

Component Replacement - electrical -



Xperia™ M5

E5603, E5606, E5633, E5643, E5653, E5663

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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).

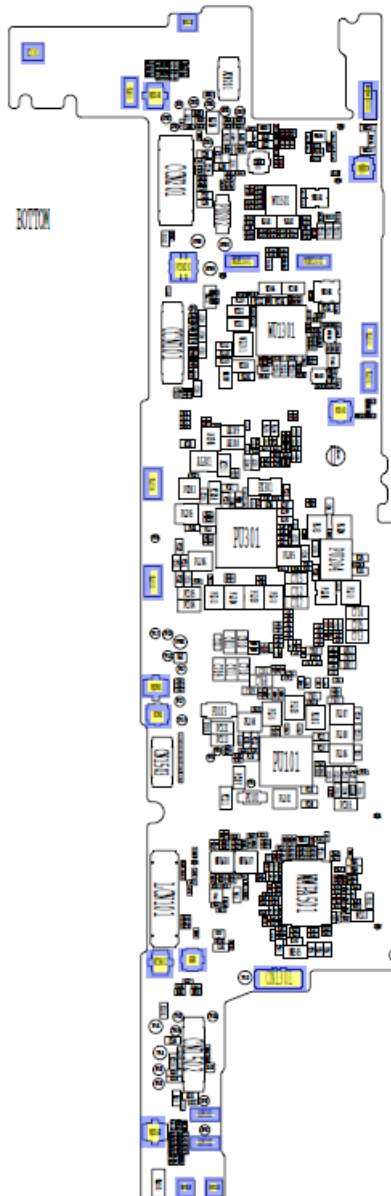
Position	Component	Part no.	Comments
APS101	Antenna Spring,Copper Alloy (C5210),2.8m	440S500160A	S HA+BH ⇨1
APS102	Antenna Spring,Copper Alloy (C5210),2.8m	440S500160A	S HA+BH ⇨1
CD301	LED LAMP,LXCL-PWF4-9024,White,500mA,SMD,	60009024E7K	S HA+BH ⇨2
CN1101	SIM Card Connector,TA-DNS20-013-05-811,5	F63012000012	P HA+BH or BGA ⇨3
CN1103	IO Connector,5045281891,Flash Memory Car	F63019013008	P HA+BH or BGA ⇨4
CN1301	Header&Socket Connector,CFX2102-0211E,So	F62060010002	S HA+BH ⇨5
MIC102	Internal Microphone,200ohm,115dB.,MA-BFA	793FA423000	P HA+BH ⇨6
PCON201	Battery Connector,BM22L-4P-V(87),4A,12V,	620G0005006	S HA+BH ⇨7
SW1305	Switch Connector	6304200O002	P HA+BH ⇨8
WABS1601	Antenna Spring,Copper Alloy (C5210),2.8m	440S500160A	S HA+BH ⇨9
WABS1602	Antenna Spring,Copper Alloy (C5210),2.8m	440S500160A	S HA+BH ⇨9
WADS1601	Antenna Spring,Copper Alloy,1.4mm*1.4 mm	440HLY1430A	S HA+BH ⇨10
WADS1602	Antenna Spring,Copper Alloy (C5210),2.8m	440S500160A	S HA+BH ⇨10
WAGS1601	Antenna Spring,Copper Alloy (C5210),2.8m	440S500160A	S HA+BH ⇨11
WANS1601	Stainless steel shrapnel,3.26 mm*1.15mm*	440S500220A	S HA+BH ⇨12
WANS1602	Stainless steel shrapnel,3.26 mm*1.15mm*	440S500220A	S HA+BH ⇨12
WAPS1601	Antenna Spring,Copper Alloy,1.4mm*1.4 mm	440HLY1430A	S HA+BH ⇨13
WAPS1602	Antenna Spring,Copper Alloy,1.4mm*1.4 mm	440HLY1430A	S HA+BH ⇨13
WAPS1604	Stainless steel shrapnel,SJ201100054_101	440S500320A	P HA+BH ⇨14
WCN401	RF Connector,C90P106-00004-H,12GHz,4,SMD	620F0300004	S HA+BH ⇨15
WCN402	RF Connector,X.FL-R-SMT-1(80),6GHz,1,SMD	620F0005001	S HA+BH ⇨16
WCN901	RF Connector,C90P106-00004-H,12GHz,4,SMD	620F0300004	S HA+BH ⇨17
WCN1401	RF Connector,C90P106-00004-H,12GHz,4,SMD	620F0300004	S HA+BH ⇨18
WCN1402	RF Connector,C90P106-00004-H,12GHz,4,SMD	620F0300004	S HA+BH ⇨19
WQCN901	RF Connector,X.FL-R-SMT-1(80),6GHz,1,SMD	620F0005001	S HA+BH ⇨20
WQCN1601	RF Connector,X.FL-R-SMT-1(80),6GHz,1,SMD	620F0005001	S HA+BH ⇨21
WQCN1602	RF Connector,X.FL-R-SMT-1(80),6GHz,1,SMD	620F0005001	S HA+BH ⇨22

2 Component Plcing

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

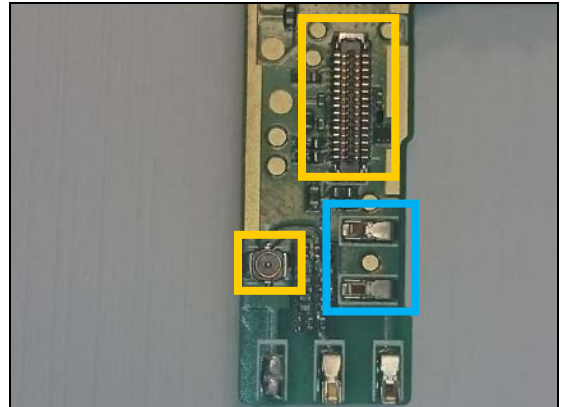
1

APS101, APS102

Replace if mechanical damaged.

(No Speaker)

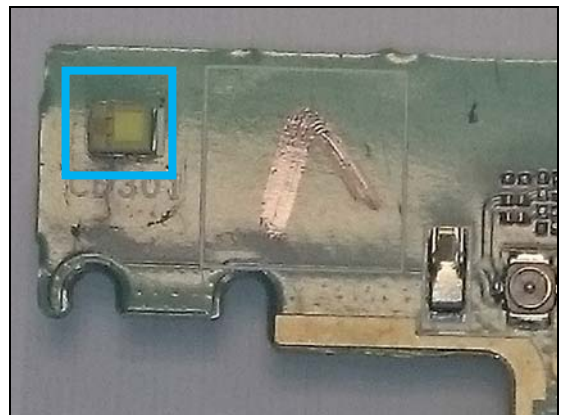
Protect the BtB and RF connector with capton tape!



2

CD301

Replace if Flash LED not working.



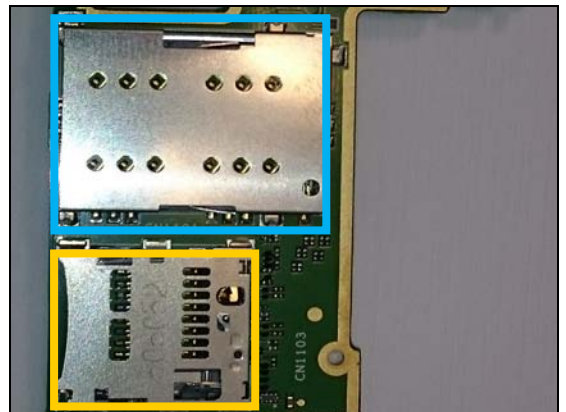
3

CN1101

Replace if mechanical damaged.

(No SIM 1 or SIM 2 card inserted)

Protect the SD connector with capton tape!



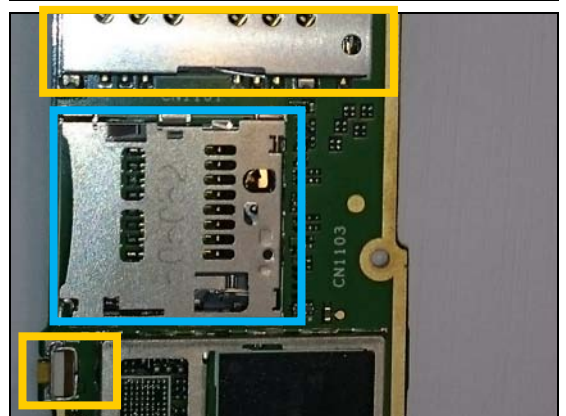
4

CN1103

Replace if mechanical damaged.

(No SD card inserted)

Protect the SIM connectors and Reset switch with capton tape!

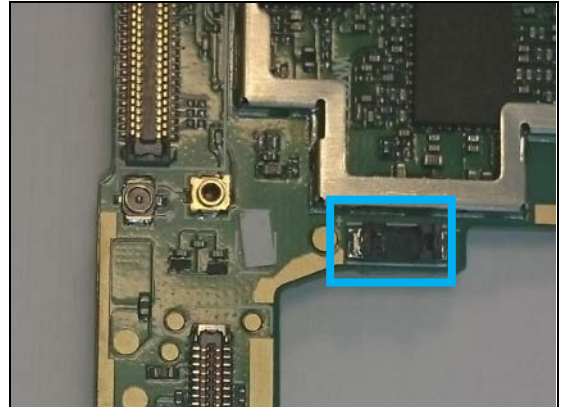


Repair Actions: Additional Repair Info

5

CN1301

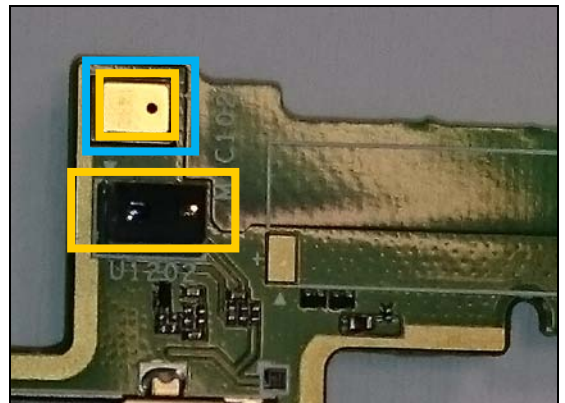
**Replace if mechanical damaged
(Vibrator not working)**



6

MIC102

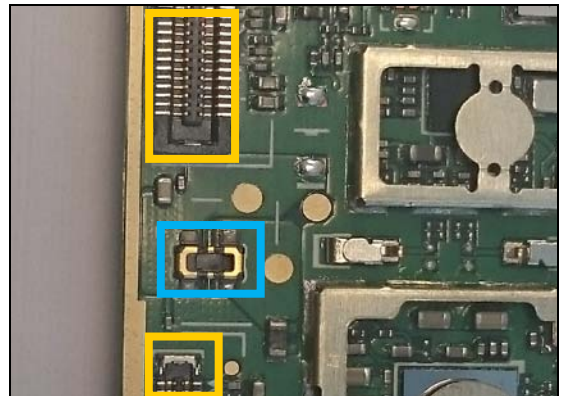
**Replace if no audio from secondary microphone.
Protect the Sensor with capton tape!
When replacing protect secondary microphone with
capton tape!**



7

PCON201

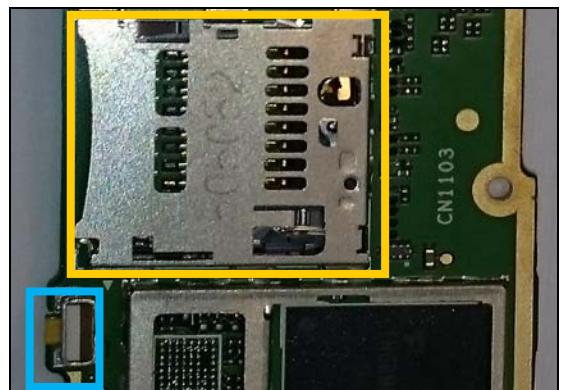
**Replace if mechanical damaged
(Phone dead or power off)
Protect the BtB connectors with capton tape!**



8

SW1305

**Replace if mechanical damaged.
(Reset not working)
Protect the SD connector with capton tape!**



Repair Actions: Additional Repair Info

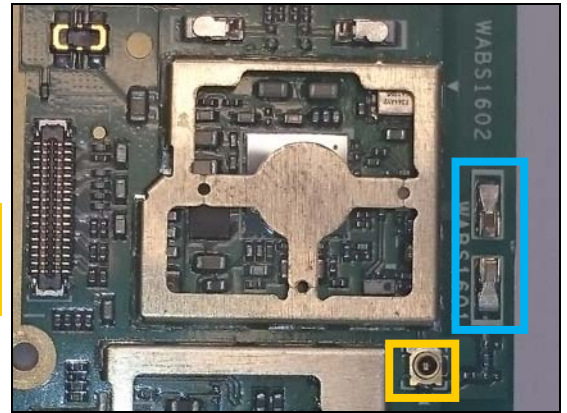
9

WABS1601, WABS1602

Replace if mechanical damaged.

(No or bad WLAN/ BT)

Protect the RF connector with capton tape!



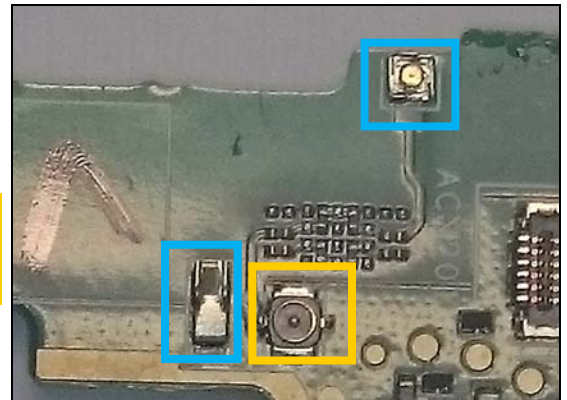
10

WADS1601, WADS1602

Replace if mechanical damaged.

(Bad network, diversity Rx antenna)

Protect the RF connector with capton tape!



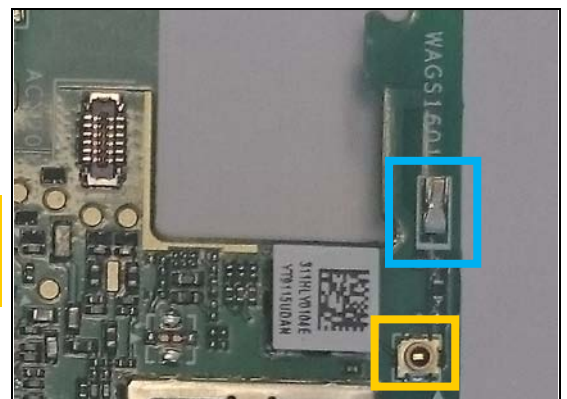
11

WAGS1601

Replace if open circuit 1-2

(No or bad GPS)

Protect the RF connector with capton tape!



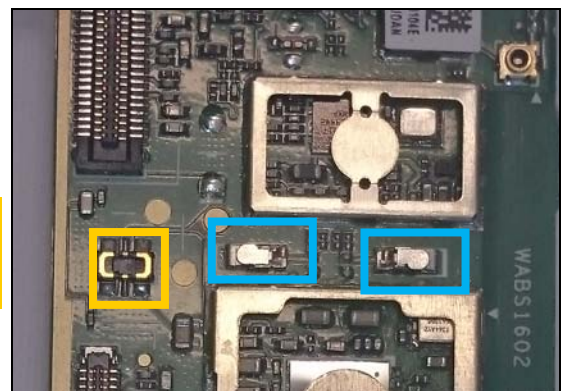
12

WANS1601, WANS1602

Replace if mechanical damaged.

(No or bad NFC)

Protect the BtB connector with capton tape!



Repair Actions: Additional Repair Info

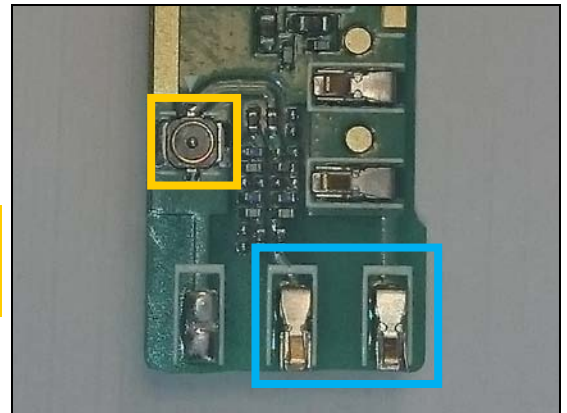
13

WAPS1601, WAPS1602

Replace if mechanical damaged

(Bad network, Main antenna)

Protect the RF connector with capton tape!

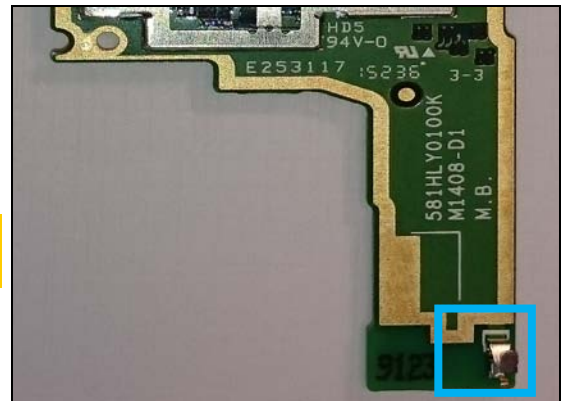


14

WAPS1604

Replace if mechanical damaged.

(Bad network, Main antenna GND)



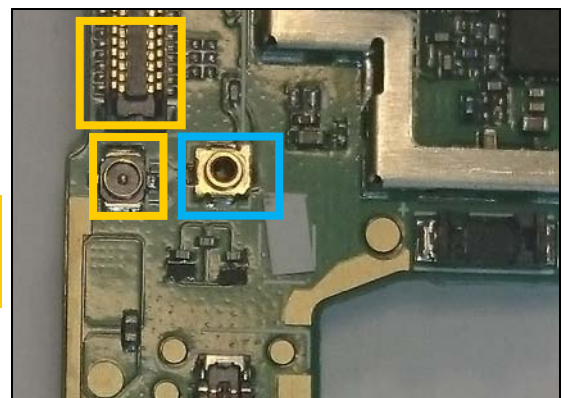
15

WCN401

Replace if open circuit 1-2.

(Bad network, Main antenna)

Protect the RF and BtB connectors with capton tape!



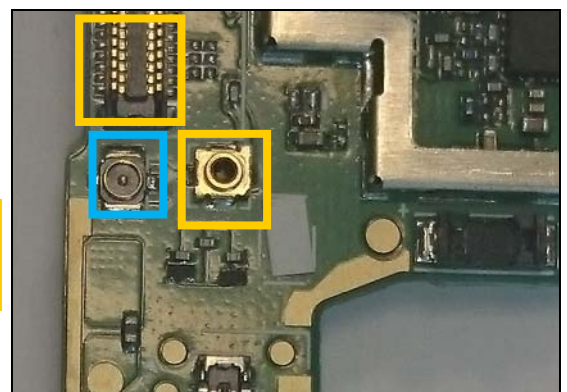
16

WCN402

Replace if mechanical damaged

(Bad network, Main antenna)

Protect the RF and BtB connectors with capton tape!



Repair Actions: Additional Repair Info

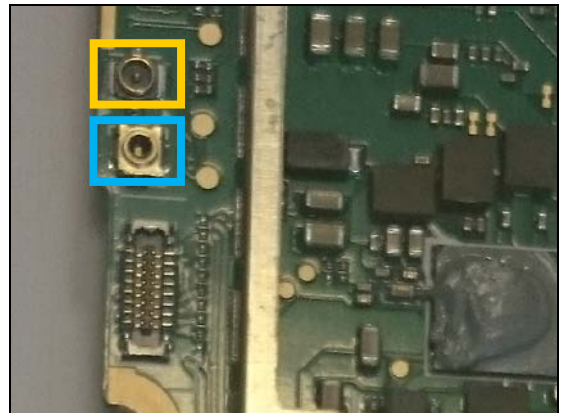
17

WCN901

Replace if open circuit 1-2.

(Bad network, diversity antenna)

Protect the RF connector with capton tape!

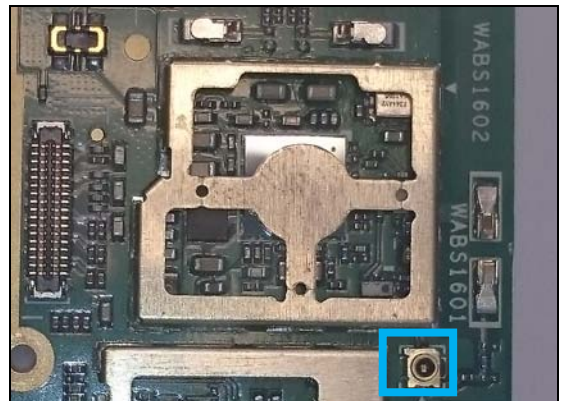


18

WCN1401

Replace if open circuit 1-2.

(No or bad WLAN/ BT)

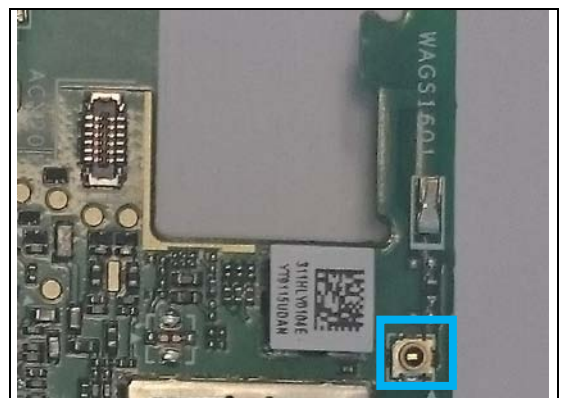


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WCN1402

Replace if open circuit 1-2.

(No or bad GPS)



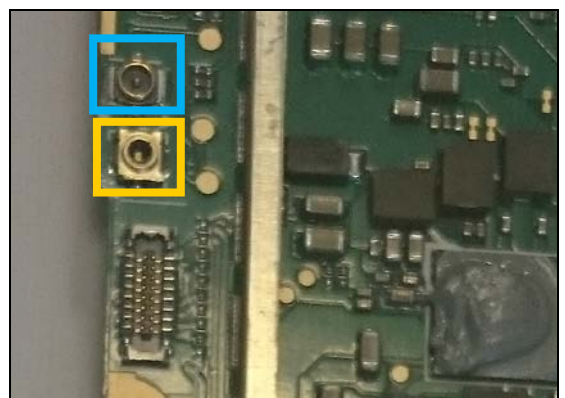
20

WQCN901

Replace if mechanical damaged

(Bad network, diversity antenna)

Protect the RF connector with capton tape!

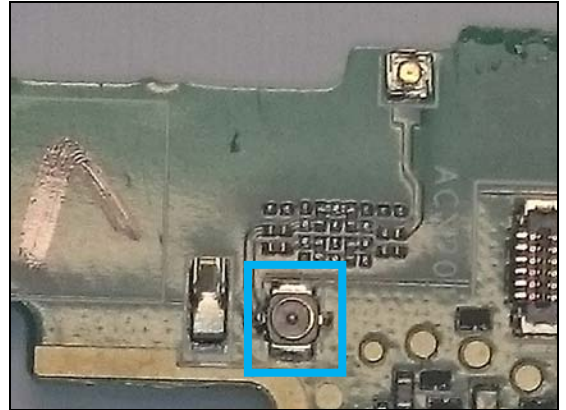


Repair Actions: Additional Repair Info

21

WQCN1601

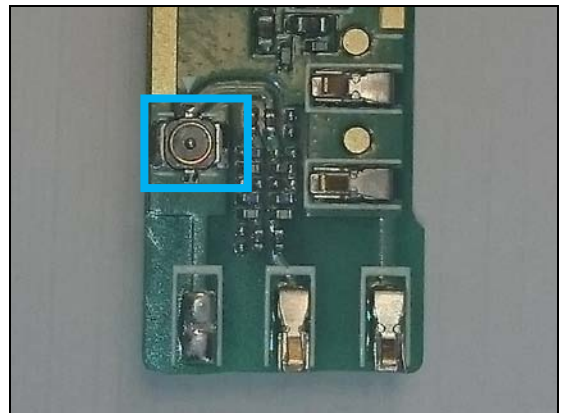
*Replace if mechanical damaged
(Bad network, diversity antenna)*



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WQCN1602

*Replace if mechanical damaged
(Bad network, Main antenna)*



4 Revision History

Rev.	Date	Changes / Comments
1	2015-08-08	Initial release
2	2015-09-03	Additional Repair Info added