



Component Replacement

- electrical -

Vivaz



U5i, U5a



U5at



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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
B1500	Osc TCXO 16.368 MHz	1201-6457	P HA (Only for U5i, U5a)
B1500	Crystal 16.368 MHz	1230-9051	P HA (Only for U5at)
L1000	Ind Chip 2,2 uH 20% K2520	1200-2913	S MSL3 HA
L1501	4.7NH +/-0.2nH 0402 WIREWOUND	1000-2519 (REGUA7041181/47)	P HA (Only for U5i, U5a)
L3000	Ind Chip 0, H	1200-6898	P HA ⇨1
L3001	Inductor	1200-0317 (REG70618/20)	P HA ⇨1
L3002	Inductor	1200-0317 (REG70618/20)	P HA ⇨1
L3003	Inductor	1200-0317 (REG70618/20)	P HA ⇨1
L3004	Inductor	1200-0317 (REG70618/20)	P HA ⇨1
L4001	Ind WW 4.7 uH +/-20% 3X2.8X1	1200-0119	S HA
N1000	IC Linear	1203-5870	S HA (Only for U5i, U5a)
N1000	IC Lin	1234-5820	S HA (Only for U5at)
N1401	Mod PA WLAN 3.0 x 3.0 x 0.45mm	1222-5645	P HA
N1500	ASIC GPS5350	1201-7557	P HA
N2800	ASIC	1204-5837	P MSL3 HA
N3004	IC Lin	1224-1925	P HA ⇨1
N4000	IC Vreg	1218-4589	S HA
N4153	IC Vreg PLP1010-4	1201-1568	P HA ⇨2
R3056	Resistor 220, Ohm +/-5% 50.0 mW K0201	1000-0237 (REP621003/22)	P HA ⇨1
R4186	Resistor 0.0 Ohm +/-5% NA mW K0402	1000-0179 (REP622001/0)	S HA
V3011	Diode 80, V 1SS362FV	1200-2364	P MSL3 HA ⇨1
X1000	Conn Coax Plug 6p RF-probe contact	1203-9688	P HA/ST
X1401	Conn Coax Plug 6p RF-probe contact	1203-9688	P HA/ST⇨1
X1402	Conn Leaf Spring 1p	1000-8912 (SND10626R1)	P HA (Only for U5i, U5a)
X1500	Conn Leaf Spring 1p	1000-8912 (SND10626R1)	P HA (Only for U5at)
X1001	Conn Other	1001-0637 (RNT79925)	S HA/ST
X2100	SIM Card Connector	1203-5307	P BGA
X2820	Conn BtB Receptacle 24p Tyco 1.5mm	1214-8350	S BGA
X2821	Conn BtB Receptacle 34p Panasonic A4S	1224-9689	P BGA
X2902	Conn BtB Receptacle 34p Panasonic A4S	1224-9689	S BGA
X2900	Conn BtB Receptacle 30p Panasonic A4S	1220-0673	P BGA
X3001	Conn USB micro B Receptacle 5p	1225-5033	S BGA (If X3001 is not glued)
X4000	Conn Pogopin 5p	1226-4176	P BGA
Z1402	Filter SAW 2,4 GHz 1.35*1.05*0.5	1217-3397	P MSL2a HA
Z1500	Filter SAW 1.575 GHz	1231-0570	P MSL2a HA ⇨4
Z2500	Filter 150.0 MHz	1221-4986	P HA ⇨2
Z2501	Filter 150.0 MHz	1221-4986	P HA ⇨2



Component Replacement (elect)

Position	Component	Part no.	Comments
Z2502	Filter 150.0 MHz	1221-4986	P HA ⇨2
Z2503	Filter 150.0 MHz	1221-4986	P HA ⇨2
Z2504	Filter 150.0 MHz	1221-4986	P HA ⇨2
Z2800	Filter 100.0 MHz	1224-6060	S HA ⇨3
Z2801	Filter 100.0 MHz	1224-6060	S HA ⇨3
Z2802	Filter 100.0 MHz	1224-6060	S HA ⇨3



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.

U5i & U5a



U5at





3 Repair Actions

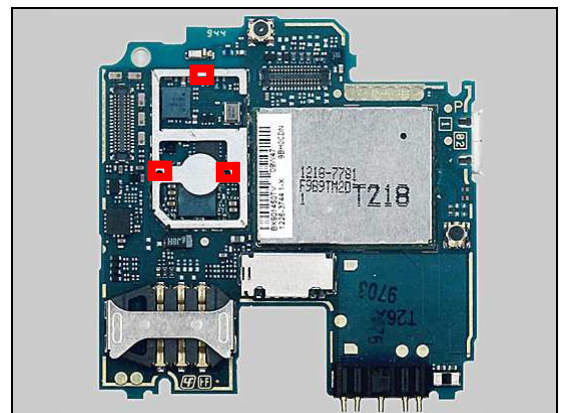
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

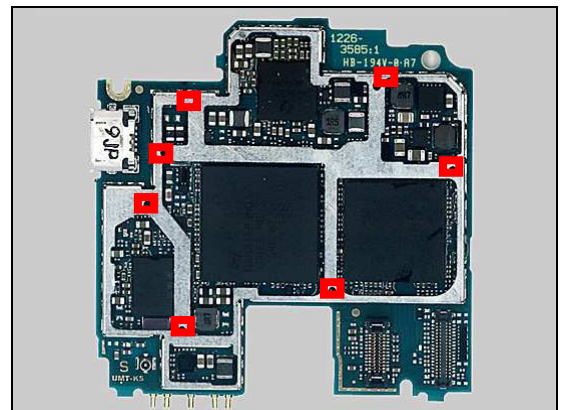
Refer to the pictures below of the primary and secondary sides for repairs that require the Shield Can Fence to be modified:

- 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





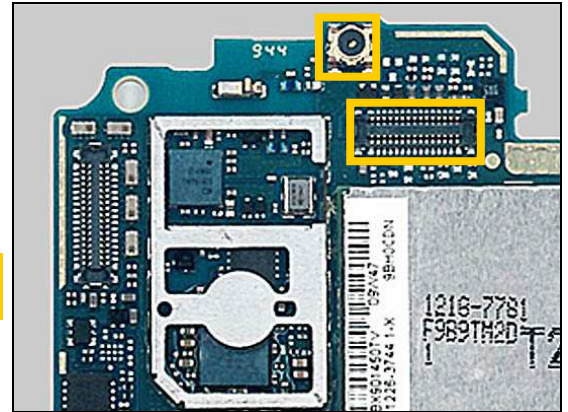
Repair Actions

3.2 Additional Repair Info

1

L3000,L3001,L3002,L3003,L3004,N3004,R3056,
V3011,X1401

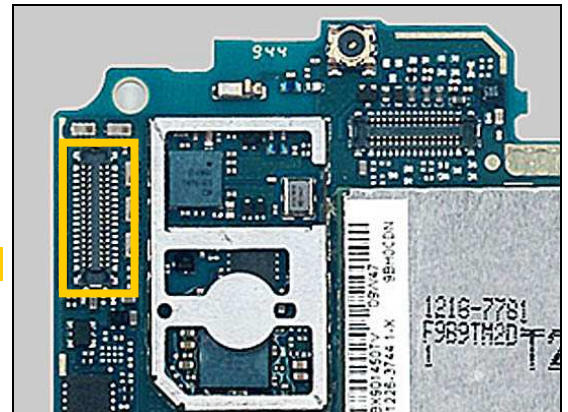
Protect BtB connector and RF-probe connector with capton tape!



2

N4153,Z2500, Z2501, Z2502, Z2503, Z2504

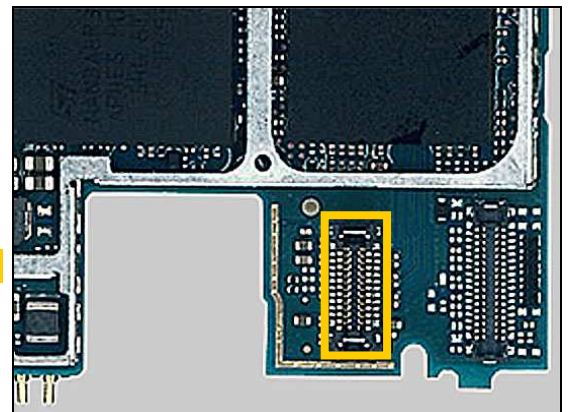
Protect BtB connector with capton tape!



3

Z2800,Z2801,Z2802

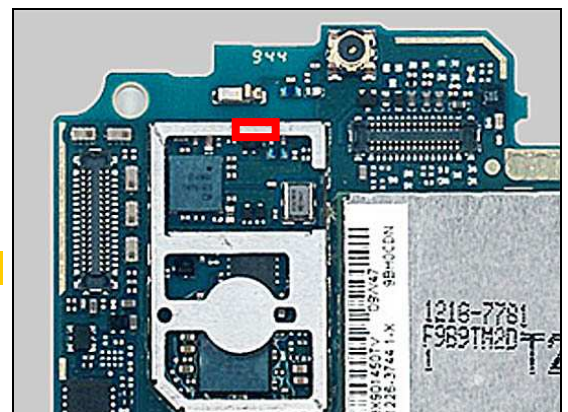
Protect two BtB connectors with capton tape!



4

Z1500

Cut the shield fence as shown!





4 Revision History

Rev.	Date	Changes / Comments
1	2010-Feb-20	Initial release
2	2010-Mar-15	Modify part no. sequence of L3001, L3002, L3003, L3004, R4186, X1001, X1402, some parts change to use space no. when ordering.
3	2010-Jun-30	Updated due to Micro USB connector X3001 is glued from week1025.
4	2010-Jul-28	Update with U5at information.
5	2010-Dec-01	Change description of 1000-8912.