

Component Replacement - electrical -



Xperia™ E5
F3311, F3313

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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 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

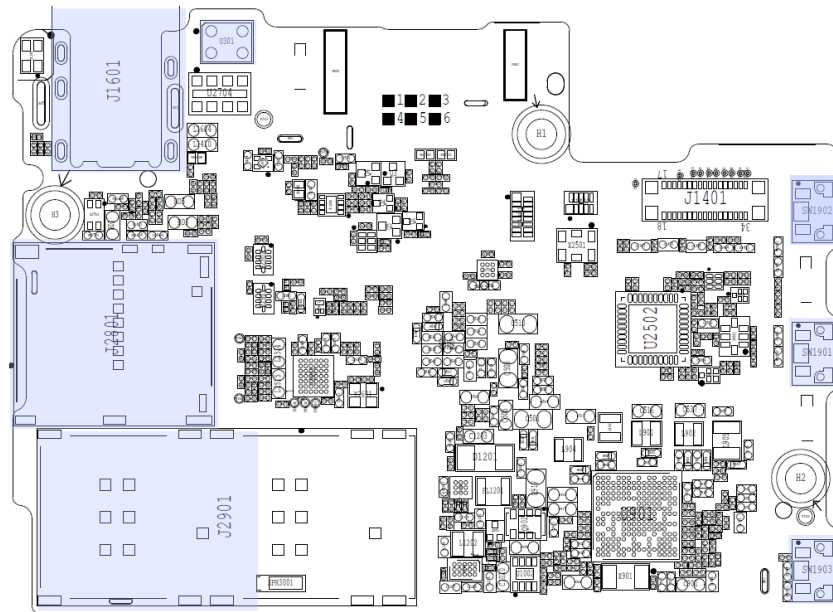
ADDITIONAL INFORMATION

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

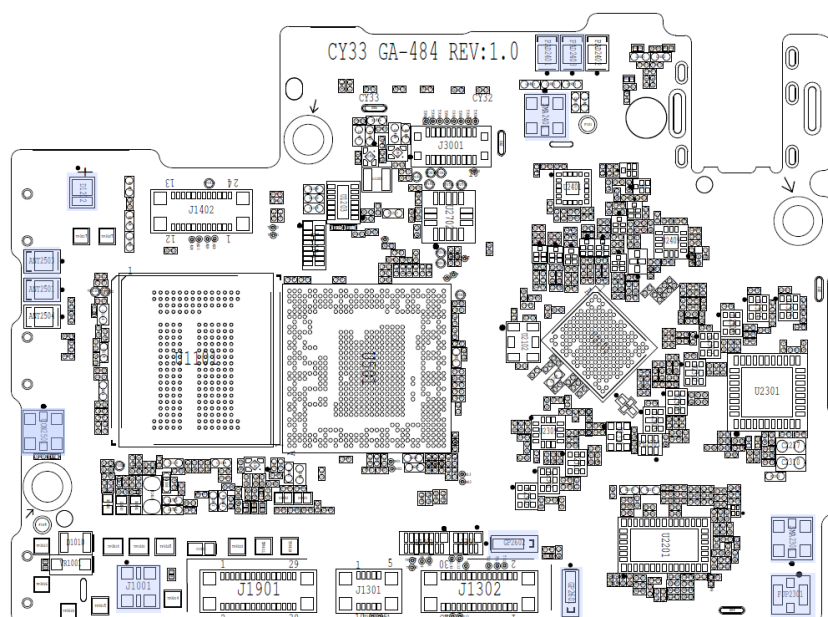
Position	Component	Part no.	Comments
ANT2501	SPR CONN TM010-307 JTCONN	2313000161W	S HA+BH ⇨1
ANT2503	SPR CONN TM010-307 JTCONN	2313000161W	S HA+BH ⇨1
CON2501	RF SWITCH C90P103-00005-H SPEED	2302000040W	S HA+BH ⇨2
D1202	LED	1770000143W	S HA+BH ⇨3
FJP2301	COAX CONN C89P119-10001-H SPEED	2335000029W	S HA+BH ⇨4
GP2601	SPR Connector	2313000105W	S HA+BH ⇨5
GP2602	SPR Connector	2313000105W	S HA+BH ⇨5
J1001	BATT CONN	2303000119W	S HA+BH ⇨6
J1601	AUDIOJACK AJ034-27323A01D JTCONN	23110000100	P HA/ST+BH ⇨7
J2801	MEMSOCKET ST11S008V4H JAE	2334000054W	P HA+BH or BGA ⇨8
J2901	Single SIMSOCKET SM049-13116A02D JTCONN	2304000158W	P HA+BH or BGA ⇨9
PAD2401	SPR CONN TM010-307 JTCONN	2313000161W	S HA+BH ⇨10
PAD2403	SPR CONN TM010-307 JTCONN	2313000161W	S HA+BH ⇨10
SMA2301	RF SWITCH C90P103-00005-H SPEED	2302000040W	S HA+BH ⇨11
SMA2401	RF SWITCH C90P103-00005-H SPEED	2302000040W	S HA+BH ⇨12
SW1901	SWITCH	2322000086W	P HA+BH ⇨13
SW1902	SWITCH	2322000086W	P HA+BH ⇨14
SW1903	SWITCH	2322000086W	P HA+BH ⇨15
U301	MEMS MIC	2220000073W	P HA+BH or BGA ⇨16

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.

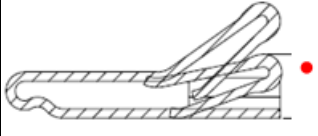
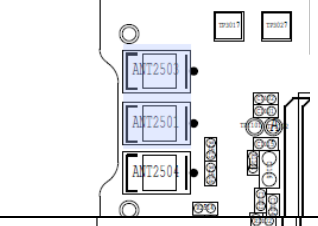
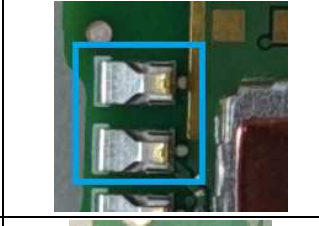
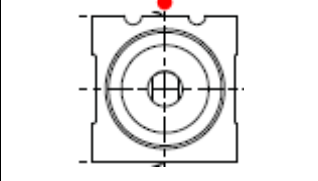
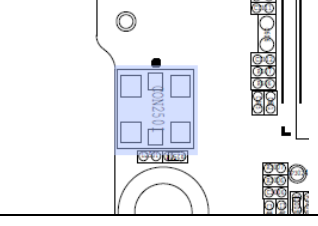
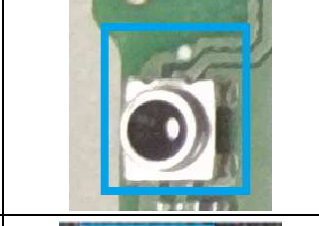

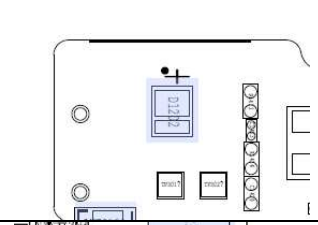
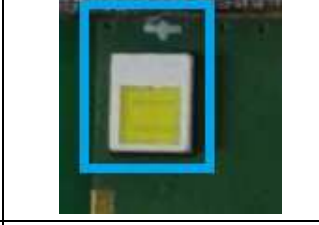
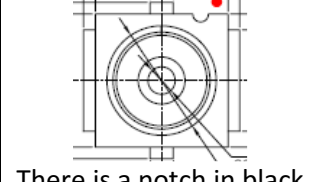
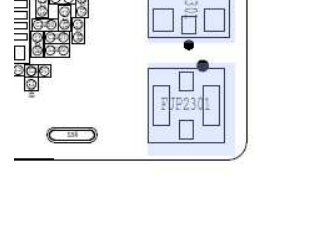

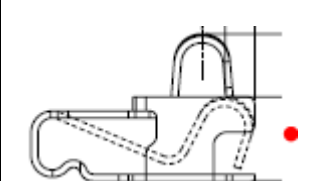
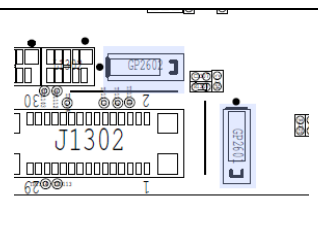
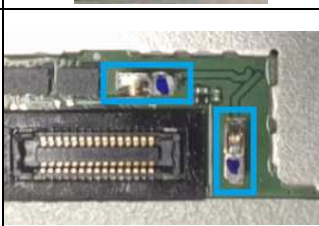
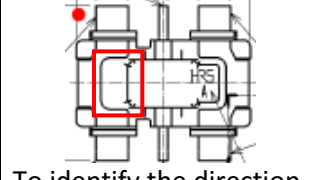
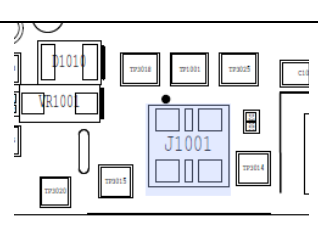
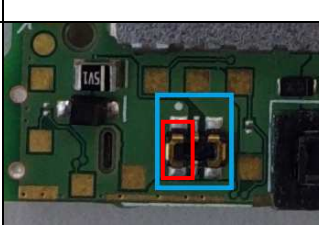
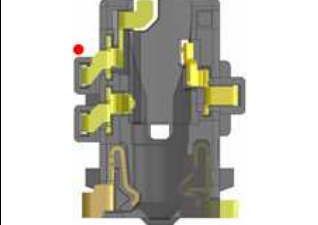
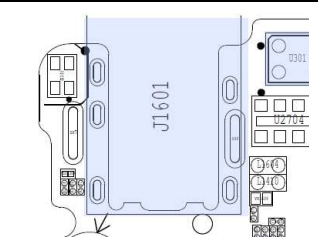



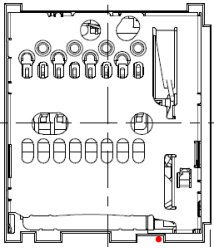
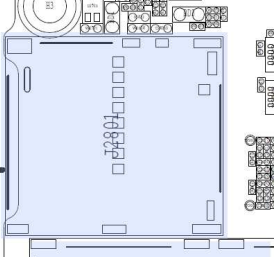
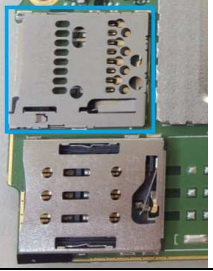
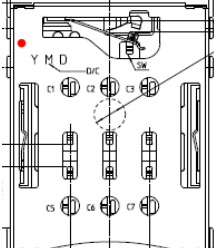
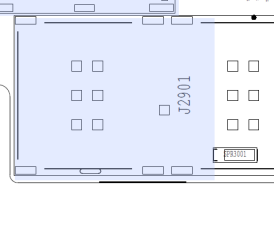
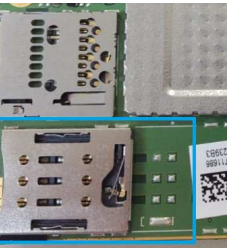
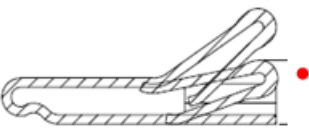
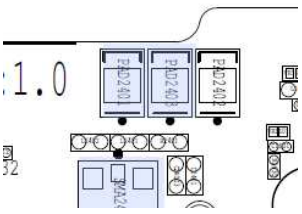
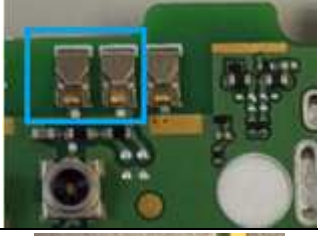
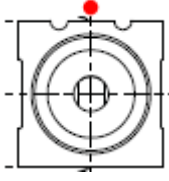
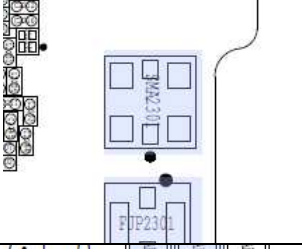

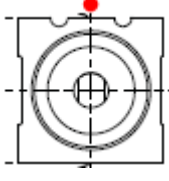
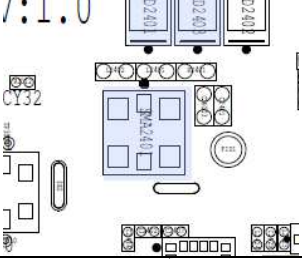
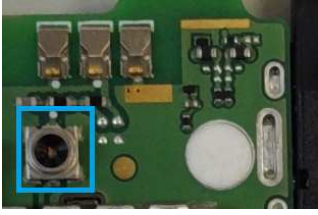

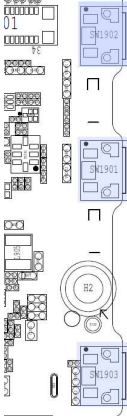

Primary side

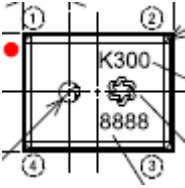
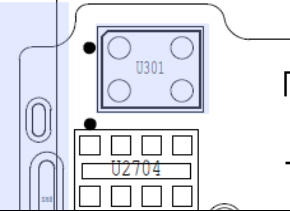
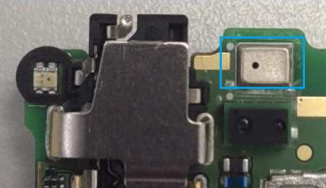


Secondary side

The Component direction is shown by using red or black point.

Position	Component direction	PBA drawing	PBA picture
ANT2501 ANT2503			
CON2501			
D1202			
FJP2301	 There is a notch in black area.		
GP2601 GP2602			
J1001	 To identify the direction, there is a black block in left side.		
J1601			

J2801			
J2901			
PAD2401 PAD2403			
SMA2301			
SMA2401			
SW1901 SW1902 SW1903			

U301			
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3 Additional Repair info

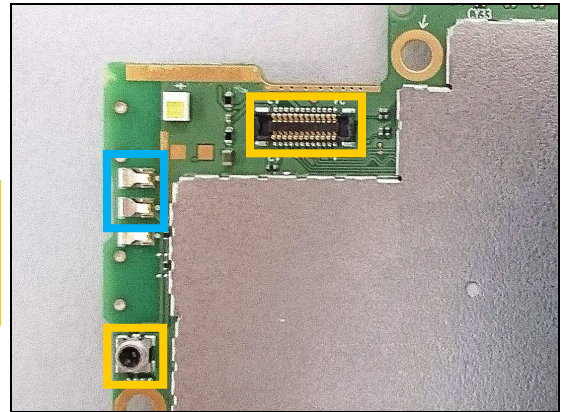
1

ANT2501, ANT2503

Replace if mechanical damaged.

(No or bad WLAN/ BT/ GPS)

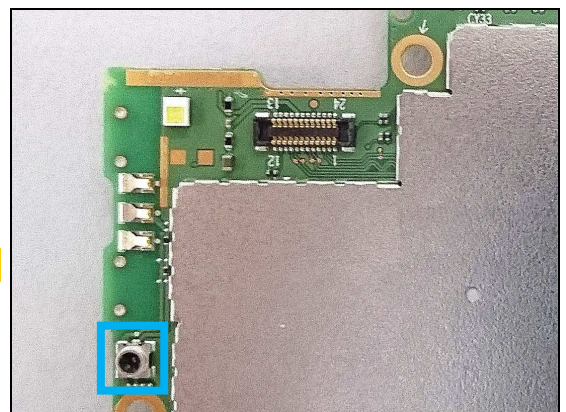
Protect the RF connector and the BtB connector with capton tape!



2

CON2501

Replace if open circuit 1-2 (No or bad WLAN/ BT/ GPS)

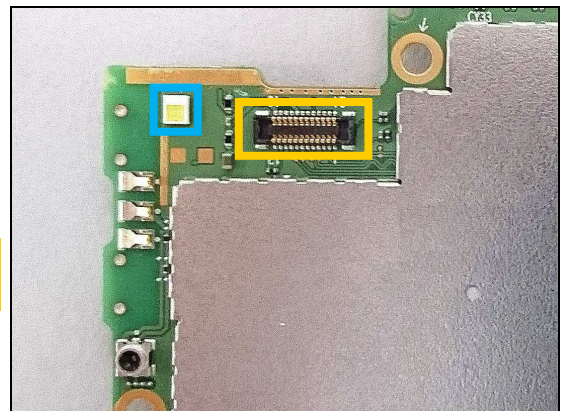


3

D1202

Replace if Flash LED not working.

Protect the BtB connector with capton tape!

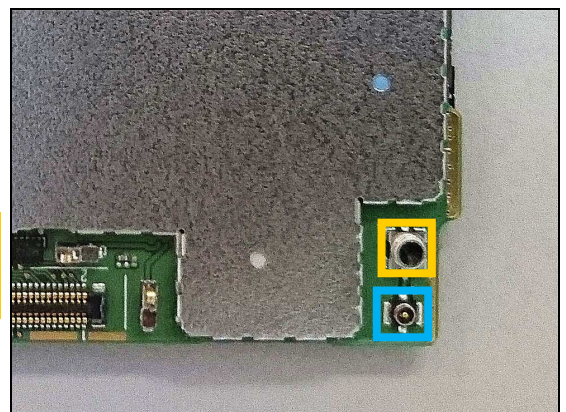


4

FJP2301

Replace if mechanical damaged (Bad network, Main antenna)

Protect the RF connector with capton tape!

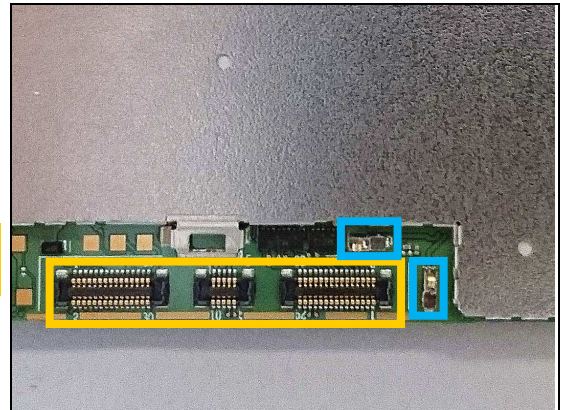


Repair Actions: Additional Repair Info

5

GP2601, GP2602

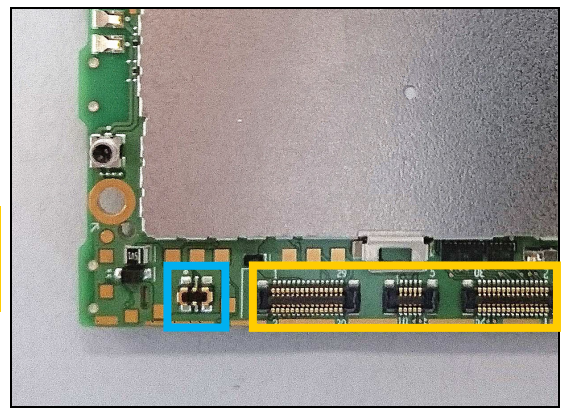
**Replace if mechanical damaged (No or bad NFC)
Protect the BtB connectors with capton tape!**



6

J1001

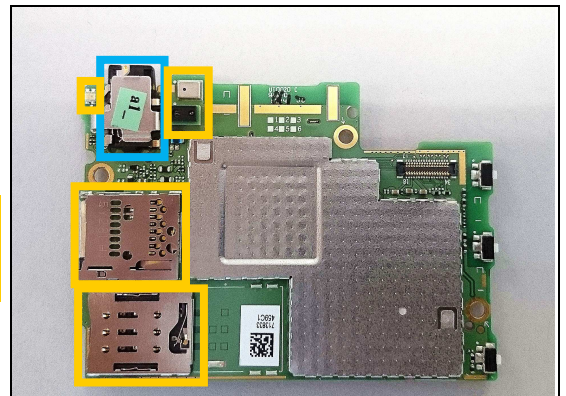
**Replace if mechanical damaged (Phone dead or power off)
Protect the BtB connectors with capton tape!**



7

J1601

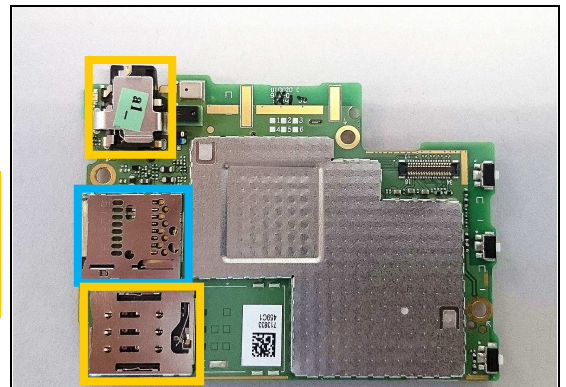
**Replace if no audio from headset.
Protect the notification LED, Mic, Proximity sensor, SD and SIM connector with capton tape!**



8

J2801

**Replace if mechanical damaged.
(No SD card inserted)
Protect the Audio Jack and SIM connector with capton tape!**



Repair Actions: Additional Repair Info

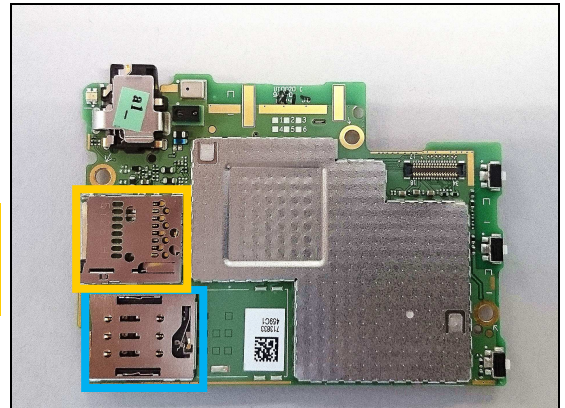
9

J2901

Replace if mechanical damaged.

(No SIM card inserted)

Protect the SD connector with capton tape!

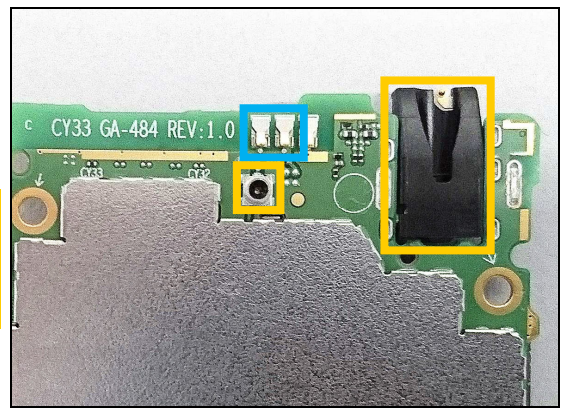


10

PAD2401, PAD2403

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

Protect the RF connector and Audio Jack with capton tape!

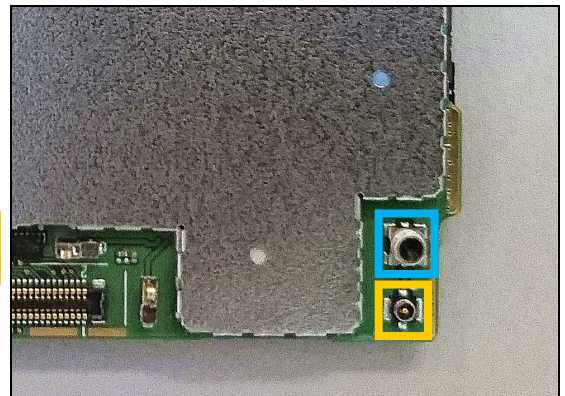


11

SMA2301

Replace if open circuit 1-2 (Bad network, Main antenna)

Protect the RF connector with capton tape!

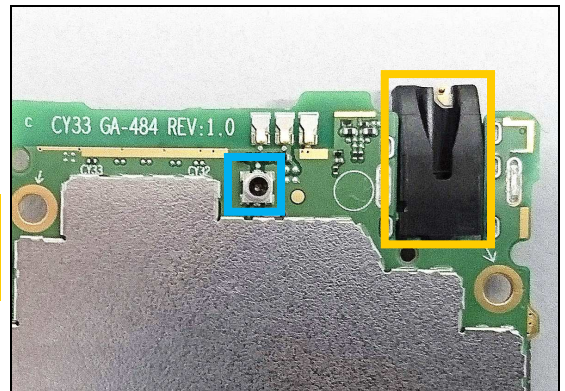


12

SMA2401

Replace if open circuit 1-2 (Bad network, diversity Rx antenna)

Protect the Audio Jack with capton tape!

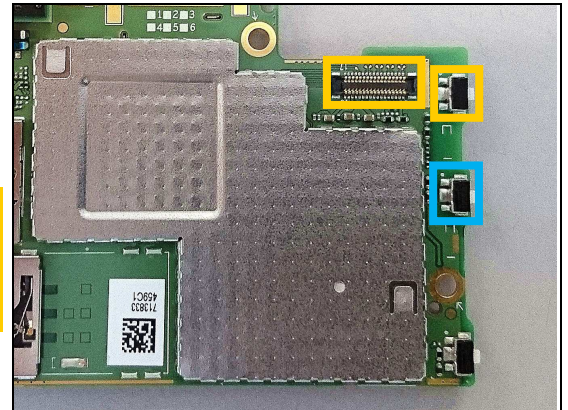


Repair Actions: Additional Repair Info

13

SW1901

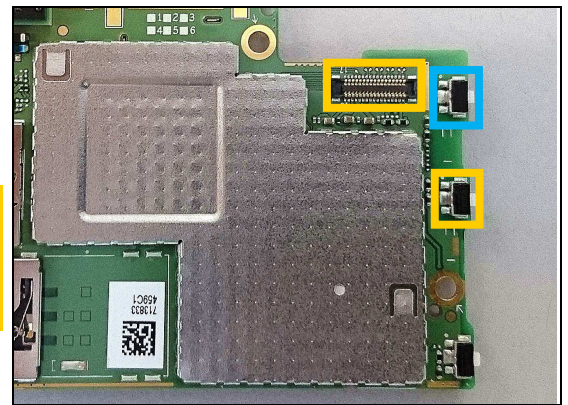
Replace if mechanical damaged or open circuit 1-2 when pushed.
(Volume down problems)
Protect the BtB connector and switch with capton tape!



14

SW1902

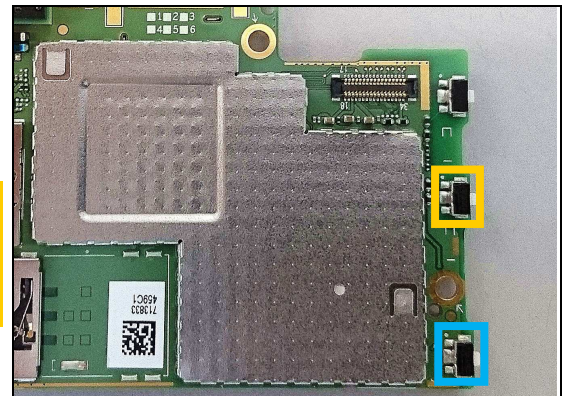
Replace if mechanical damaged or open circuit 1-2 when pushed.
(Volume up problems)
Protect the BtB connector and switch with capton tape!



15

SW1903

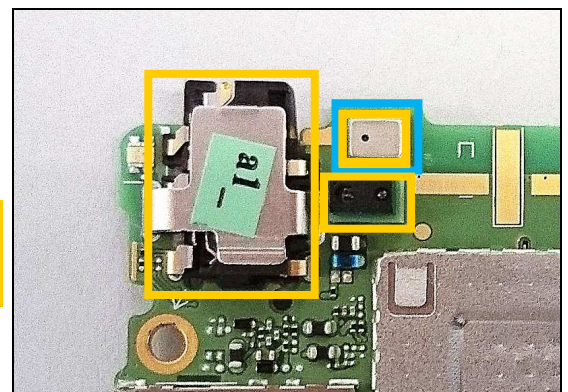
Replace if mechanical damaged or open circuit 1-2 when pushed.
(Power on problems)
Protect the switch with capton tape!



16

U301

Replace if no audio from secondary mic.
When replacing protect secondary mic, Proximity-sensor and Audio Jack with capton tape!



4 Revision History

Rev.	Date	Changes / Comments
1	2016-Jun-08	Initial release
2	2016-Jun-09	Added F33 Drawing
3	2016-Jul-18	<ol style="list-style-type: none">1. Updated attached 'F33 Drawing'.2. Updated PBA Primary Side picture.3. Updated PBA secondary side picture.4. Added component direction list.5. Updated instructions and pictures for chapter3 number 13, 14 and 15.