

Component Replacement

- electrical -



Xperia™ Z3

D6603, D6616, D6643, D6646, D6653

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***For general information about electrical repair related issues, refer to
1220-1336: Generic Repair Manual - electrical***

Baking prior to repair is required, if the board have been exposed to air more than 12 hours from PWB package opening. Too long exposure time increase the level of moisture in PWB and the PWB could delaminate during repair process and result in direct or latent failures and reduce reliability.

The boards shall be baked in 125°C ±5°C for 4 hours.

Test after electrical replacement: refer to 1273-1772 Mechanical Test Instruction

All Electrical components are RLC level B, Reversed Logistic Classification, See the Spare Part Handling chapter in Mechanical/Generic Repair Manual 1220-1333.

Do not remove shield can lids (Heat pasta are added and RF performance will be damaged)

1 Replaceable Components

EXPLANATION OF ABBREVIATIONS USED IN THE COLUMN 'COMMENTS' BELOW

COMPONENT LOCATION

P = Primary side

S = Secondary side

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

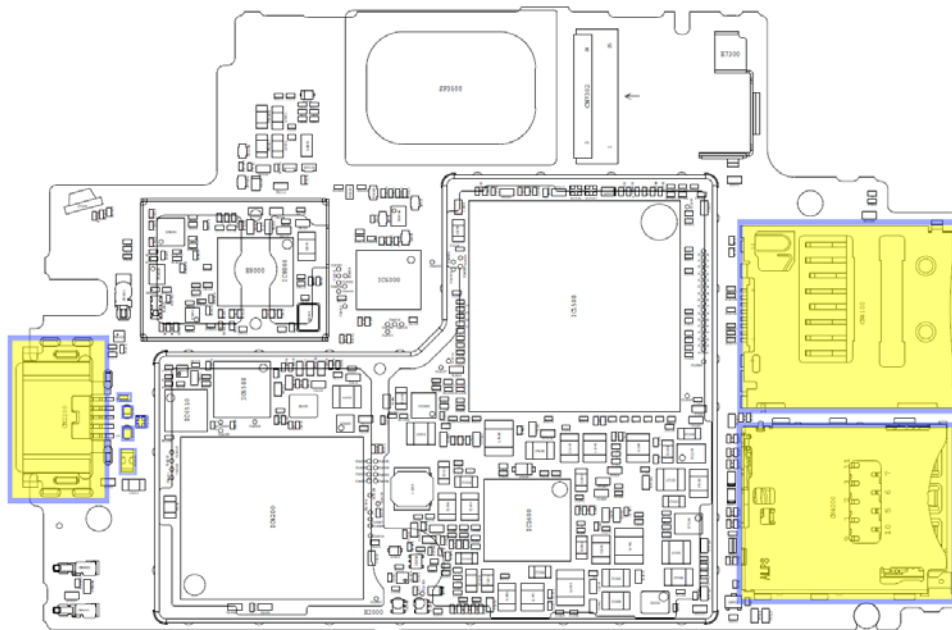
ADDITIONAL INFORMATION

⇒1 (2,3,4, etc.) = Proceed to 'Additional Repair Info' for further instructions in the indicated section(s).

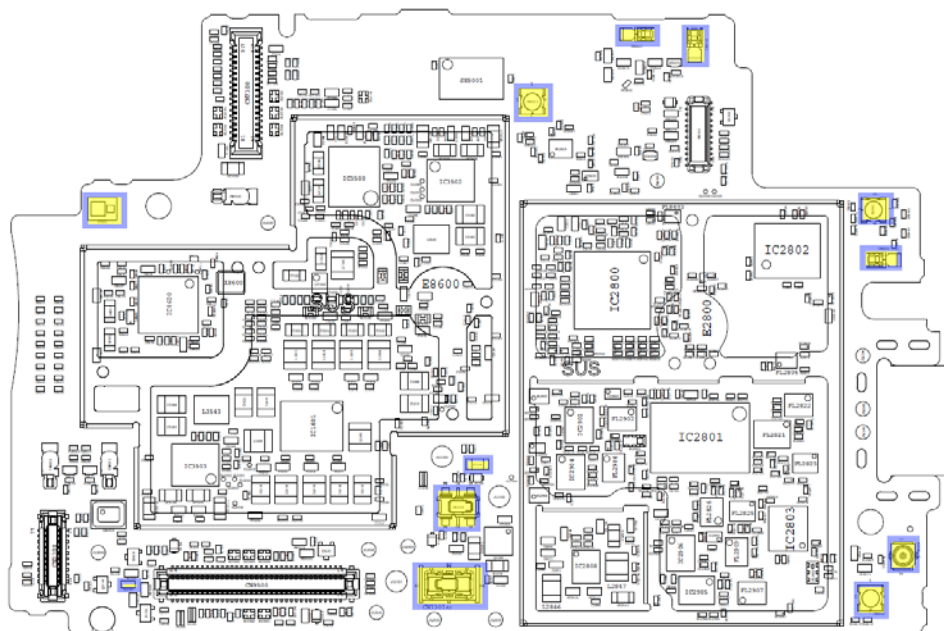
Position	Component	Part no.	Comments
CN1300	Conn BtB Plug 4p HIROSE/BM22	1281-9973	S HA+BH ⇒1
CN1301	Conn BtB Receptacle 4p HIROSE/BM22	1264-6156	S HA+BH ⇒2
CN2200	Conn USB B Receptacle 5p	1268-3388	P HA+BH or BGA ⇒3
CN2650	Conn Leaf Spring Plug 1p	1289-6405	S HA+BH ⇒4
CN2651	Conn Leaf Spring Plug 1p	1289-6405	S HA+BH ⇒4
CN2653	Conn Coax Receptacle 1p	1237-5326	S HA+BH ⇒5
CN2654	Conn Coax Receptacle 1p	1261-3585	S HA+BH ⇒6
CN2655	Conn Coax Receptacle 1p	1237-5326	S HA+BH ⇒7
CN4000	Card Conn SIM Nano	1278-7930	P HA+BH or BGA ⇒8
CN4100	Card Conn Micro SD	1281-9124	P HA+BH or BGA ⇒9
CN8000	Conn Leaf Spring Plug 1p	1289-6405	S HA+BH ⇒10
CN8003	Conn Coax Receptacle 1p	1237-5326	S HA+BH ⇒11
D2200	Diode	1201-8440	P HA+BH ⇒12
D2201	Diode	1201-8440	P HA+BH ⇒13
D7800	LED flash LED 2.03mmx1.63mmx0.70mm	1277-7270	S HA+BH ⇒14
FL2200	Filter 100.0 MHz 0,85*0,65*0,45	1256-1194	P HA+BH ⇒15
FL2201	Diode Protection 15.0 V 0.6x0.3x0.33 Bi-	1256-4313	P HA+BH ⇒16
FL2202	Filter Ceramic Lo-pass 50.0 MHz 1608	1269-0526	P HA+BH ⇒17
R1304	Resistor 0.01 Ohm +/-1% 200.0 mW (1.6x0.	1238-2147	S HA+BH ⇒18
R5100	Resistor 0.0 Ohm +/-5% 63.0 mW K0402	1000-0179	S HA+BH ⇒19

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.



Primary side



Secondary side

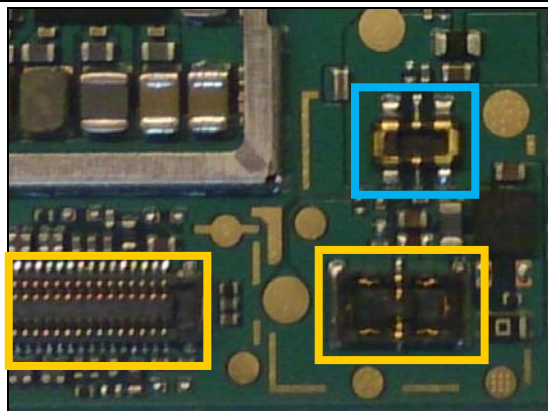
3 Additional Repair info

1

CN1300

Replace if mechanical damaged. (Phone dead or power off)

Protect the BtB connectors with capton tape!

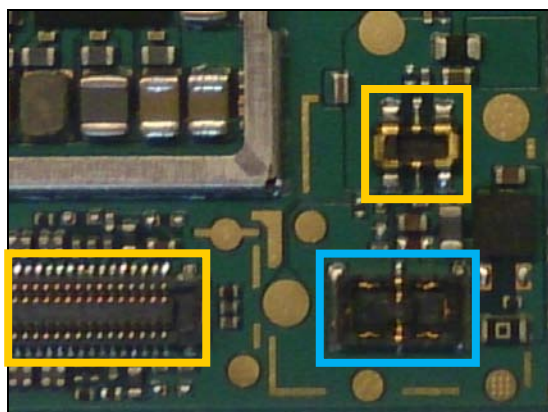


2

CN1301

Replace if mechanical damaged. (Magnet charger not working)

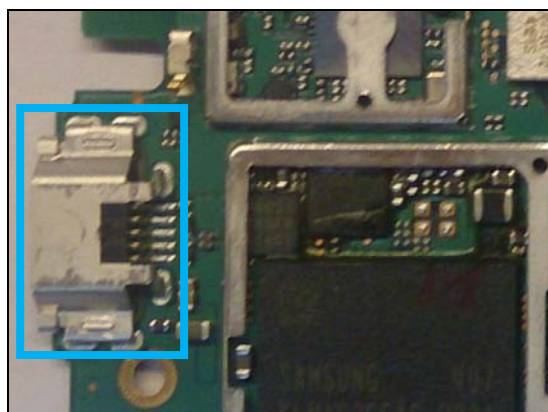
Protect the BtB connectors with capton tape!



3

CN2200

Replace if mechanical damaged (USB charger or data transfer not working)

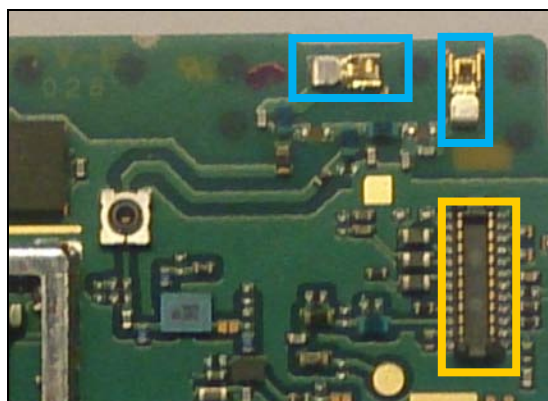


4

CN2650, CN2651

Replace if mechanical damaged (No or bad GPS /network secondary antenna)

Protect the BtB connector with capton tape!

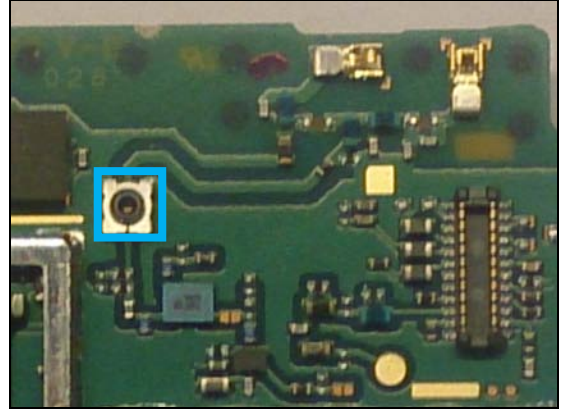


Repair Actions: Additional Repair Info

5

CN2653

Replace if open circuit 1-3 (No or bad GPS /network secondary antenna)

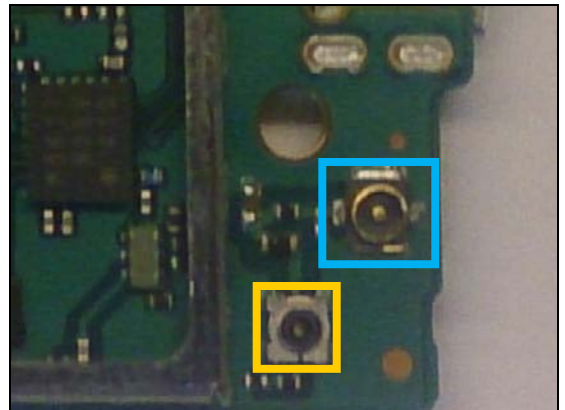


6

CN2654

Replace if mechanical damaged (No or bad network, main antenna)

Protect the RF connector with capton tape!

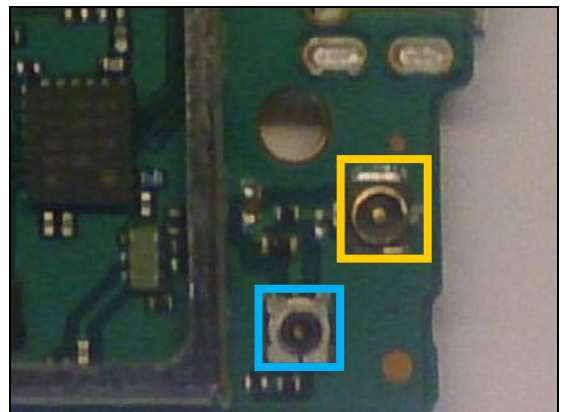


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CN2655

Replace if open circuit 1-3 (No or bad network, main antenna)

Protect the RF connector with capton tape!

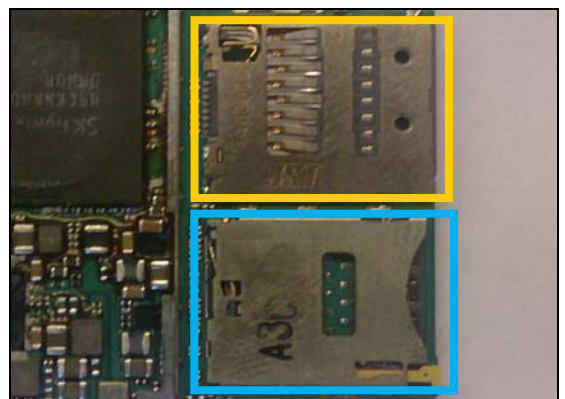


8

CN4000

Replace if mechanical damaged (No network, restart, No SIM card inserted, NFC SIM problem, reset problem)

Protect the SD card connector with capton tape!



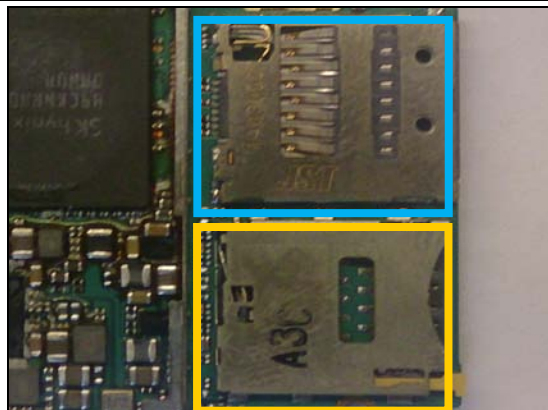
Repair Actions: Additional Repair Info

9

CN4100

Replace if mechanical damaged (No SD card)

Protect the SIM connector with capton tape!

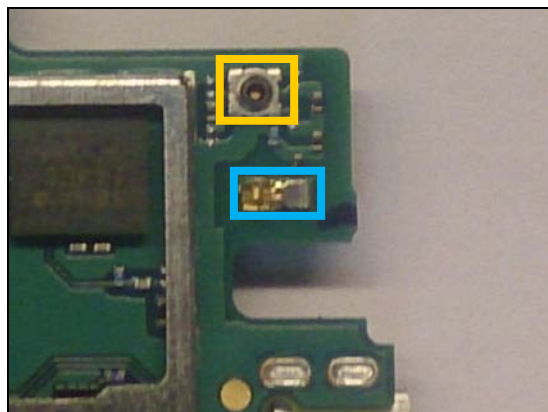


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CN8000

Replace if mechanical damaged (no or bad WLAN/ BT)

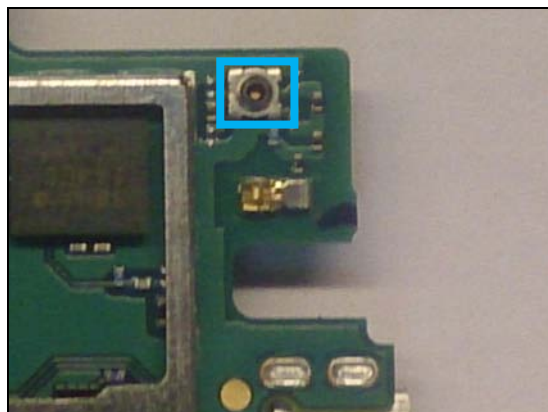
Protect the RF connector with capton tape!



11

CN8003

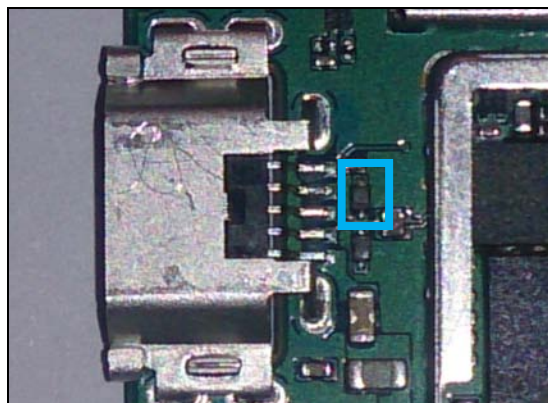
Replace if open circuit 1-3 (no or bad WLAN/ BT)



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D2200

Replace if short circuit (USB charger not working)

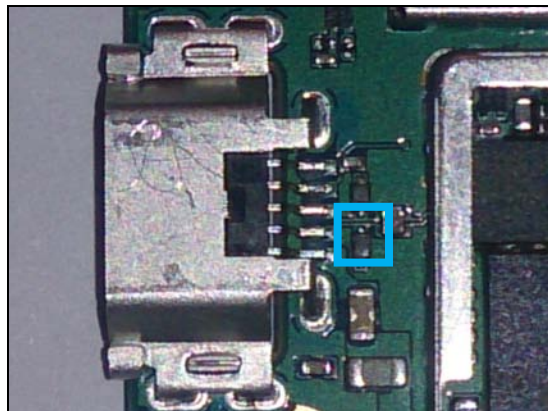


Repair Actions: Additional Repair Info

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D2201

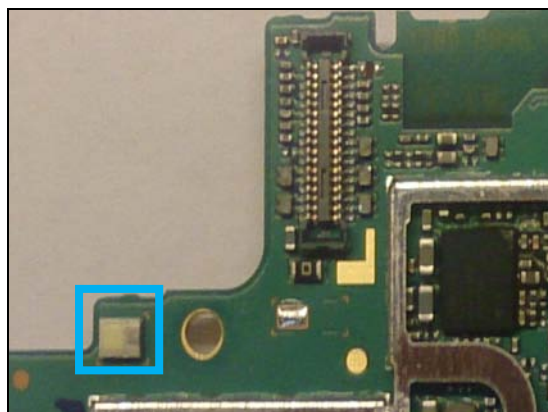
Replace if short circuit (USB charger not working)



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D7800

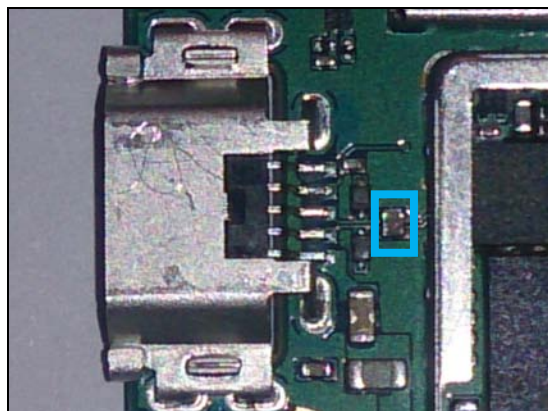
Replace if Flash LED not working



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FL2200

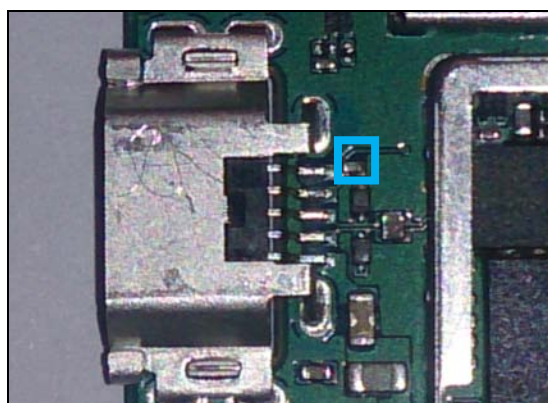
Replace if open circuit 1-2 or 3-4 (USB charger not working)



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FL2201

Replace if open circuit (USB charger not working)

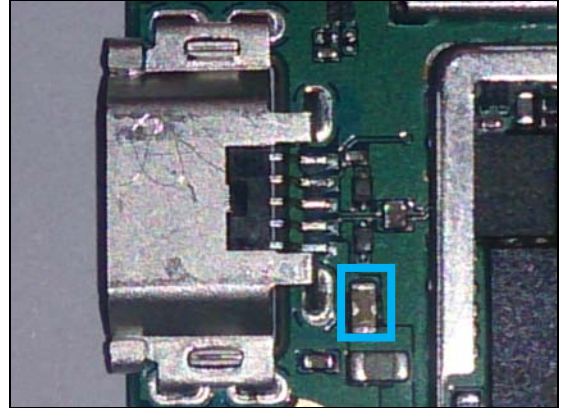


Repair Actions: Additional Repair Info

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FL2202

Replace if open circuit (USB charger not working)

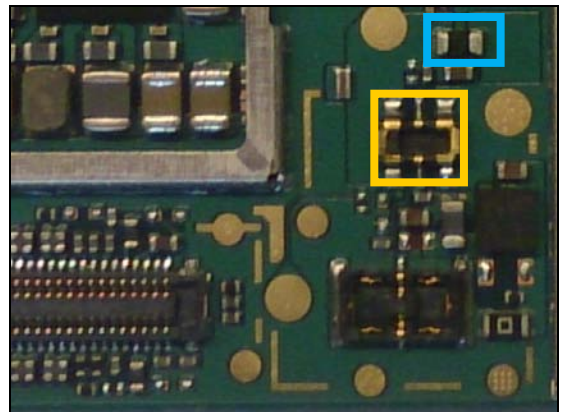


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R1304

Replace if open circuit (Phone dead)

Protect the BtB connectors with capton tape!

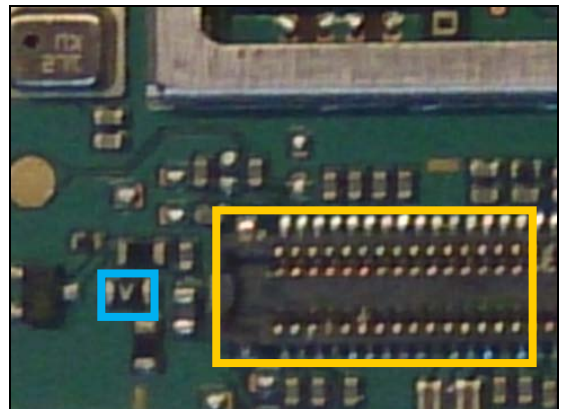


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R5100

Replace if open circuit (Vibrator not working)

Protect the BtB connectors with capton tape!



4 Revision History

Rev.	Date	Changes / Comments
1	2014-09-11	Initial release
2	2014-09-12	Added Additional Repair info
3	2015-03-17	Added components
4	2015-09-30	Added D6646, Added baking info.