

Component Replacement

- electrical -



Xperia XA2

H3113,H3123,H3133,H4113,H4133

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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 C.

Do not remove shield can lids (RF performance will be damaged).

If there is other components right next to replacement component, protect the other components with Kapton tape.

1 Replaceable Components

EXPLANATION OF ABBREVIATIONS USED IN THE COLUMN 'COMMENTS' BELOW

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).

Primary Side

Position	Component	Part no.	Comments
U3901	MEMS MIC KRM0300-035090 HOSIDEN	22200000V00	HA+BH ⇨1
J2801	SIMSOCKET SM049-13116A05D JTCONN	C/23040001800	HA+BH or BGA ⇨2
J2802	MEMSOCKET 3.2.16.0055 JTCONN	23340000G00	HA+BH or BGA ⇨3

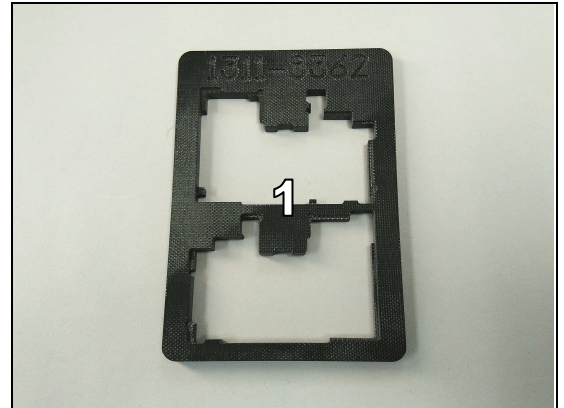
Secondary Side

Position	Component	Part no.	Comments
J3801	BATT CONN BM22L-4P-V(87) HRS	23030000U00	HA+BH ⇨1
J3701	BTB CONN ASE5B5010 ATC	23080005V00	HA+BH or BGA ⇨2
J3601	BTB CONN ASE5S1210 ATC	C/23080006100	HA+BH or BGA ⇨3
J3901	BTB CONN ASE5S1610 ATC	2308000216W	HA+BH or BGA ⇨4
J4202	BTB CONN ASE5S3010 ATC	2308000312W	HA+BH or BGA ⇨5
J4101	BTB CONN ASE5S4010 ATC	2308000278W	HA+BH or BGA ⇨6
J4201	BTB CONN BB35-RD34-3A-D8 DDK	23080002J00	HA+BH or BGA ⇨7
FJP3101	COAX CONN 3.2.08.0113 JTCONN	23350000R00	HA+BH ⇨8
FJP3102	COAX CONN 3.2.08.0113 JTCONN	23350000R00	HA+BH ⇨8
D2201	LED LTPL-C0677WPNB-CC2 LITEON	17700002Z00	HA+BH ⇨9
GP3401	SPR CONN WMS0011-010030 HOSIDEN	2313000109W	HA+BH ⇨10
GP3402	SPR CONN WMS0011-010030 HOSIDEN	2313000109W	HA+BH ⇨10
ANT3304	SPR CONN TM010-307 JTCONN	2313000161W	HA+BH ⇨11
ANT3305	SPR CONN TM010-307 JTCONN	2313000161W	HA+BH ⇨11
GNDSPR2	SPR CONN TM010-307 JTCONN	2313000161W	HA+BH ⇨12
PAD3201	SPR CONN TM010-307 JTCONN	2313000161W	HA+BH ⇨13
PAD3203	SPR CONN TM010-307 JTCONN	2313000161W	HA+BH ⇨13
PAD3204	SPR CONN TM010-307 JTCONN	2313000161W	HA+BH ⇨13
PAD3205	SPR CONN TM010-307 JTCONN	2313000161W	HA+BH ⇨13

2 Tools

SPECIAL TOOLS

1. PBA Soldering Fixture (1311-8362)



STANDARD TOOLS

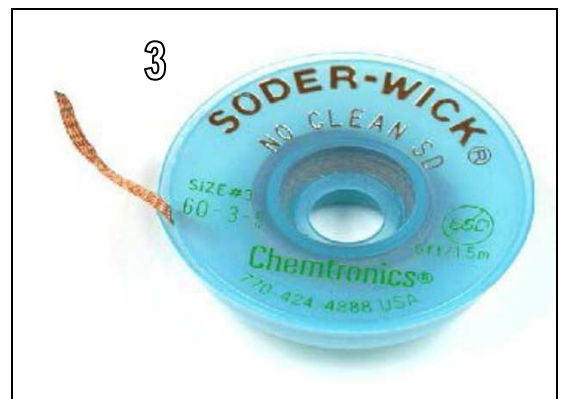
1. Small Convection (Hot Air) Device



2. Soldering Iron



3. Soldering wick



4. Solder-wire



5. Solder-paste



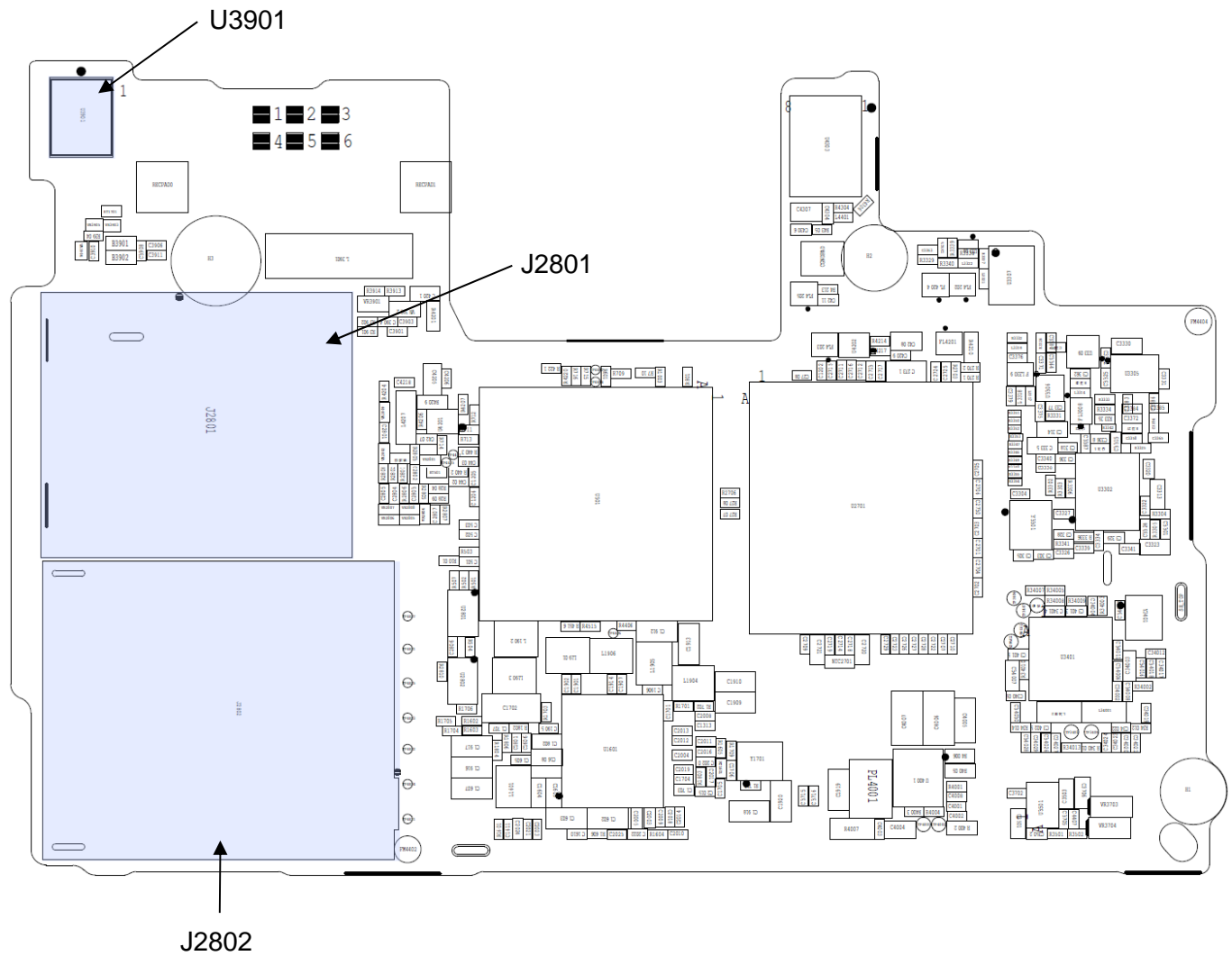
6. Low Static Heat Protection Tape



7. Flux

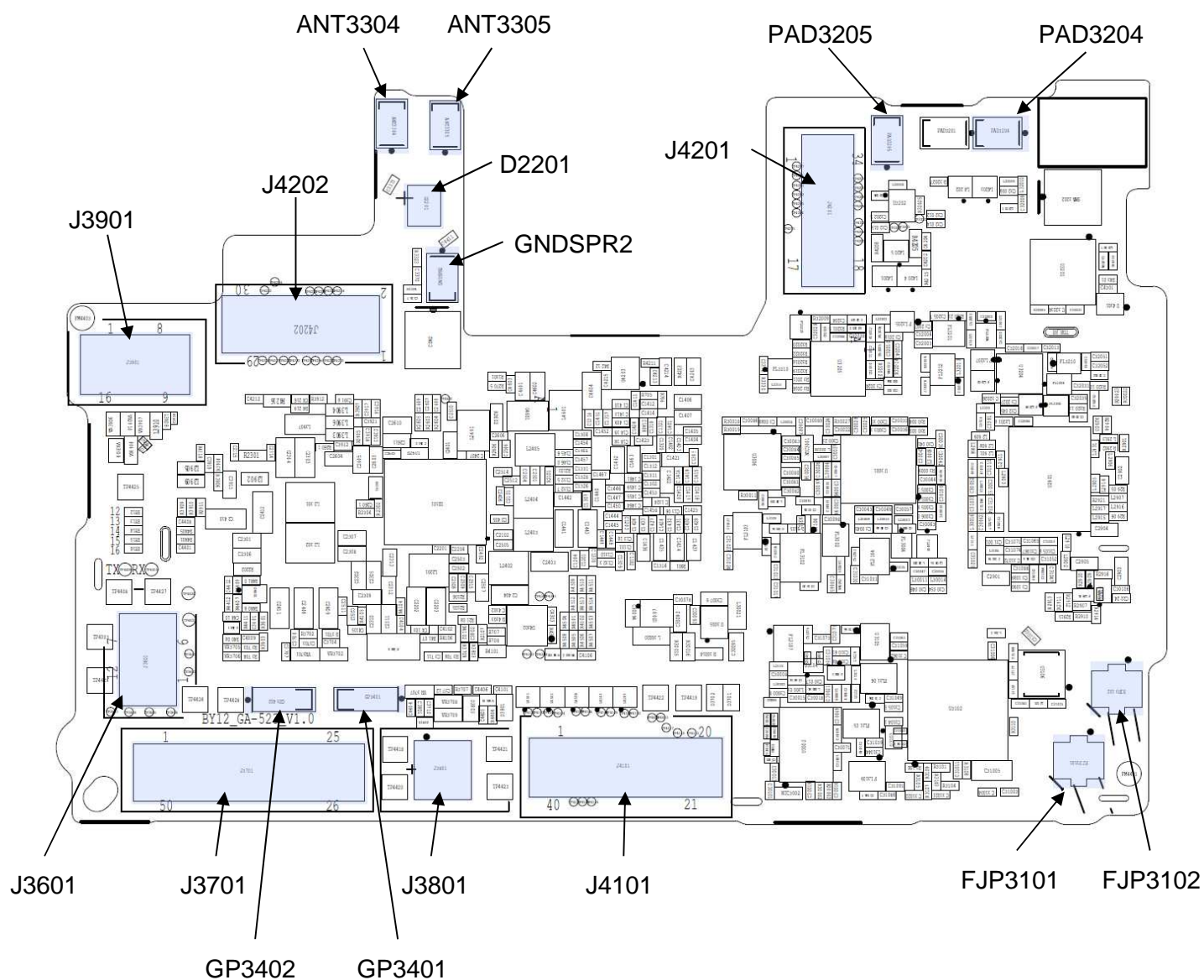


Primary side

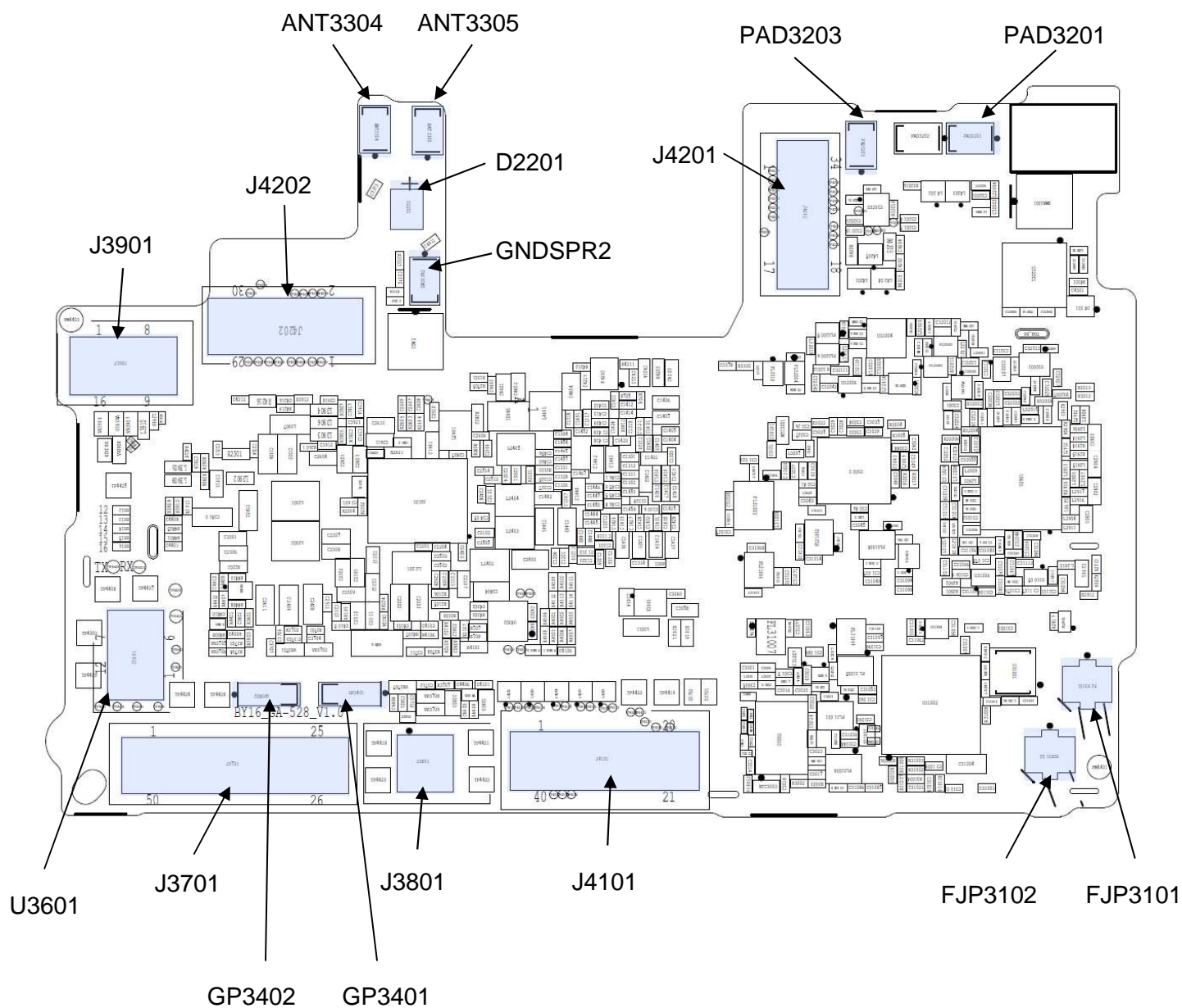


Secondary side

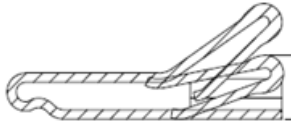
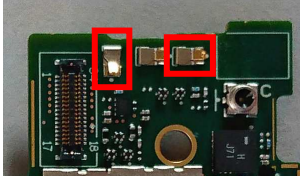
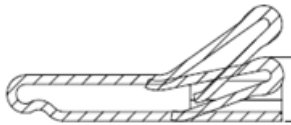
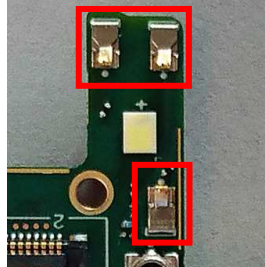
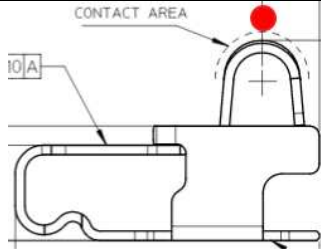
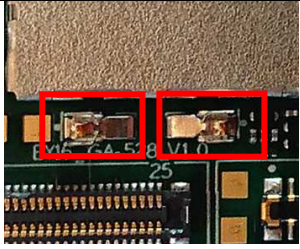
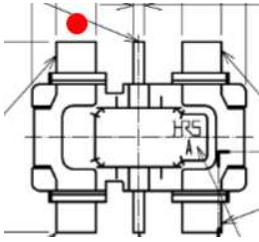
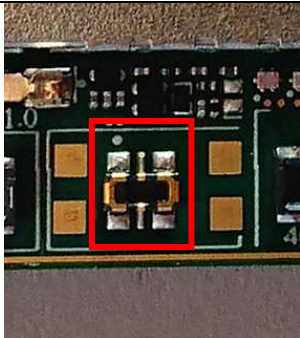
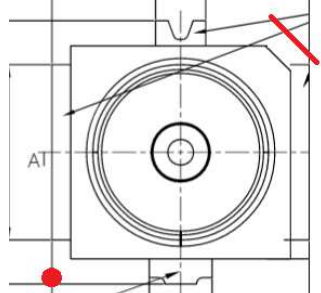
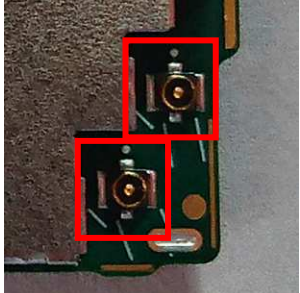
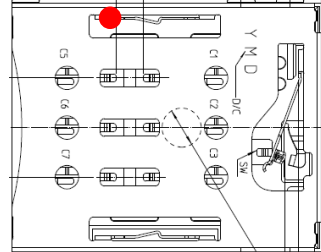

Only valid for H3113, H3133, H4113, H4133!

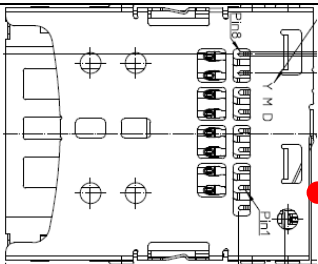
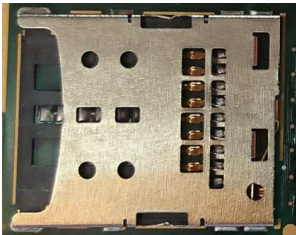
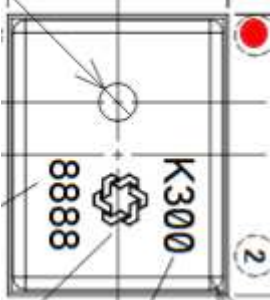
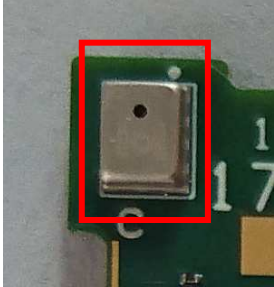
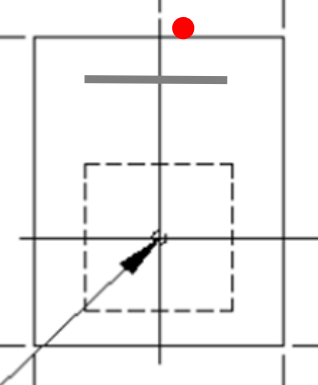
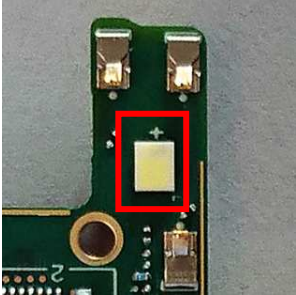


Only valid for H3123!



The Component direction is shown by using red point.

Position	PBA drawing	PBA picture
PAD3201 PAD3203 PAD3204 PAD3205		
ANT3304 ANT3305 GNDSPR2		
GP3401 GP3402		
J3801		
FJP3101 FJP3102		
J2801		

J2802		
U3901		
D2201		

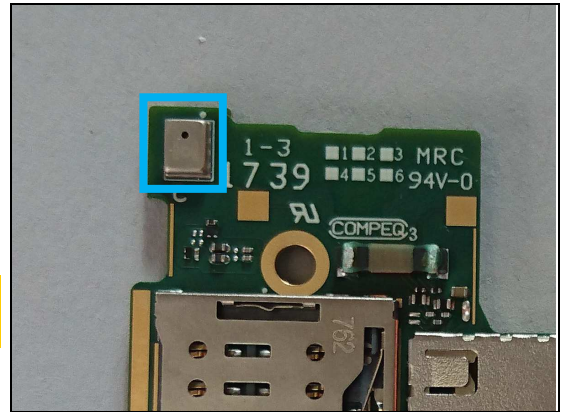
4 Additional Repair info

4.1 Primary Side

1

U3901

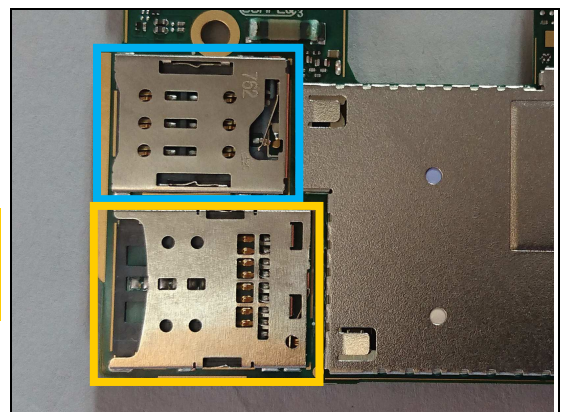
*Replace if mechanical damaged.
(2nd MIC not working)*



2

J2801

*Replace if mechanical damaged.
(No SIM card 1 inserted)
Protect the SIM/SD or SD connector with capton tape!*

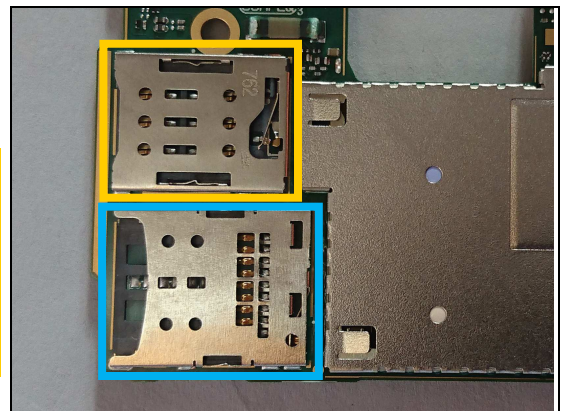


3

J2802

*Replace if mechanical damaged.
(No SIM card 2 or SD card inserted)
Protect the SIM connector with capton tape!*

*H4113 and H4133 is SIM/SD combo connector.
H3113, H3123 and H3133 is SD connector.*



4.2 Secondary Side

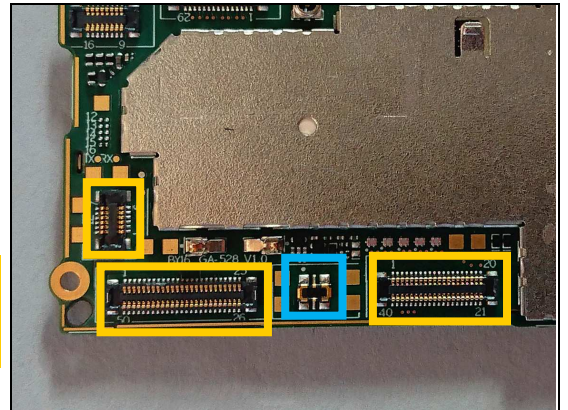
1

J3801

Replace if mechanical damaged.

(Phone dead or power off)

Protect the BtB connectors with capton tape!



2

J3701

Replace if mechanical damaged.

(Cannot Charge/ USB

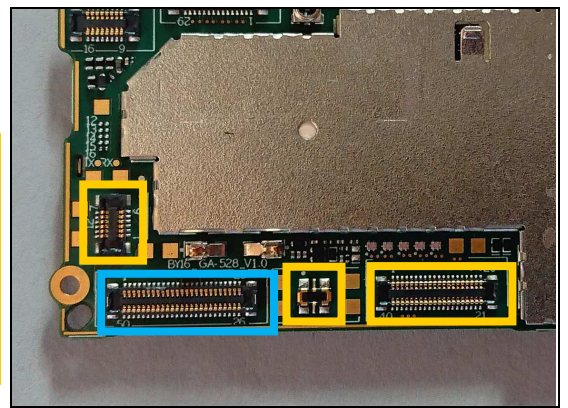
data transfer error / Main mic not working /

Loudspeaker no sound / Keys not working properly and

related symptoms)

Protect the Battery and BtB connectors with capton

tape!



3

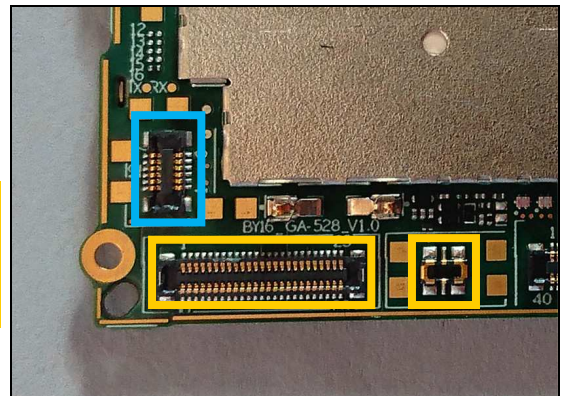
J3601

Replace if mechanical damaged.

(Finger print not working)

Protect the Battery and BtB connectors with capton

tape!



4

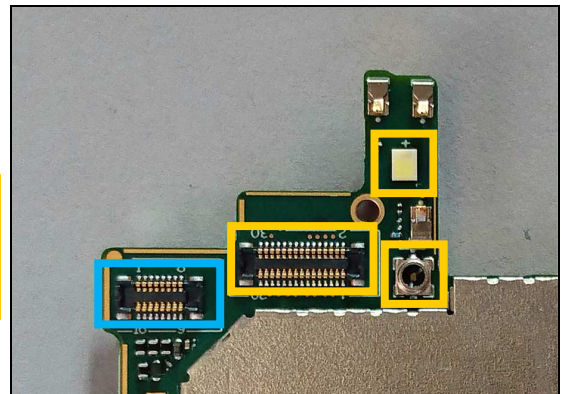
J3901

Replace if mechanical damaged.

(No sound from headset / No FM radio)

Protect the RF switch, LED and BtB connectors with

capton tape!



Repair Actions: Additional Repair Info

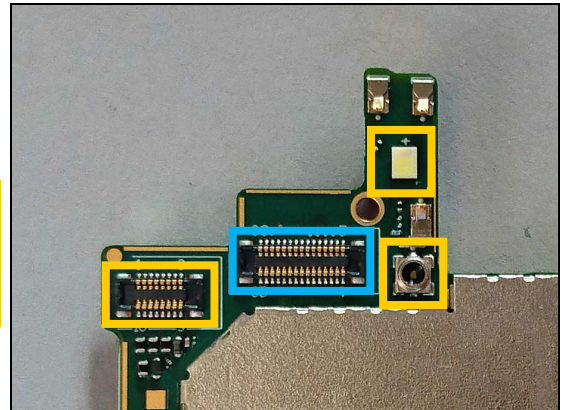
5

J4202

Replace if mechanical damaged.

(Front camera not working properly)

Protect the RF switch, LED and BtB connectors with capton tape!



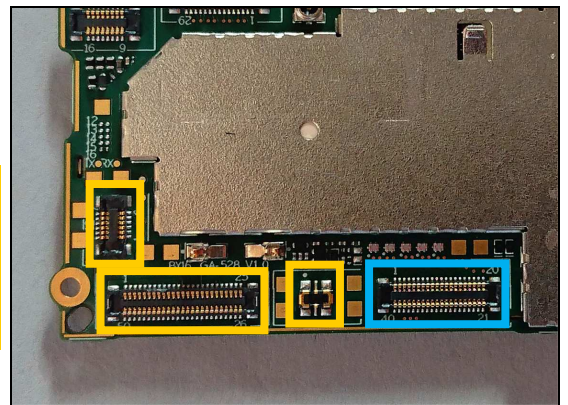
6

J4101

Replace if mechanical damaged.

(Display abnormal or touch panel related symptoms)

Protect the Battery and BtB connectors with capton tape!



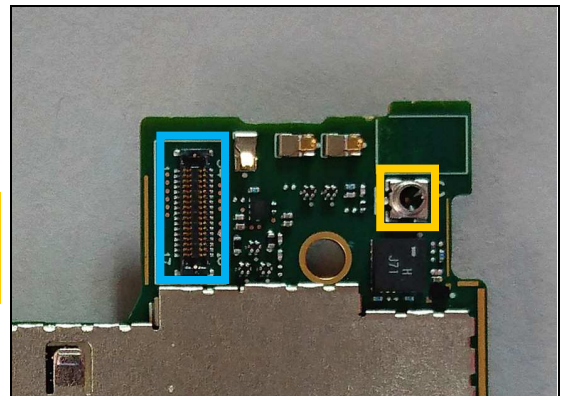
7

J4201

Replace if mechanical damaged.

(Main camera not working properly)

Protect the RF switches with capton tape!



8

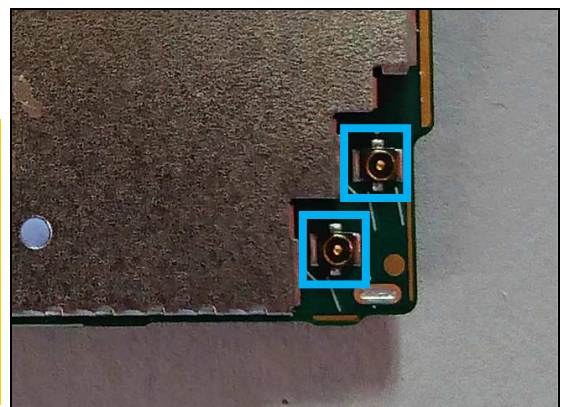
FJP3101, FJP3102

Replace if mechanical damaged.

(Bad network, Main antenna)

Protect the other RF connector with capton tape if only replace one of them!

Note! The position number of the two RF connectors are different between H3113/H3133/H4113/H4133 and H3123, please refer to 'Component Placing-secondary side' for more details.

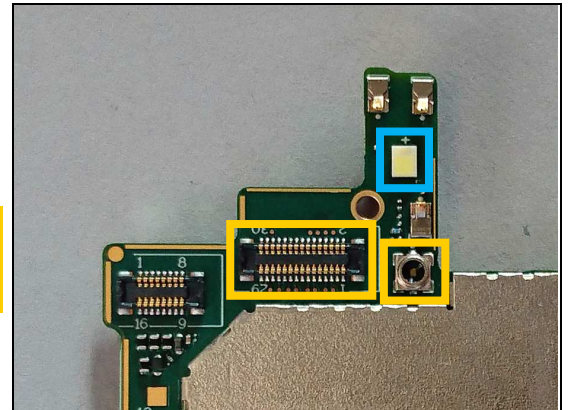


Repair Actions: Additional Repair Info

9

D2201

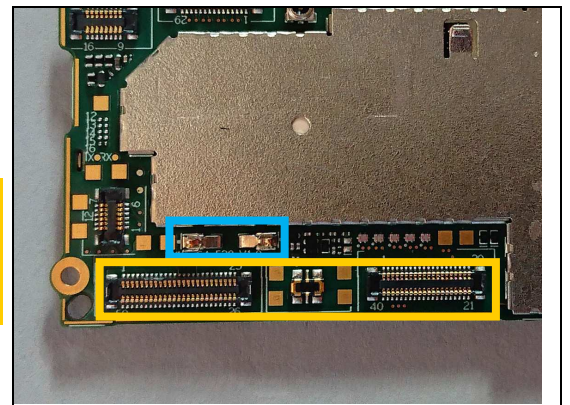
Replace if Flash LED not working.
Protect the BtB connector and RF switch with capton tape!



10

GP3401, GP3402

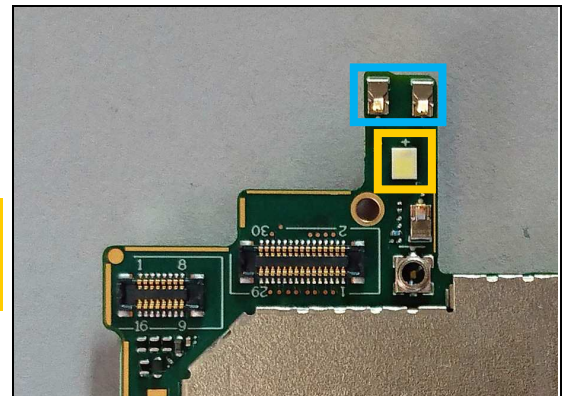
Replace if mechanical damaged.
(No or bad NFC)
Protect the Battery and BtB connectors with capton tape!



11

ANT3304, ANT3305

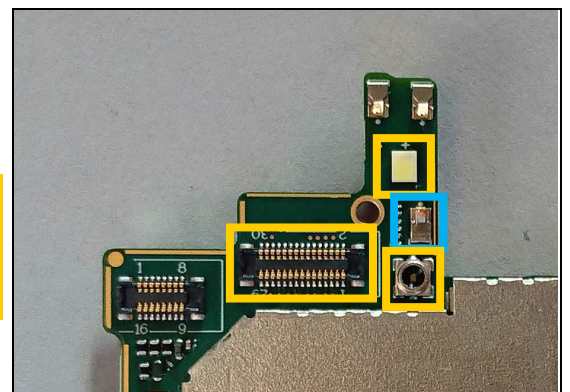
Replace if mechanical damaged.
(No or bad WLAN/ BT/ GPS)
Protect the LED with capton tape!



12

GNDSR2

Replace if mechanical damaged.
(No or bad GPS)
Protect the LED, BtB connector and RF switch with capton tape!



Repair Actions: Additional Repair Info

13

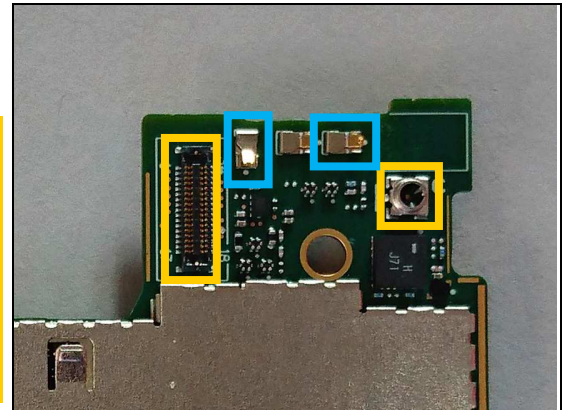
PAD3201, PAD3203, PAD3204, PAD3205

Replace if mechanical damaged.

(Bad network, diversity Rx antenna)

Protect the RF switch and BtB connector with capton tape!

Note! The position numbers of these contact springs are different between H3113/H3133/H4113/H4133 and H3123, please refer to 'Component Placing-secondary side' for more details.



5 Revision History

Rev.	Date	Changes / Comments
1	2018-Jan-12	Initial release