1
N2411	MEMS 3-axis accelerometer BMA120	1211-3461	P HA
N2420	IC IF 2,4x2,4x0,6mm 25 Bumps	1230-4432	P HA
N2422	ASIC Baseband	1201-4120	P HA
N3000	IC IF micro SMD 24 Bump	1216-8174	P HA
N3100	IC Amplifier 500mA	1203-4594	P HA
N3101	ASIC Tjatte3 CSP20	1000-0198	P HA ⇒1
N4000	Transistor	1001-0077	P HA
N4300	IC Vreg	1215-2684	P HA
N4301	IC Vreg DFN 1212-6	1226-5618	P HA
V2200	Diode	1000-0282	S HA ⇒7
V2403	Transistor	1200-0145	P HA ⇒1
V2404	Diode	1000-0272	P HA ⇒1
V2410	Diode Schottky 40.0 V SOD-923	1200-2065	P HA ⇒8
V2415	Diode	1201-8440	S HA ⇒4
V2416	Diode	1201-8440	S HA ⇒4
V2417	Diode	1000-0272	P HA ⇒1
V3102	Dual ESD protection diode 6V	1001-0730	P HA



Component Replacement Repair Drawing Additional Soldering Process/

Position	Component	Part no.	Comments
X1200	Conn Coax Plug 6p RF-probe contact	1203-9688	S HA/ST
X1201	Conn Leaf Spring Antenna conn	1200-2144	S HA
X1202	Conn Leaf Spring Antenna conn	1200-2144	S HA
X1301	Conn Leaf Spring Antenna conn	1200-2144	S HA ⇒4
X1302	Conn Leaf Spring Antenna conn	1200-2144	S HA ⇒4
X2400	System connector I/O Receptacle 12p	1205-9723	S BGA ⇒2
X2401	Card Conn Micro SD	1225-5520	S BGA ⇒9
X2402	Conn BtB Receptacle 20p AXE520124	1222-5289	P BGA
X2403	Conn BtB Receptacle 30p P4S, h=1.5mm	1225-5299	S BGA⇒10
X2404	Conn BtB Receptacle 50p AXE550124	1212-6588	P BGA
X2420	Card Conn SIM	1230-1308	S BGA ⇒11
X3100	Conn Leaf Spring Antenna conn	1200-2144	S HA
X3101	Conn Leaf Spring Antenna conn	1200-2144	S HA
X3601	Battery Connector	1234-6192	S BGA ⇒12
Z1300	Filter Cer Ceramic RF Bandpass 2.441 GHz	1231-9570	S HA ⇒2
Z2400	Filter 100.0 MHz	1224-6060	S HA ⇒4
Z4000	Filter 400.0 MHz KNA16400	1200-1824	P HA ⇒13
Z4001	Filter 400.0 MHz KNA16400	1200-1824	P HA
Z4002	Filter 400.0 MHz KNA16400	1200-1824	P HA ⇒13



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

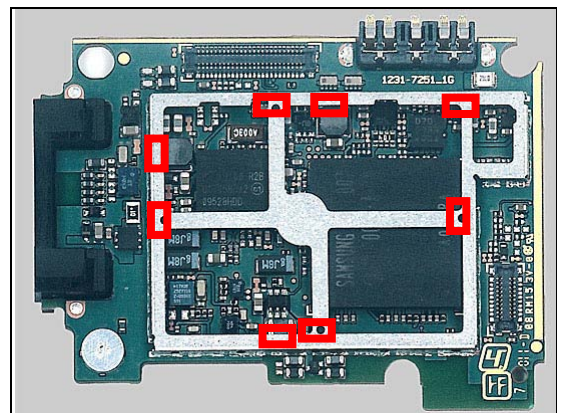
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

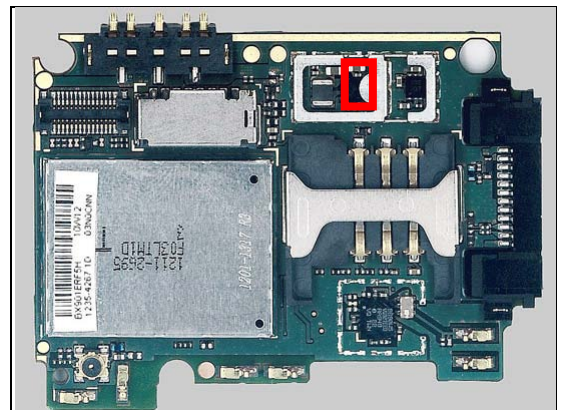
Refer to the pictures below of the primary and secondary sides for repairs that require the Shield Can Fence to be modified:

- 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





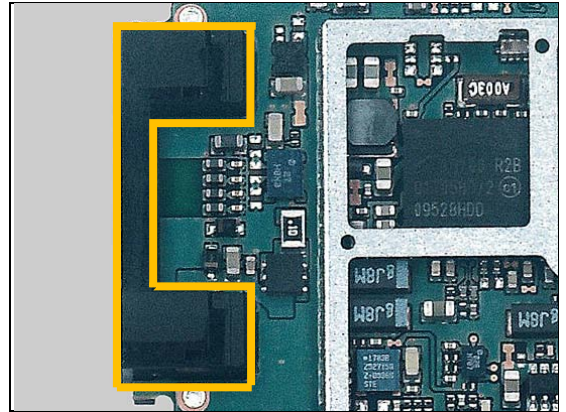
Repair Actions

3.2 Additional Repair Info

1

C2228, L2401, L2403, L2404, L2405, L3302, N2401, N3101, V2403, V2404, V2417, C2225

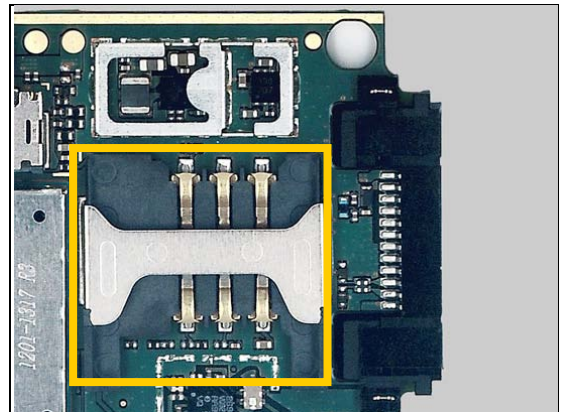
Protect the system connector with capton tape!



2

L1200, N1300, X2400, Z1300

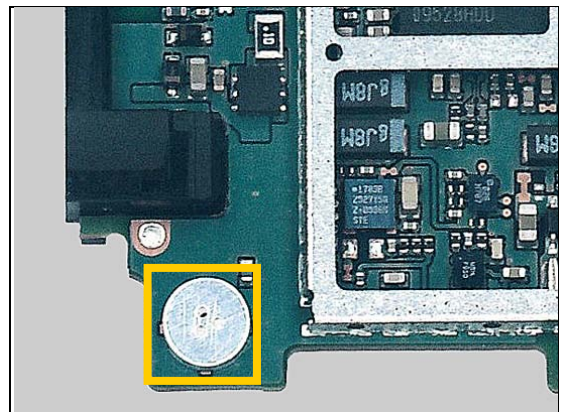
Protect the SIM holder with capton tape!



3

L3100

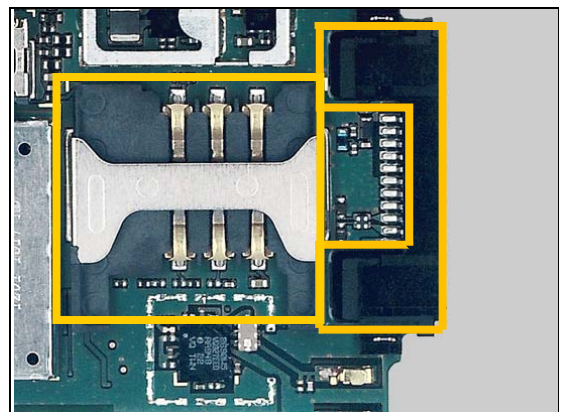
Protect the microphone with capton tape!



4

L3301, V2415, V2416, X1301, Z2400, X1302

Protect the system connector and SIM holder with capton tape!



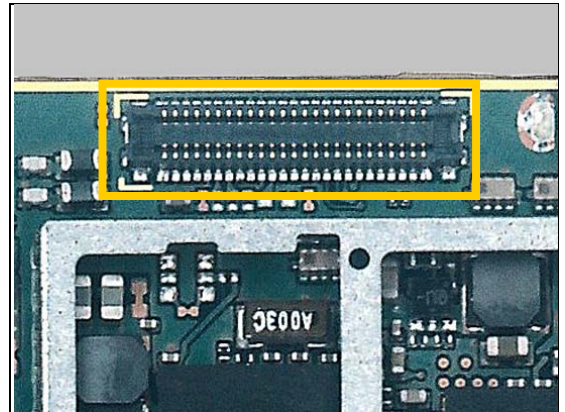


Repair Actions: Additional Repair Info

5

L3502, L3503

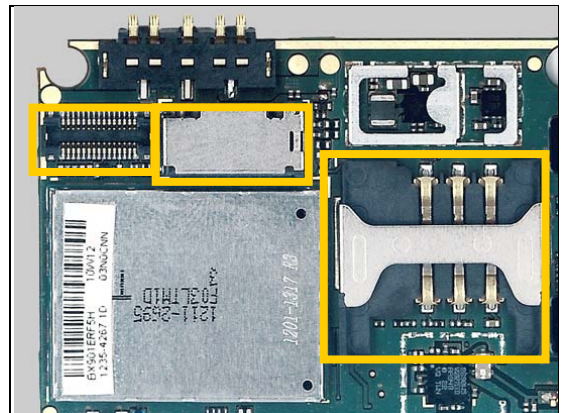
Protect the BtB connector with capton tape!



6

N1200

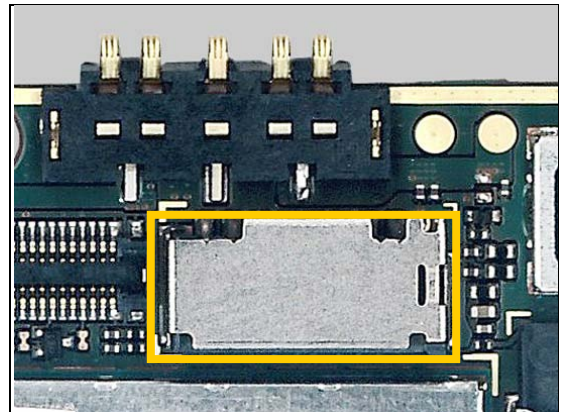
Protect the BtB connector, micro sd connector and SIM holder with capton tape!



7

V2200

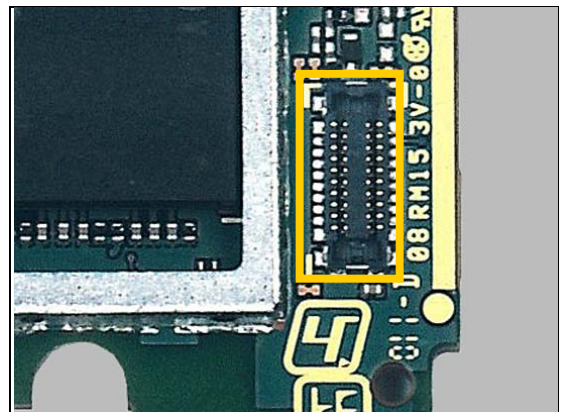
Protect the micro sd connector with capton tape!



8

V2410

Protect the BtB connector with capton tape!



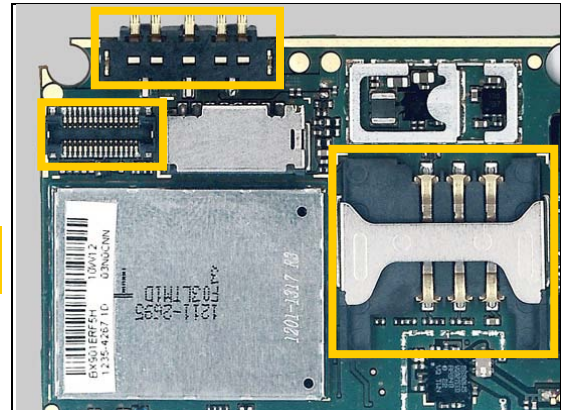


Repair Actions: Additional Repair Info

9

X2401

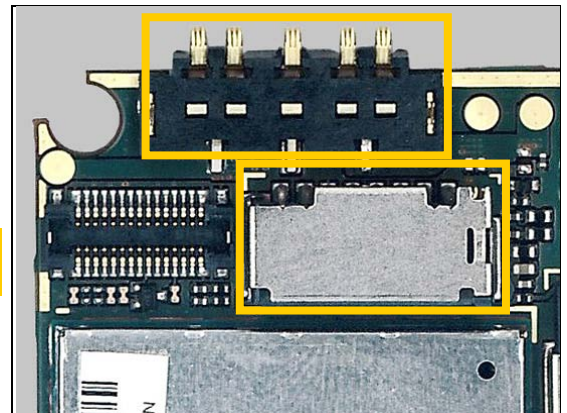
Protect the BtB connector, SIM holder and battery connector with capton tape!



10

X2403

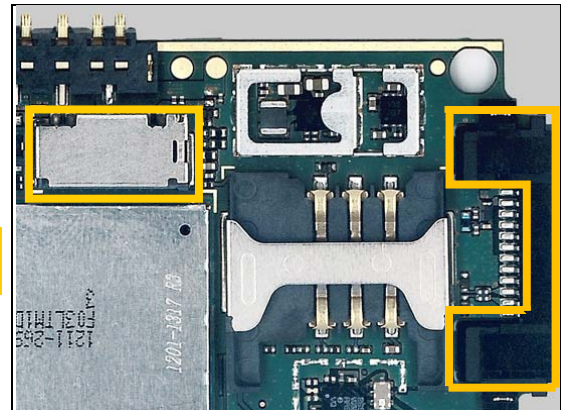
Protect the micro sd connector and battery connector with capton tape!



11

X2420

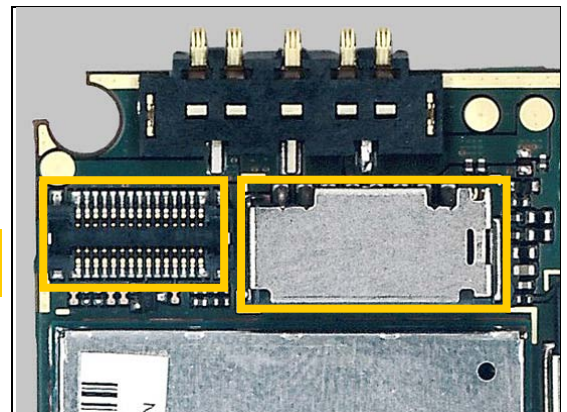
Protect the system connector and micro sd connector with capton tape!



12

X3601

Protect the BtB connector and micro sd connector with capton tape!



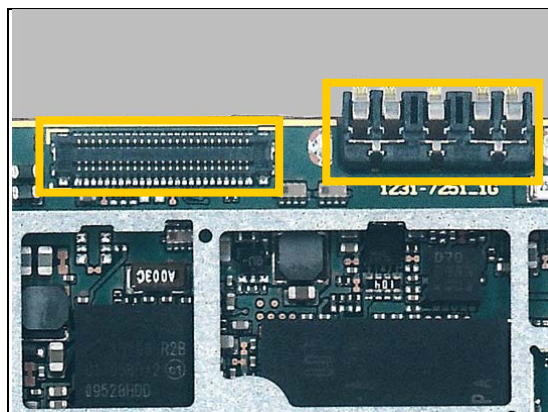


Repair Actions: Additional Repair Info

13

Z4000, Z4002

Protect the BtB connector and battery connector with capton tape!





4 Revision History

Rev.	Date	Changes / Comments
1	2010-Jun-21	Initial release
2	2010-07-05	No update
3	2010-11-30	6 parts' description updated.
4	2010-12-01	Calibration added to B2100
5	2010-12-01	Calibration added to N1200
6	2010-12-13	E2400(Shield Can Closed BT) is added.
7	2011-09-20	C2246 is added