

# Disassembly & Assembly Guide

## [ Galaxy Tab S5e ]

HHP Global CS team

Rev 1.2

# Revision History

Date	Rev	Comments	Pages
2019.03.16	1.0	- Initial version	

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## 1. Disassembly

- Pre-requisite
- Parts for disassembly
- Disassembly

## 2. Assembly



- Pre-requisite
- Non-reusable parts for reassembly
- Parts for assembly
- Assembly

# Disassembly






# Pre-requisite

Rev1.0

## Common

Tweezers (Rounded-Tip/Plastic)	Disassembly stick	Screw Driver	Anti-static gloves	Anti-static mat
 <p>GH81-14437A</p>	 <p>GH81-11926A</p>			 <p>(Earth connection)</p>

## To disassemble

Automatic OCTA Disassembler for <b>Tablet</b>	Mini vacuum for battery disassembly	Cotton Swab	Sput	Ethyl Alcohol (about 95%)
 <p>GH81-16435A (220V) GH81-16595A (110V)</p>	 <p>GH81-12712S (33pi)</p>	 <p>GH81-12712N</p>	 <p>GH81-12712P</p>	 <p>IMK 1108948200</p>

※ Ethyl Alcohol can be used only for battery detaching & swollen battery.

# Parts for Disassembly

Rev1.0

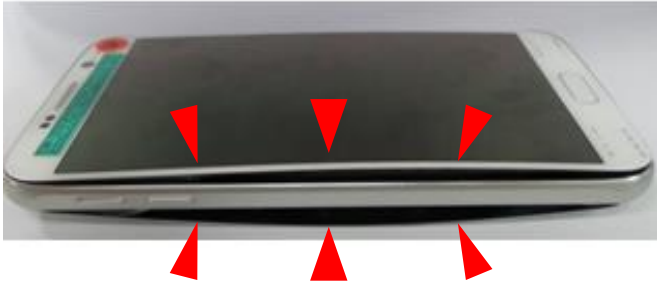
1. OCTA
2. Bracket
3. Side PBA & SUB-PBA(USB Connector)
4. Main PBA (Include Main Camera & Front Camera)
5. 4 Speakers
6. Battery

# Disassembly – Display (1/4)

Core process  
for battery handling

Rev1.0

1) Check if the back glass/OCTA is swollen or not.



Back glass/OCTA status	
Normal	Swollen or deformed
The device can be heated under standard.	<b>Never heat the device. Use ethyl alcohol only.</b>



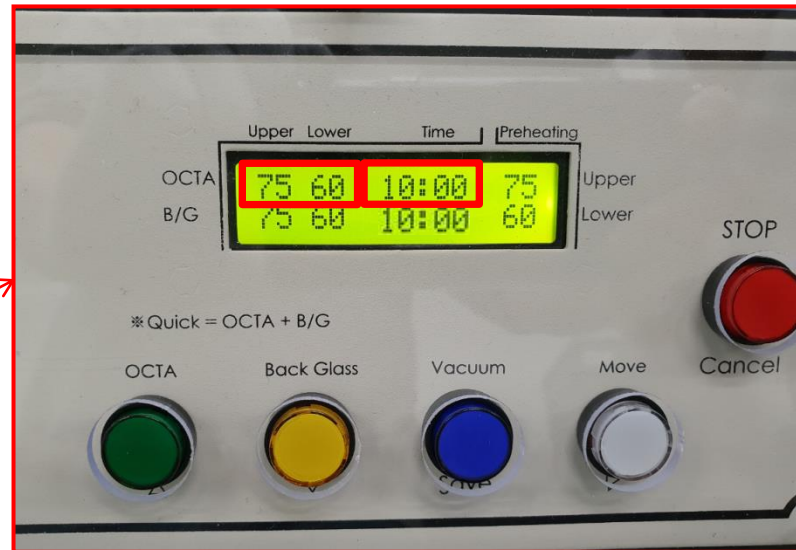
# Disassembly – Display (2/4)

Rev1.0

## 2) Set the AOD jig as below condition.

### Condition of pre-heat the device.

- Upper 75 °C / Lower 60 °C 10 min
- ※ Battery level(SOC) should be under 68%.



- ※ The Display part for TAB S5e is very thin, so it must be handled very carefully.
- ※ Keep the pre-heating condition to prevent quality issue during repair.

# Disassembly – Display (3/4)

Rev1.0

3) Replace & hold the device on the AOD.

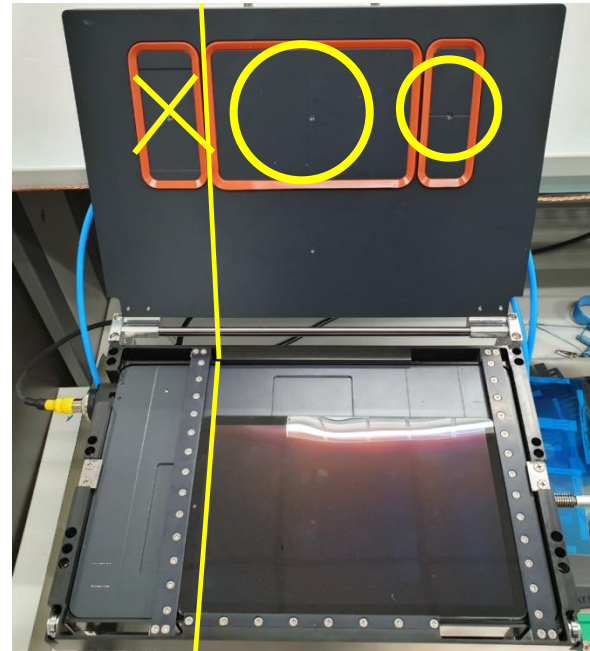
(※ Pogo pin side should be placed on the front side.)

4) Align the device with suction line on the Upper Plate like a picture below.

5) Put the upper plate down, and press the vacuum button.

And then check the vacuum working status.

Press the OCTA button and it will be disassembled automatically.



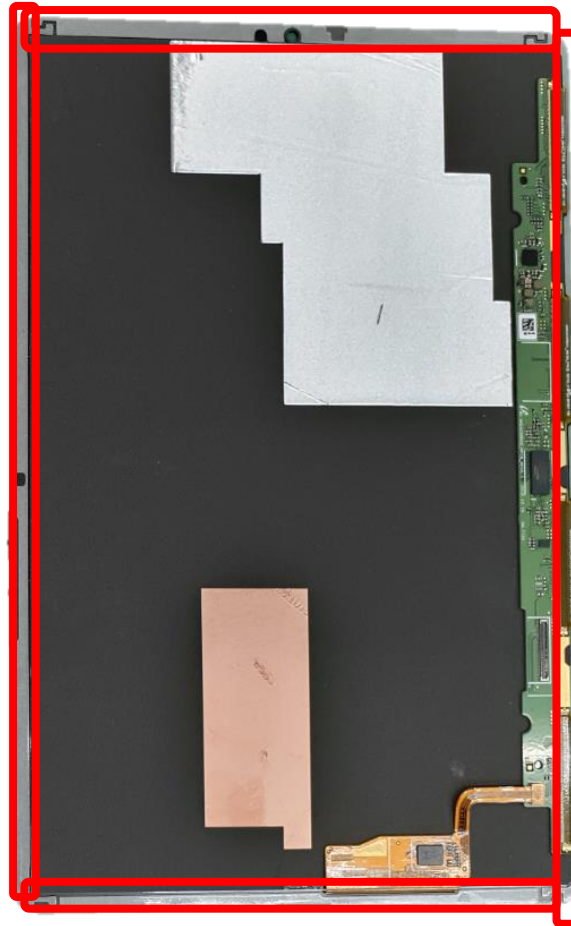
# Disassembly – Display (4/4)

Core process  
for water resistance

Rev1.0

6) Remove 4 adhesive tapes which are located outside of OCTA.

👉 Window adhesive tapes **CAN NOT** be re-used.



# Disassembly – Bracket

Rev1.0

- 1) Remove SIM tray and Loosen 37 screws from the rear case. (Black 2, Silver 35)
- 2) Disassemble the bracket with disassembly stick **with care**.



37 points



※ Do NOT forget remove the SIM tray before disassembling.

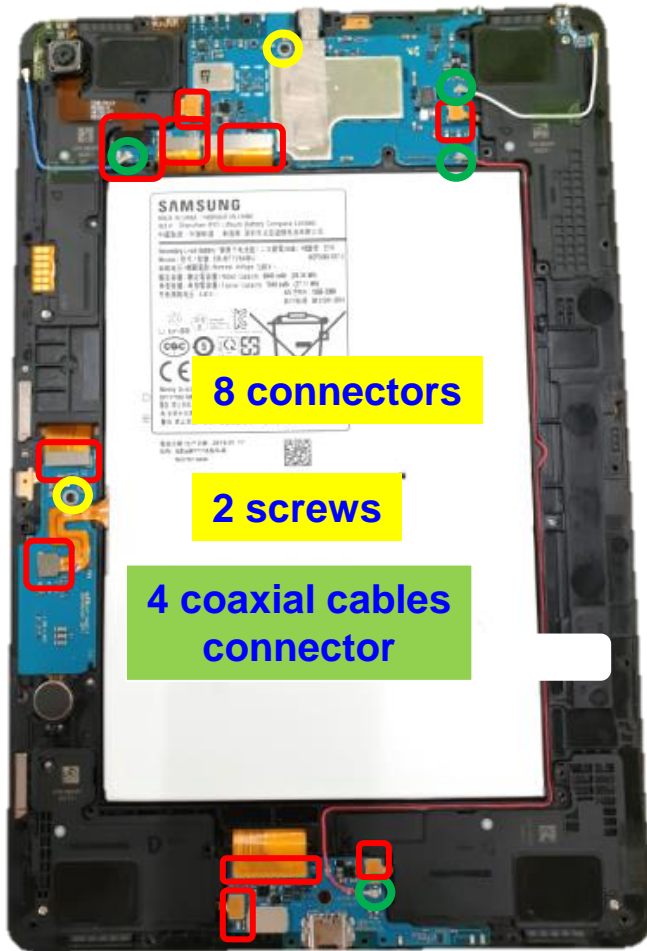
※ The Bracket part is very thin, so it must be handled very carefully.

※ Watch out not to give any damage on FPCB.

# Disassembly – Side PBA & SUB-PBA

Rev1.0

- 1) Open the connector for rear-camera and remove the Rear camera.  
\* Place the Front CAM with the lens facing up.
- 2) Open the all connector and remove the screws PBA out from bracket.
- 3) Disassemble the SIDE-PBA & SUB-PBA(USB con).



8 connectors

2 screws

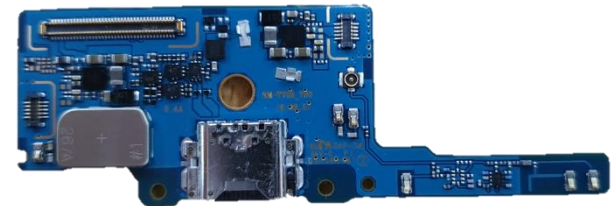
4 coaxial cables connector



Rear CAM



Side PBA



SUB PBA

[ Note ]

✘ The Bracket part is very thin, so it must be handled very carefully.

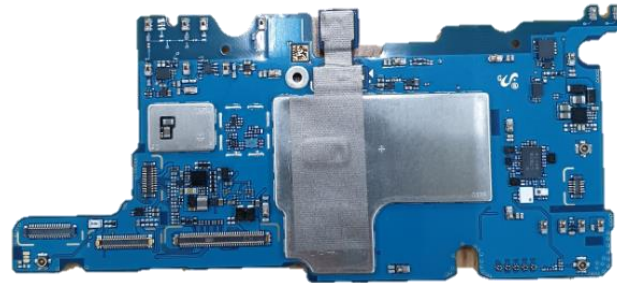
# Disassembly – Main PBA & 4 Speakers (1/2)

Rev1.0

- 1) Take the main PBA out from bracket and remove the 2 conductive tapes.
- 2) Remove 4 screws on the 4 Speakers.



4 screws  
for speakers



Main PBA



Remove conductive tapes. They cannot be reused.

# Disassembly – Main PBA & 4 Speakers (2/2)

Rev1.0

- 1) Remove the 4 Speaker modules.
- 2) In case of 2 upper speakers take the speakers out with Antenna FPCB.
- 3) **Disassemble the Antenna FPCB from the speakers and remove the CU tapes.**

\* CU tapes and Conductive tapes cannot be reused.

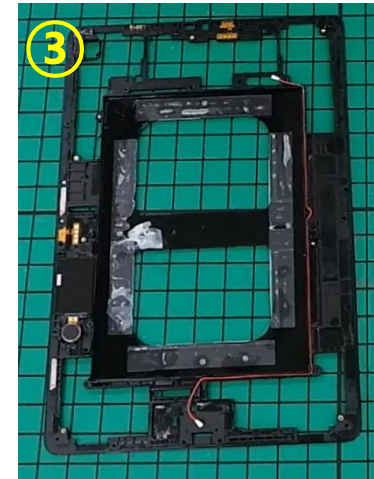
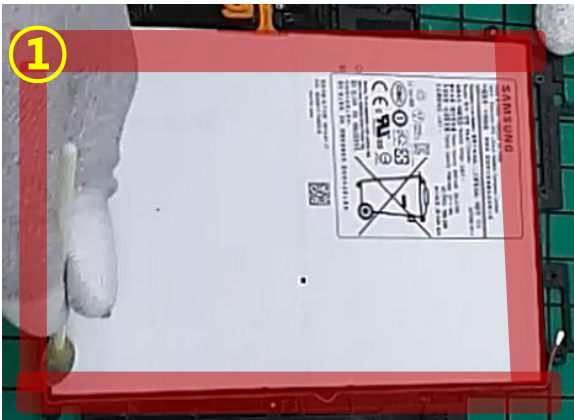


# Disassembly - Battery (1/2)

Core process  
for battery handling

Rev1.0

- 1) Put ethyl alcohol into the out side of battery with clean swab(①), and slightly tilt the front case to soak alcohol inside enough.
- 2) Lift battery using battery disassembly vacuum.
  - ※ **When lifting the battery, lift the battery with the bracket in close contact with the bottom to prevent it from bending like a second picture below.**
- 3) Remove all residues of tape. (Other adhesive tapes can more easily remove residues.)



## [ Notice ]

1. Do NOT use any sharp tools(disassembly stick, knife, any plastic or tweezers).
2. Do NOT reuse the battery and battery tapes.
3. In case of battery replacement, transfer the IMEI label on the old battery to the new battery.

*If the battery is not properly removed, it may lead to damage to the phone and battery.  
Only authorized service providers with the instructions provided can remove the battery.*



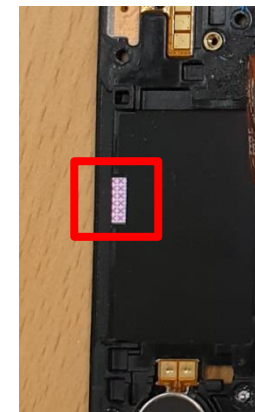
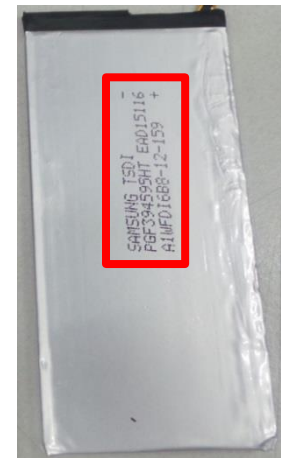
## ★ Caution of Handling Ethyl Alcohol ★

### Do not touch any print area on the Battery pouch.

There are below information:

- Production vendor
- Production date
- Production line
- Serial number
- Lot / Batch Number

### Do not touch LDI(Liquid Damage Indicator) on the Sensor FPCB(Entrance of Sim card tray).



# Assembly

# Pre-requisite (To assemble and press)

Rev1.0

Tweezers



GH81-14437A

Disassembly stick



GH81-11926A

Screw Driver



Anti-static gloves



Anti-static mat



(Earth connection)

Window pressing jig



GH81-11903A

Window pressing pad



GH81-16925J

Battery pressing pad  
Lower 2 ea (for Tablet)



GH81-14967A

# Non-reusable parts for reassembly (1/5)

Rev1.0

Below items must be changed to the new one in case of disassembly of each part such as OCTA, main PBA, Speakers, front camera.

- **OCTA Window Tapes SVC Kit code** (It needs all when the OCTA is removed/replaced.)

Items (Non-reusable)		PBA Tapes SVC Kit
Kit Code (Composed with below items)		<b>GH82-19789A</b>
Part Code	Left	GH02-18006A
	Right	GH02-18007A
	Top	GH02-18004A
	Bottom	GH02-18005A




# Non-reusable parts for reassembly (2/5)

Rev1.0

**Below items must be changed to the new one in case of disassembly of each part such as OCTA, main PBA, Speakers, front camera.**

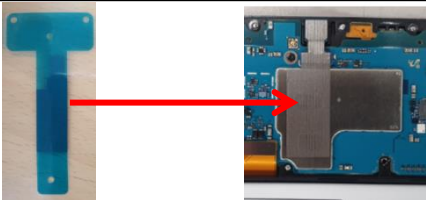
**- Battery adhesive tape (It needs when the Battery is replaced.)**

Item (Non-reusable)	Picture	SEC Code
A/S-TAPE-BATTERY-SVC		GH81-16873A

**- Speaker Mesh (Only the Mesh can be replaced from the speaker.)**

Item (Non-reusable)	Picture	SEC Code
Speaker Mesh		GH81-16713A

**- Front CAM-PBA conductive tape (It needs when the Front Camera is removed/replaced.)**

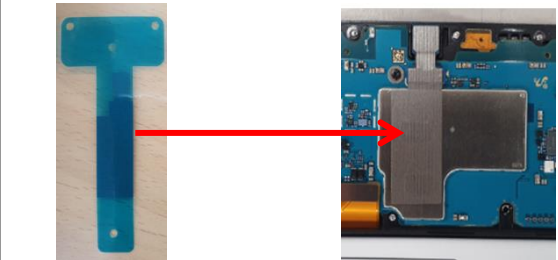

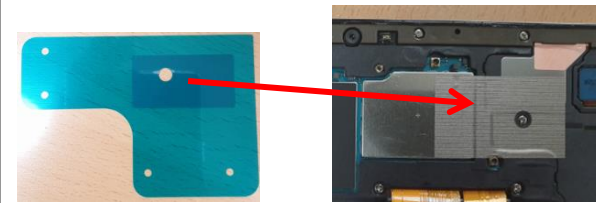
Item (Non-reusable)	Picture	SEC Code
Front CAM-PBA conductive tape (Non-reusable)		GH02-18555A

# Non-reusable parts for reassembly (3/5)

Rev1.0

Below items must be changed to the new one in case of disassembly of each part such as OCTA, main PBA, Speakers, front camera.

- **PBA Tapes SVC Kit code** (It needs all when the PBA is removed/replaced.)

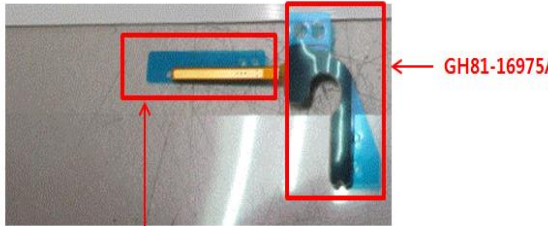
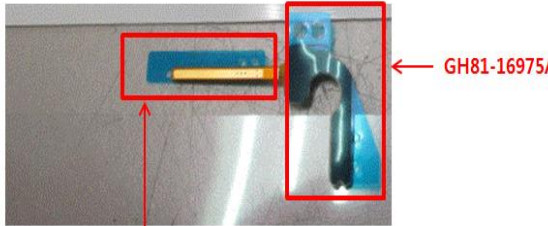

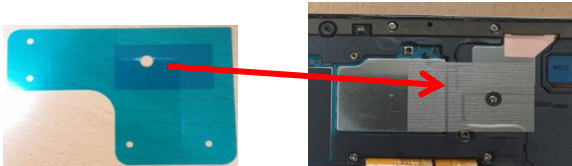
Items (Non-reusable)		PBA Tapes SVC Kit
Kit Code (Composed with below items)		<b>GH82-19790A</b>
Part Code	<p>Front CAM-PBA conductive tape</p> 	GH02-18555A
	<p>Conductive HB Main Tape</p> 	GH02-18559A
	<p>Conductive WIFI Main Tape</p> 	GH02-18557A

# Non-reusable parts for reassembly (4/5)

Rev1.0

Below items must be changed to the new one in case of disassembly of each part such as OCTA, main PBA, Speakers, front camera.

- **R-SPK** (Rear CAM is attached on it) **Tapes SVC Kit code** (It needs all when the R-SPK is removed/replaced.)

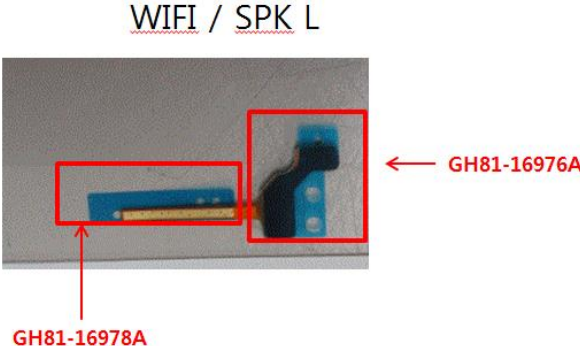
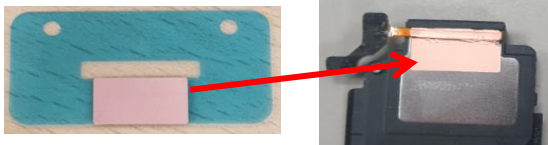

Items (Non-reusable)		PBA Tapes SVC Kit	
Kit Code (Composed with below items)		<b>GH82-19791A</b>	
Part Code	<b>MAIN ANT CONTACT FPCB Conductive TAPE</b>	 <p>MAIN ANT/ <u>SPK R</u></p> <p>← GH81-16975A</p> <p>GH81-16977A</p>	GH81-16977A
	<b>MAIN ANT PCB Adhesive TAPE</b>	 <p>GH81-16977A</p>	GH81-16975A
	<b>SPK TAPE-R</b>		GH02-18793A
	<b>Conductive HB Main Tape</b>		GH02-18559A

# Non-reusable parts for reassembly (5/5)

Rev1.0

Below items must be changed to the new one in case of disassembly of each part such as OCTA, main PBA, Speakers, front camera.

- **L-SPK Tapes SVC Kit code** (It needs all when the L-SPK is removed/replaced.)

Items (Non-reusable)		PBA Tapes SVC Kit	
Kit Code (Composed with below items)		<b>GH82-19792A</b>	
Part Code	<b>WIFI ANT CONTACT FPCB Conductive TAPE</b>	 <p>WIFI / SPK L</p> <p>← GH81-16976A</p> <p>↑ GH81-16978A</p>	GH81-16978A
	<b>WIFI ANT PCB Adhesive TAPE</b>		GH81-16976A
	<b>SPK TAPE-L</b>		GH02-18792A
	<b>Conductive WIFI Main Tape</b>		GH02-18557A



- 1. Battery**
- 2. 4 Speakers**
- 3. Main PBA and Camera**
- 4. Side PBA & Sub-PBA**
- 5. Bracket**
- 6. OCTA**

# Assembly - Battery

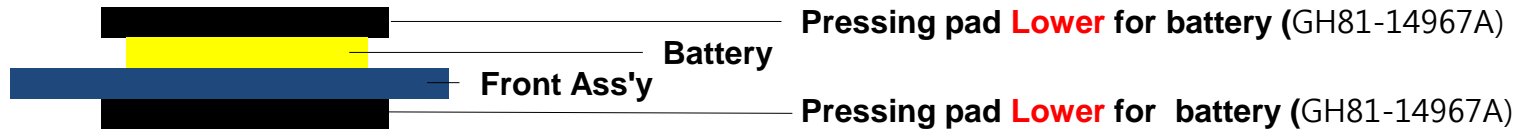
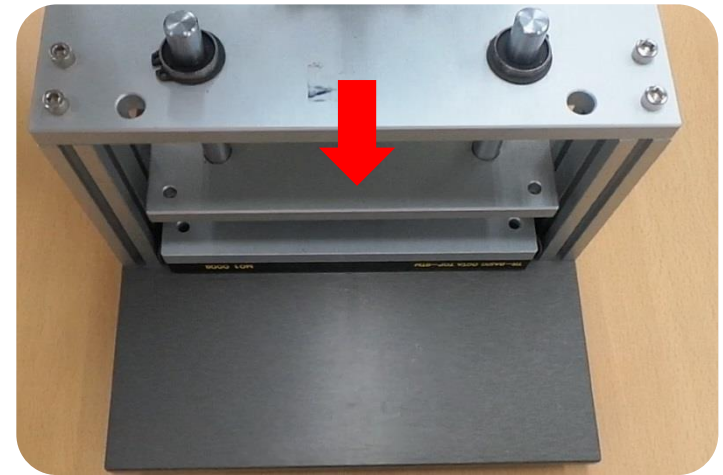
Core process  
for battery handling

Rev1.0

- 1) Remove the release film in the battery .
- 2) Attach the battery from TOP to BOTTOM.
- 3) Check the battery assembly status.
- 4) Press the battery using pressing jig and pad.

- Pressing force : **0.6 N** (It is set on the pressing jig in advance)
- Pressing time : **5 seconds**

Torque wrench 78,400KRW SVC Part of GH81-11903A		GH81-12712C (SEC) 1074720500 (IMK)	- Common usage - Use for Window press Jig body → Changeable part - 1N force
Torque wrench 72,100KRW SVC Part of GH81-11903A		GH81-14467A (SEC) 1166055300 (IMK)	- Common usage - Use for Window press Jig body → Changeable part - 0.6N force



## [ Notice ]





Do **NOT** press a battery over 5 seconds to prevent display damage.

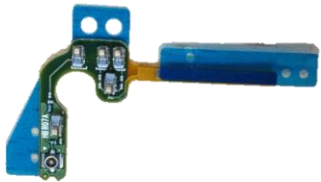
# Assembly – Speakers (1/2)

Rev1.0

## 1) Assemble the Antenna FPCB module and Speakers

(These tapes will be provided as the SVC Kit Code. Refer to page 22~24.)

Item	SPK TAPE L	SPK TAPE R	WIFI ANT CONTACT FPCB	MAIN ANT CONTACT FPCB
Image				
BOM CODE	GH02-18556A	GH02-18558A	GH59-15095A	GH59-15069A



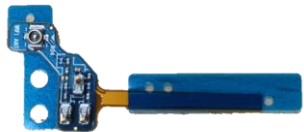
MAIN ANT CONTACT FPCB



Attach an ANT-FPCB to Speaker-R



Attach a CU Tape to Speaker-R



WIFI ANT CONTACT FPCB



Attach an ANT-FPCB to Speaker-L



Attach a CU Tape to Speaker-L

# Assembly – Speakers (2/2)

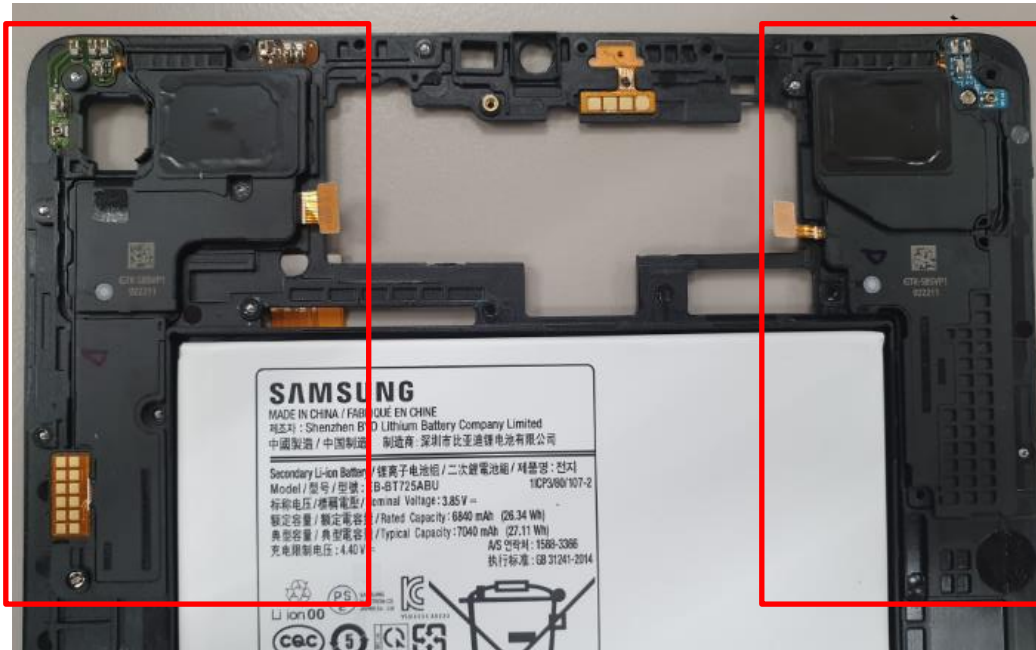
Rev1.0

1) Assemble the speakers on the main PBA.

※ In case of the top side speakers, it should be assembled with ANT-FPCB.

( Place the speaker firstly and then place the ANT-FPCB.)

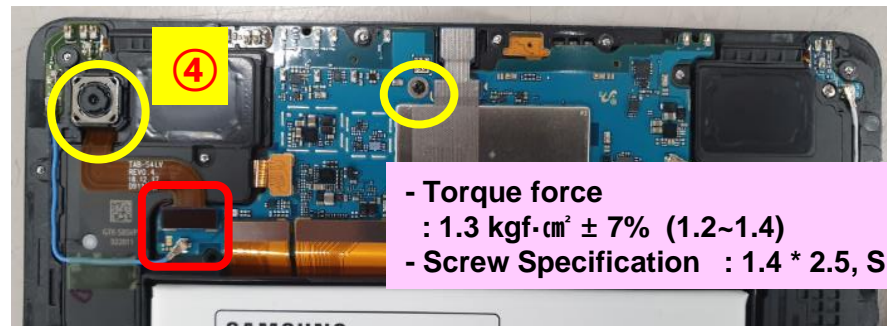
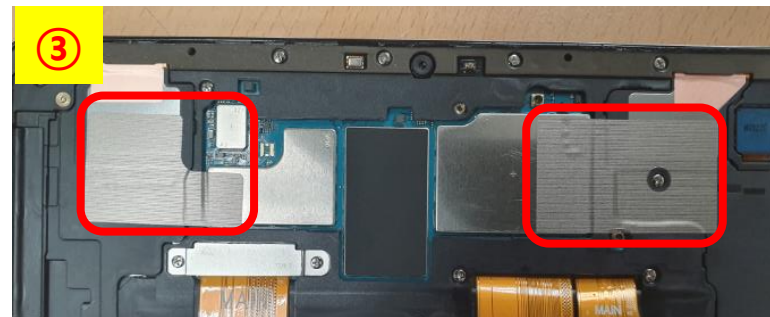
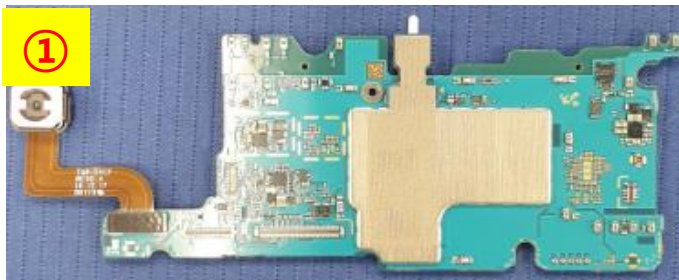
2) Tighten 4 screws for speakers. (1 screw for 1 speaker)



# Assembly - Main PBA

Rev1.0

- 1) If the Front camera was disassembled, assemble the front camera firstly and attach the Front CAM-PBA conductive tape. (GH02-18555A)
- 2) Place the main PBA on the bracket, and connect all connectors firmly.
  - Softly open all connectors to make assembly easy before placing main PBA.
- 3) Attach the **Conductive tapes** (GH02-18557A, GH02-15065A) to connect PBA with Speakers.
- 4) Assemble Rear-Camera module and tighten 1 screw.



- Torque force  
: 1.3 kgf·cm<sup>2</sup> ± 7% (1.2~1.4)  
- Screw Specification : 1.4 \* 2.5, Silver 4ea

## [Important management]

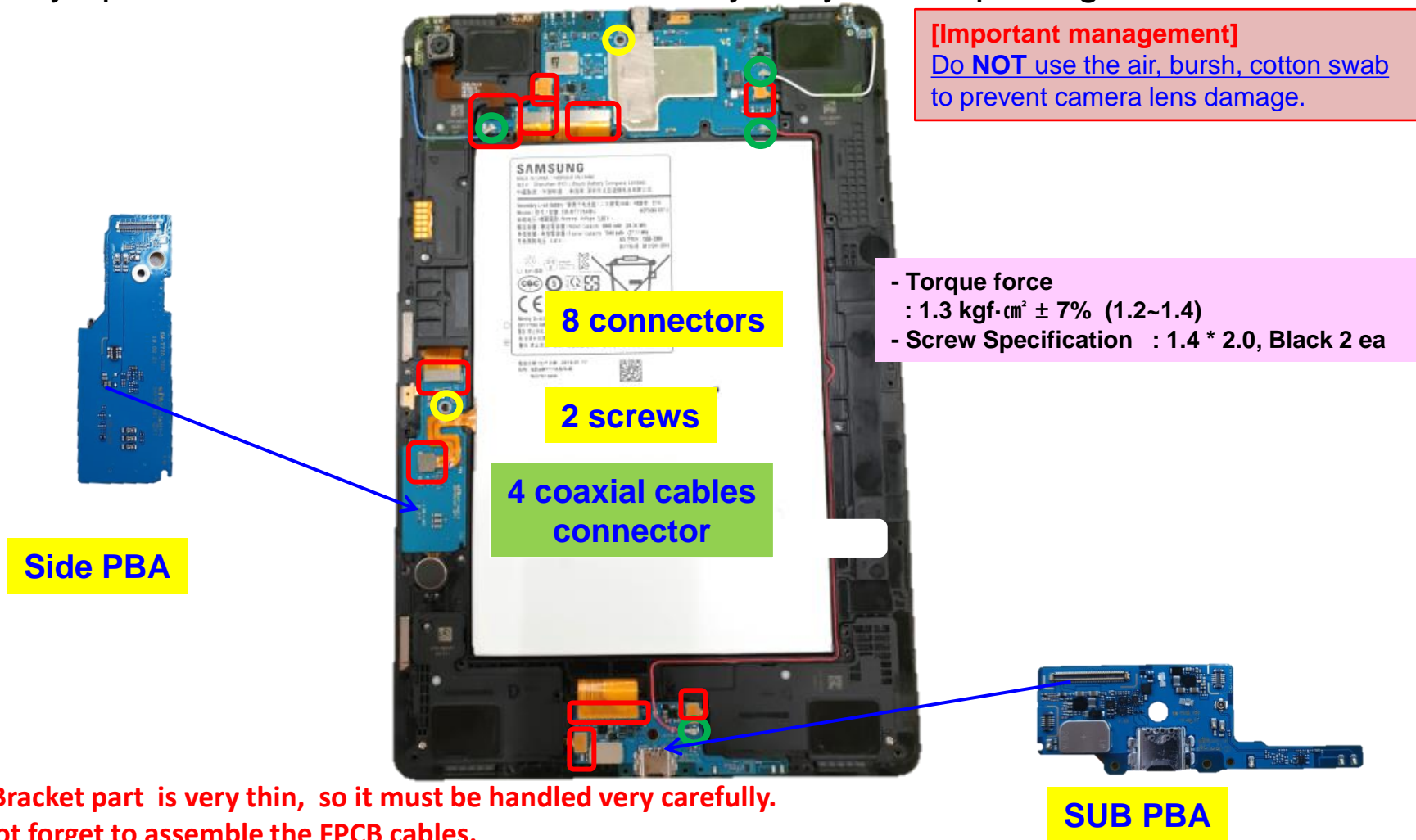
Do **NOT** use the air, bursh, cotton swab to prevent camera lens damage.

# Assembly - Side PBA, Sub-PBA

Rev1.0

1) Place the Side PBA and Sub-PBA on the bracket, and connect all connectors firmly.

- Softly open all connectors to make assembly easy before placing main PBA.



# Assembly - Rear Case

Rev1.0

- 1) Assemble the rear case.
- 2) Tighten all screws.

- Torque force :  $1.3 \text{ kgf}\cdot\text{cm}^2 \pm 7\%$  (1.2~1.4)
- Screw Specification
  - : 1.4 \* 2.3, Silver 36 ea
  - : 1.4 \* 3.0, Black 2 ea



※ The Bracket part is very thin,  
so it must be handled very carefully.

38 points



[ Notice ]

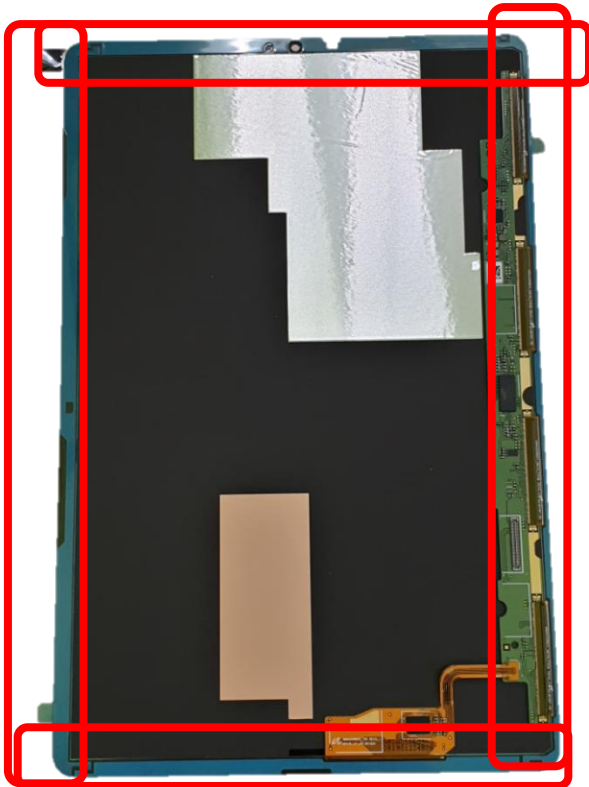
Watch out not to give any damage on the FPCB during screwing.

## 1) Attach the new adhesive tapes on the outside of OCTA.

- Attach the OCTA window outside tape on the OCTA by hands.

## 2) Attach the OCTA on the bracket.

- Assemble the OCTA connector and gently press all adhesive parts of tape using hands.



### [ Notice ]

Fit the tapes precisely to the guide holes of tapes.



- 1) Check if there is any gap or difference between OCTA and metal frame.
  - 2) Press the OCTA using pressing jig and pad.
    - ※ **SIM Tray must be seperated before pressing the backglass or the OCTA.**
- Pressing force : **1N** (It is set on the pressing jig in advance)
  - Pressing time : **1 minute**
- 3) Take the device out, and do the visual inspection again.



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