



Component Replacement

- electrical -



Yari
U100a, U100i

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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 Device (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
B1401	Oscillator 16.368 MHz	1201-6457	P HA
B2100	Crystal 32768Hz	RTM501911/2	P HA C
B3101	Microphone	1206-4070	P HA ⇒1
B4200	Vibrator	1219-8601	P HA+BH ⇒2
C2439	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	RJC5163237/1	P HA ⇒3
C2440	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	RJC5163237/1	P HA ⇒4
C4203	Capacitor Ceramic 1,0 uF +/-10% 25,0 V K	RJC5163237/1	P HA
E1	Thread Insert	1222-9479	P ST
L2200	Inductor Wirewound 4.7 uH	1200-2190	P HA
L2202	Ind Chip 2,2 uH K2520	REG9030049/22	P HA
L2401	Inductor	REG70618/20	S HA ⇒4
L2402	Inductor	REG70618/20	S HA ⇒4
L2403	Inductor	REG70618/20	S HA ⇒4
L2404	Inductor	REG70618/20	S HA ⇒4
L2406	Chip Inductor 2.2uH +/-20% 0603	REG9030052/22	S HA ⇒4
L2407	Filter 1.0 GHz 0402	REG70618/18	P HA ⇒3
L3102	Inductor Chip	1203-8594	S HA
L3103	Inductor Chip	1203-8594	S HA ⇒4
L3104	Inductor Chip	1203-8594	P HA ⇒1
L3105	Inductor Chip	1203-8594	P HA ⇒1
L4200	Inductor	REG7245512/22L	P HA
N1200	Pre-bumped Tiger 1,8	1218-1880	P BGA C
N1200	Pre-bumped Tiger 1,2,5	1218-1883	P BGA C
N1211	IC Voltage Regulator	1204-5903	P HA
N1300	Bluetooth + FM	1222-5304	P BGA
N1400	ASIC GPS	1201-7557	P HA
N1401	IC Amp MicroDFN-6	1215-1892	P HA
N2207	IC Vreg 600mA	1205-8787	P HA
N2208	IC Vreg PLP1010-4	1202-5945	P HA
N2209	IC Vreg PLP1010-4	1201-1568	P HA
N2210	IC Vreg PLP1010-4	1201-1568	P HA
N2211	IC Vreg PLP1010-4	1201-1568	P HA
N2212	IC Vreg PLP	1201-6460	P HA
N2402	IC IF	1224-5383	P HA
N2411	ASIC Accelerometer	1224-3097	P HA
N2420	IC IF 2,4x2,4x0,6mm 25 Bumps	1230-4432	P HA
N2421	IC ESD Prot UDFN 6 2x2 mm	1200-6309	P HA
N2422	ASIC Baseband	1201-4120	P HA
N2440	IC Vreg 6-Pin	1227-4433	P HA
N3100	IC Amplifier 500mA	1203-4594	P HA
N3101	ASIC Tjatte3 CSP20	ROP1013074/1	P HA
N3102	IC Amplifier 500mA	1203-4594	P HA
N4200	Transistor	RYN901936/1	P HA
N4206	IC Driver WL-CSP	1219-2970	P HA ⇒5
R2443	Resistor 0, Ohm +/-50m 63 mW K0603	REP623001/0	S HA ⇒4
R2448	Resistor 0, Ohm +/-50m 63 mW K0603	REP623001/0	S HA ⇒4



Component Replacement Repair Drawing Electrical/

Position	Component	Part no.	Comments
V2200	Diode	RKZ223911/1	P HA ⇒6
V2202	Transistor	RYN122910/1	P HA
V2412	Diode	RKZ223905/2	S HA ⇒4
V2415	Diode	1201-8440	P HA
V2416	Diode	1201-8440	P HA
V2417	Diode	RKZ223905/2	P HA ⇒3
V2470	Schottky Barrier Diodes 2PIN	RKZ123905/1	P HA ⇒6
V3101	Dual ESD protection diode 6V	RKZ223914/2	S HA ⇒4
V3102	Dual ESD protection diode 6V	RKZ223914/2	P HA ⇒1
V3103	Dual ESD protection diode 6V	RKZ223914/2	P HA ⇒2
V4208	LED Flash	1222-5624	S BGA
X1200	Connector	1203-9688	P HA
X1210	Conn Leaf Spring	SND90161	S HA
X1211	Conn Leaf Spring	SND90161	S HA
X2	Pogopin Plug 1pin	1208-0925	P HA ⇒7
X2201	Battery Connector	1222-3069	S BGA
X2401	Card Connector Micro SD	1222-1396	S BGA
X2403	SIM reader	1221-8734	S BGA
X2405	System Connector	1219-8778	S BGA
X3	Pogopin Plug 1pin	1208-0925	P HA ⇒1
X4000	Conn BtB	1200-2263	P BGA
X4001	ZIF Connector 17p	1224-9957	P BGA
X4300	Connector BtB 40p	1206-3348	P BGA
X5	Connector Pogo Pin	1216-3221	P HA
Z1300	Filter	RTN202941/1	P HA
Z1400	Filter SAW 1.575 GHz	1211-5714	P HA
Z1401	Filter SAW 1,575 GHz	1201-7439	P HA
Z2400	Filter	1225-1423	P HA
Z4200	LC Filter	REV50148/1	P HA
Z4201	LC Filter	REV50148/1	P HA
Z4202	LC Filter	REV50148/1	P 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

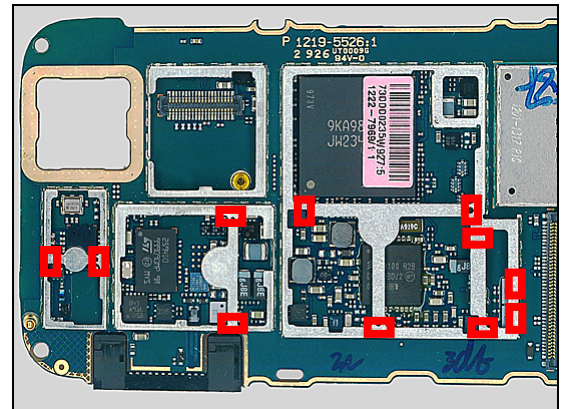
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

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





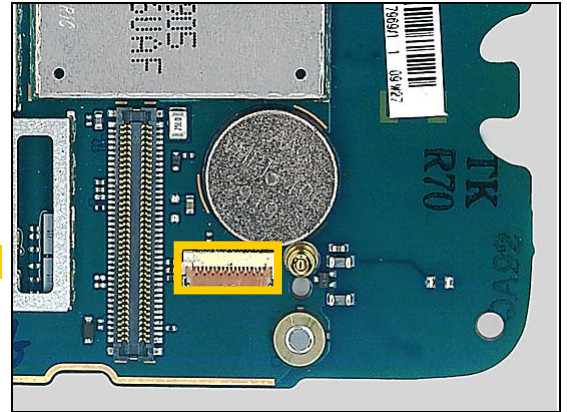
Repair Actions

3.2 Additional Repair Info

1

B3101, L3104, L3105, V3102, X3

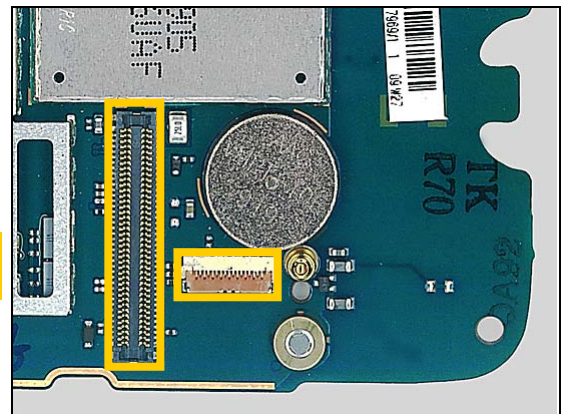
Protect the ZIF connector with capton tape!



2

B4200, V3103

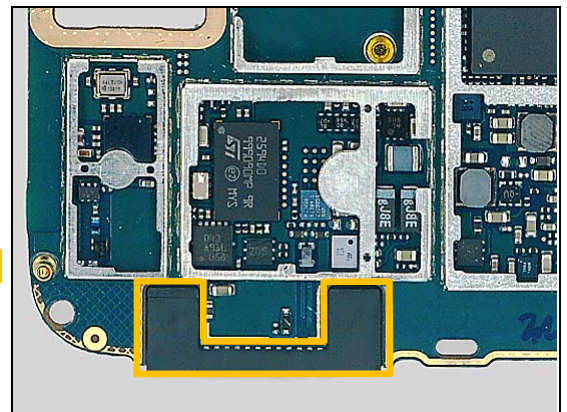
Protect the ZIF connector and BtB connector with capton tape!



3

C2439, L2407, V2417

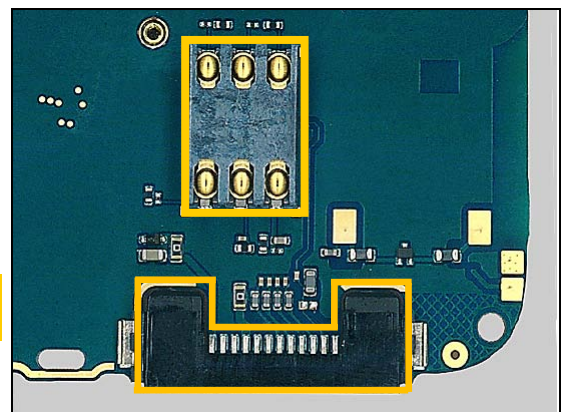
Protect the system connector with capton tape!



4

C2440, L2401, L2402, L2403, L2404, L2406, L3103, R2443, R2448, V2412, V3101

Protect the system connector and SIM card holder with capton tape!

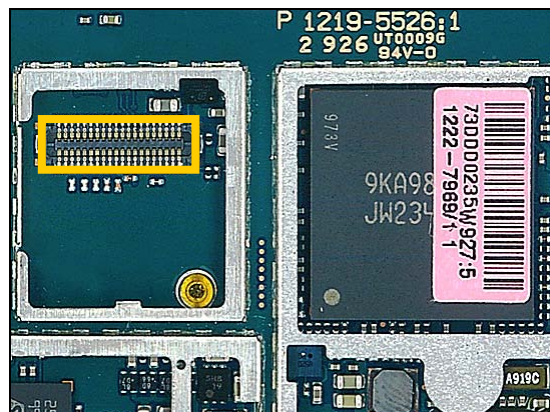


Repair Actions: Additional Repair Info

5

N4206

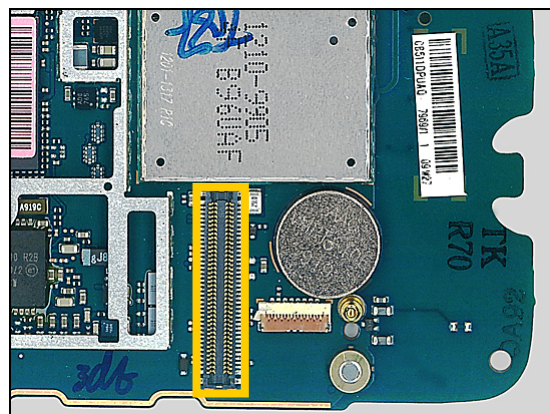
Protect the BtB Connector with capton tape!



6

V2200, V2470

Protect the BtB Connector with capton tape!



7

X2

Protect the coax connector with capton tape!





4 Revision History

Rev.	Date	Changes / Comments
1	2009-Sep-25	Initial release
2	2009-Oct-15	Updated the Component Replacement.
3	2010-Apr-30	N1210 has been removed. Two version of N1210, depends on L1200. And added 1222-9479.
4	2011-Mar-10	Added calibration to B2100