

# **Desktop ROG Strix (G10CE)**

## **Service Manual**

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## Safety precautions

- Before handling components, use a grounded wrist strap or touch a safely grounded object to avoid damaging them due to static electricity.
- Keep liquids or moisture away from your Notebook PC to avoid short circuits.
- Remove rings, watches, and any other metal objects from your hands.
- Hold components by the edges to avoid touching the ICs.
- Properly install all components before connecting the AC power. Do not use power adapters or batteries from other devices to reduce the risk of injury to persons due to fire or explosion. Use only certified power adapters or batteries supplied by the manufacturer or authorized retailers.
- Detach all clips or flaps before removing cables to prevent damage.
- Disconnect cables, connectors, and power plugs by pulling the plug evenly to avoid damage.
- Use the correct screw models on your Notebook PC to prevent damage.
- Confirm that the cable orientation is correct before connecting any cables.
- Fully remove all adhesive residue after removing and before installing any components.
- Photograph the appearance of cables, cable routing, connectors, and screws for later reference before proceeding with each step.

- [ASUS Desktop ROG Strix \(G10CE\) Overview](#)
- [Components Top View](#)
- [Components Bottom View](#)
- [Appropriate Tools](#)
- Disassembly steps :
  - [SLIDE DOOR](#)
  - [VGA CARD](#)
  - [FAN](#)
  - [DDR & SSD CARD](#)
  - [2<sup>nd</sup> M.2 SSD](#)
  - [CPU COOLER](#)
  - [MAIN BOARD & WIFI CARD & CPU](#)
  - [FRONT COVER AND LED BOARD](#)
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  - [TOP COVER AND FRONT IO BD AND LED](#)
  - [FIO USB CABLE](#)
  - [HDD](#)
  - [POWER SUPPLY](#)
  - [WIFI MAIN ANTENNA](#)
  - [CABLE ASSEMBLY](#)

## Front & Top View

Front

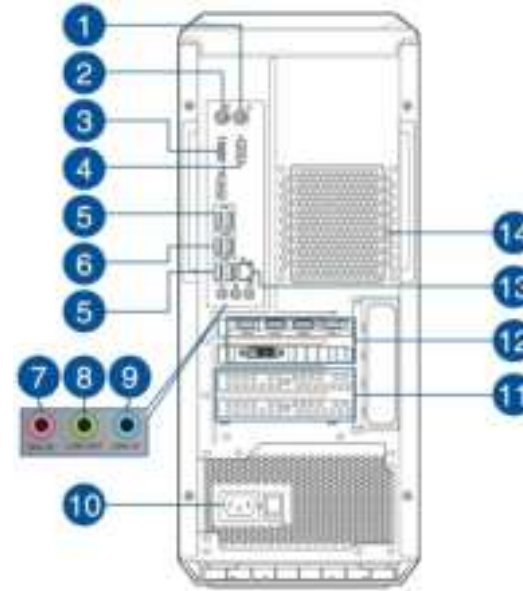


Top





























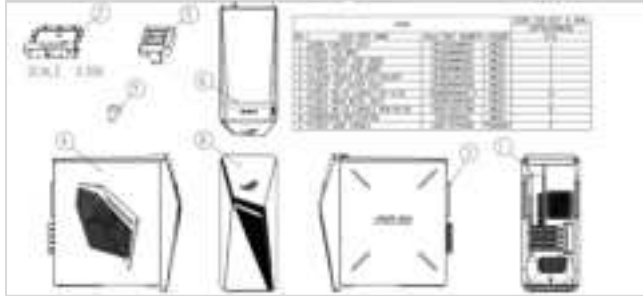








- 1 Power button
- 2 Headset port
- 3 USB 3.2 Gen 1 ports

## Rear Panel View



- 1 PS/2 mouse port
- 2 PS/2 keyboard port
- 3 HDMI™ port
- 4 Display port
- 5 USB 3.2 Gen 1 ports
- 6 USB 3.2 Gen 2 ports (teal blue, Type A)
- 7 Microphone port (pink)
- 8 Line Out port (lime)
- 9 Line In port (light blue)
- 10 Power connector
- 11 Expansion slot brackets
- 12 ASUS Graphics Cards (on selected models only)
- 13 LAN (RJ-45) port
- 14 Air vents

◆ VGA CARD 	◆ SYS FAN 	◆ LED BD. CR 	◆ HDD SATA CABLE 	◆ WIFI ANTENNA 	◆ POWER SWITCH HOLDER 	◆ IO: 6USB/2DP/HDM/LAN// AJ:3AUDIO/2PS2/IO00N961239C 	◆ SIDE DOOR PLATE 
◆ CPU 	◆ CPU COOLER 	◆ LED BD. UP 	◆ AUDIO CABLE 	◆ CABLE USB3.0 FIO TO MB L500 	◆ SIDE LED CABLE 	◆ GL10DH SATA CABLE 15P F/P 430MM 	
◆ SSD 	◆ MAIN BOARD 	◆ LED BD. DOWN 	◆ POWER SW CABLE 	◆ FFC CABLE (20P 0.5 L50mm ) 	◆ ANTENNA GASKET 	◆ SPNL SCREW PACKAGE 	
◆ WIFI CARD 	◆ HDD 	◆ LED BD. SIDEUP 	◆ USB2.0 CRB TO MB L750 	◆ FFC CABLE (14P 0.5 L50mm ) 	◆ FIOL ODD OPPENING SHIEL 	◆ G10CE SUB ASSY 	
◆ DDR 	◆ FRONT IO BD 	◆ LED BD. SIDEDOWN 	◆ POWER SUPPLY 	◆ BEZEL MYLAR 	◆ M2 PAD 		

◆ VGA Card



◆ SYS FAN



◆ LED BD CR



◆ LED BD.  
SIDEDOWN



◆ DDR



◆ CPU COOLER



◆ LED BD. UP



◆  
SSD



◆ CPU



◆ LED BD. DOWN



◆ WIFI CARD



◆ FRONT IO BD



USB CONN GASKET

◆ LED BD. SIDEUP





Please prepare and select the appropriate tools to disassemble/assemble for the ROG Strix (G10CE) desktop.

## ◆ Screwdriver

Please accord to different screw specification to choose different screwdriver and head.

#1 #2 

## ◆ Plastic Blade



## ◆ Plastic Tweezers

Use a pair of tweezers to remove/insert/tidy cables.



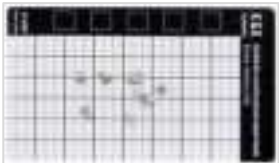
## ◆ Thickness Gauge

Thickness compass specification 0.05mm-1.5mm. Use it to measure the gap.



## ◆ Magnetism Board

Suggest local buy magnetism board to place screw, avoid mix different type screw to cause assembly damage.



## ◆ Alcohol 95%



## ◆ Thermal Grease



## ◆ Cable Tie (Local Buy)



## ◆ Glove



## ◆ Dust-free Cloth



## ◆ Needle nose pliers





## Disassembly Notice

Please be sure to pull out adapter and disconnect the battery. 

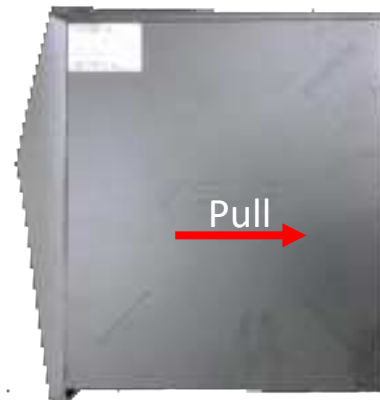
Step 1 : Remove screws \*4pcs.

Step 2 : Pull the side doors \*2pcs.

Screws	QTY	Spec	Torque (kgf-cm)
 	4	#6-32*6.3L (7.3,2.45)(B)//KL,MACHINE NY B-ZN #2	8.0±0.5



SLIDE DOOR (L)



SLIDE DOOR (R)

## Disassembly Notice

Please be sure to pull out adapter and disconnect the battery. 



Step 1 : Disconnect (yellow mark) connector \*1pcs.

Step 2 : Open the door.

Step 3 : Remove screws \*4pcs.

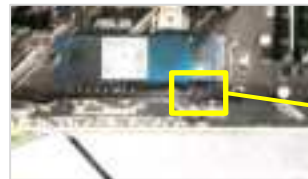
Step 4 : Press and unlock the VGA card.

Step 5 : Take out the VGA card.

Screws	QTY	Spec	Torque(kgf-cm)
	2	M3*6L (5.5,2.15) (P) #2	6.0± 0.5
	2	#6-32 L6*H2.3 (B)B-NI-ZN	4.0± 0.5



4 Press (Green Mark)



5





**Disassembly Notice**

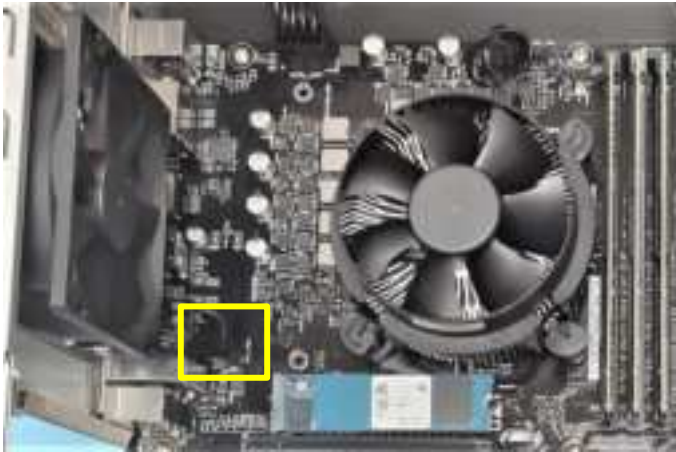
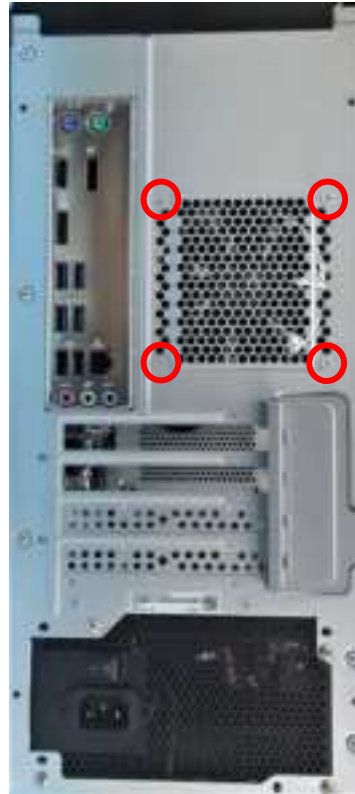
Please be sure to pull out adapter and disconnect the battery. 

Step 1 : Disconnect (yellow mark) FAN connector \*1pcs.

Step 2 : Remove 4 screws on the outside of iron grid.

Step 3 : Take out the Fan \*1 pcs.

Screws	QTY	Spec	Torque (kgf-cm)
 	4	M5*10L (F) W-NI (TP5)	8.0±0.5



**① Disconnect (yellow mark)****② Remove****③**

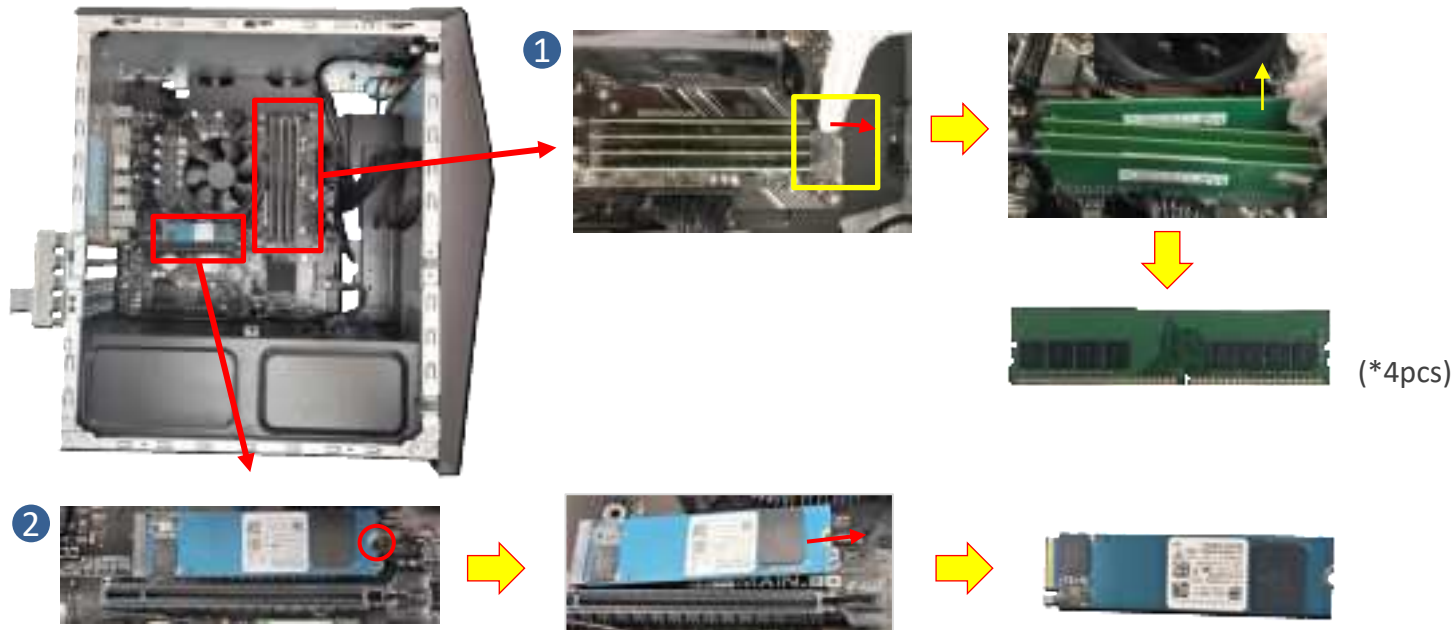
## Disassembly Notice

Please be sure to pull out adapter and disconnect the battery. 

Step 1 : Unlock then remove DDR \*4pcs.

Step 2 : Remove screw \*1pcs then take out the SSD \*1pcs.

Screws	QTY	Spec	Torque (kgf-cm)
 	1	M2*3L(4.6,0.8) (K)#1	2.0 ±0.2



## Assembly Notice

 Please follow the below criteria to assemble DDR.

Memory slot	1pcs	2pcs	3pcs	4pcs
DIMM_A1				●
DIMM_A2		●	●	●
DIMM_B1			●	●
DIMM_B2	●	●	●	●





## Assembly Notice

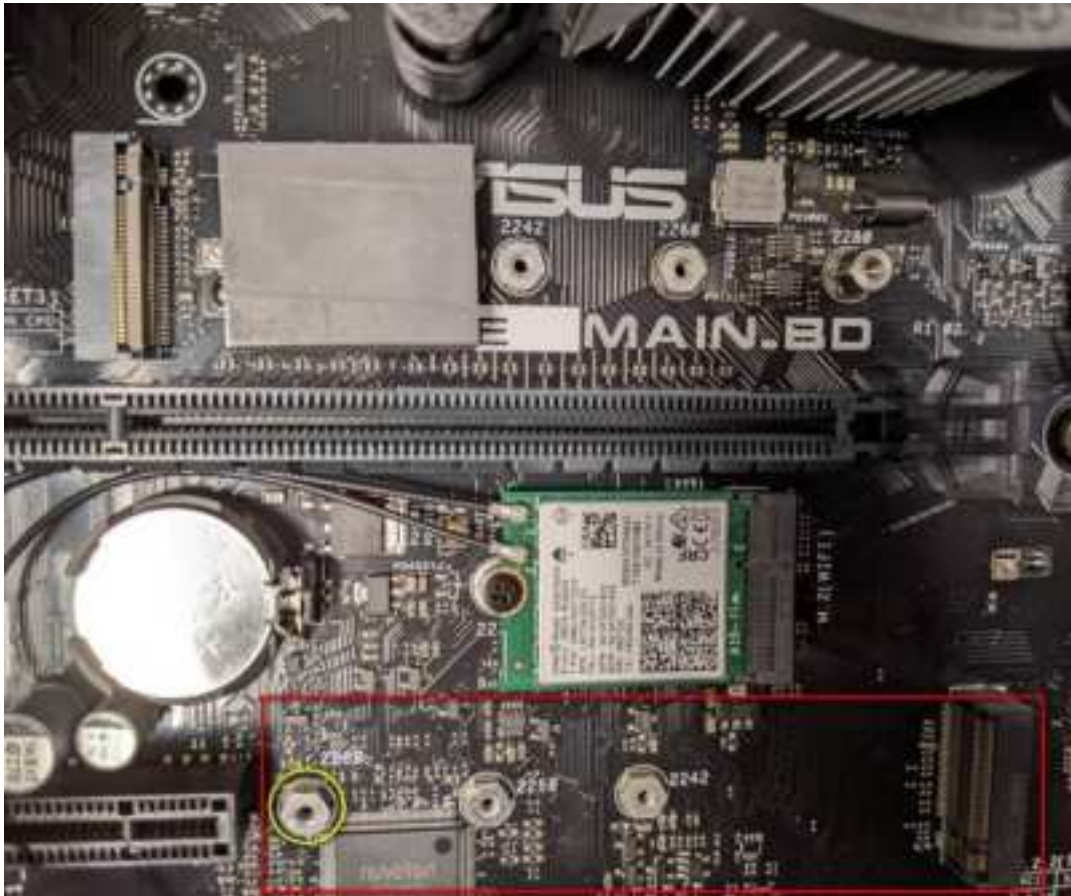
Please be sure to pull out adapter and disconnect the battery.

Please follow the below criteria to assemble 2<sup>nd</sup> M.2 SSD.

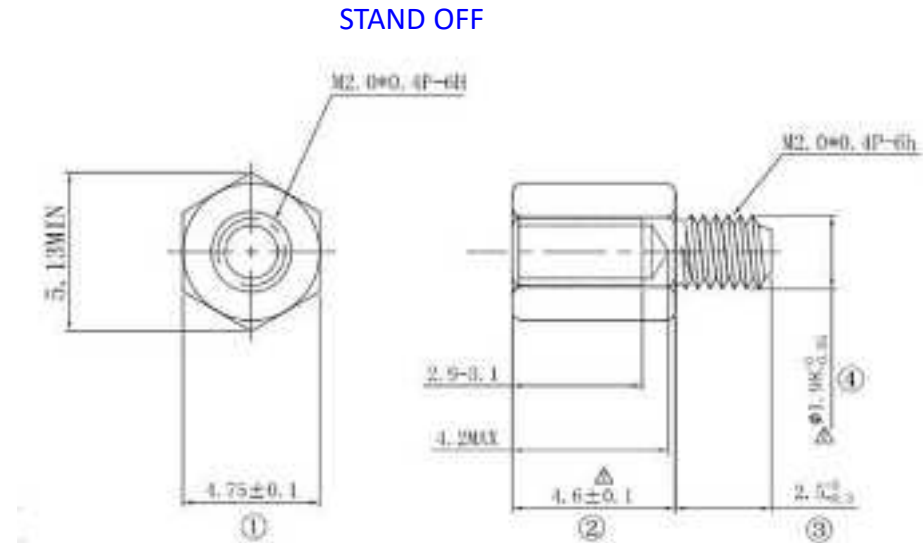
Step-1 : Install stand off to lock\*1pc (yellow mark).

Step-2 : Install M.2 SSD \*1pc.

Step-3 : lock screw \*1pc.



Screws	QTY	Spec	Torque (kgf-cm)
Step-1	1	D640MB STAND OFF M2*4.6H*4.75D	$3.0 \pm 0.3$
Step-3	1	SCREW M2*3L(4.6,0.8) (K)#1	$2.0 \pm 0.2$



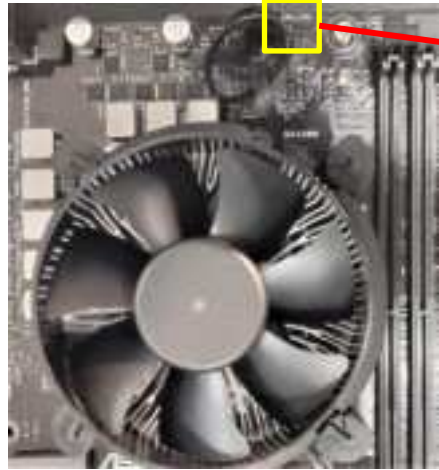
**Disassembly Notice**

Please be sure to pull out adapter and disconnect the battery. 

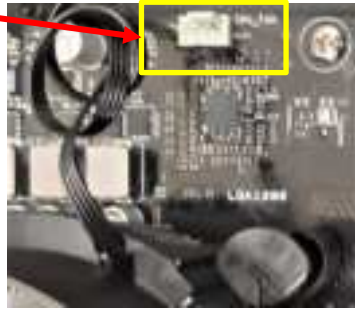
Step 1 : Disconnect CPU\_FAN connector.

Step 2 : Unscrew \*4pcs CPU buckle.

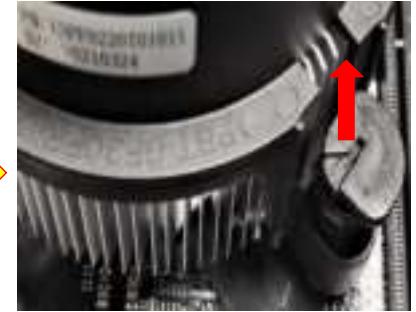
Step 3 : Remove the CPU Cooler.



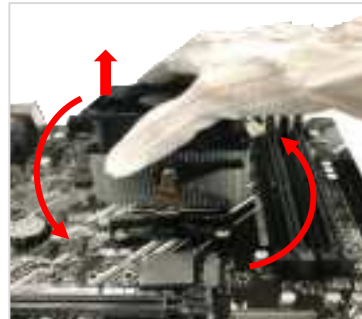
① Disconnect



② Unscrew(Rotate in the direction of the arrow)



③ Take it out



If the CPU COOLER is hard to disassemble,  
please move the COOLER left and right to separate.

## Disassembly Notice

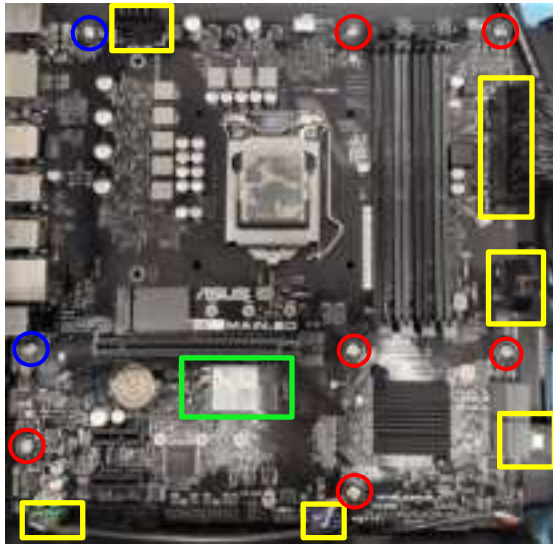
Please be sure to pull out adapter and disconnect the battery.

- Step 1 : Disconnect (yellow mark) connectors \*6pcs.  
 Step 2 : Remove screws \*8pcs (Red & Blue mark).  
 Step 3 : Remove screw \*1pcs and antenna \*2pcs (Green mark).  
 Step 4 : Take out the Main Board.  
 Step 5 : Remove the CPU.

Screws	QTY	Spec	Torque (kgf-cm)
	2	M3*4L (6.3,2.05) (P) #2	6.0±0.5
	6	#6-32*6L(7.1,2.3) (B) #2	8.0±0.5
	1	M2*3L(5.0,0.8) (K)#1	2.0±0.5

① Disconnect (Yellow mark)

② Unscrew (Red and Blue mark)



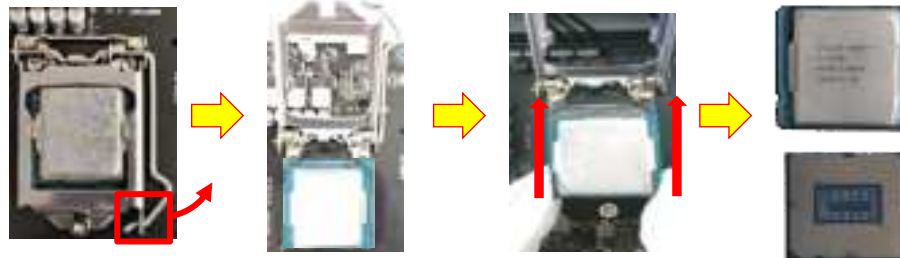
③ Remove WIFI CARD (Screw \*1pcs and antenna \*2)



④ Take out Main Board



⑤ Press and then lift up

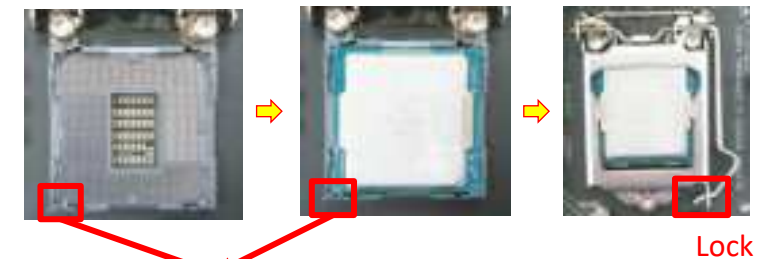


## CPU Disassembly Notice

Pin facing down on Processor packaging to protect the CPU.



Please follow the instructions to assemble the CPU.

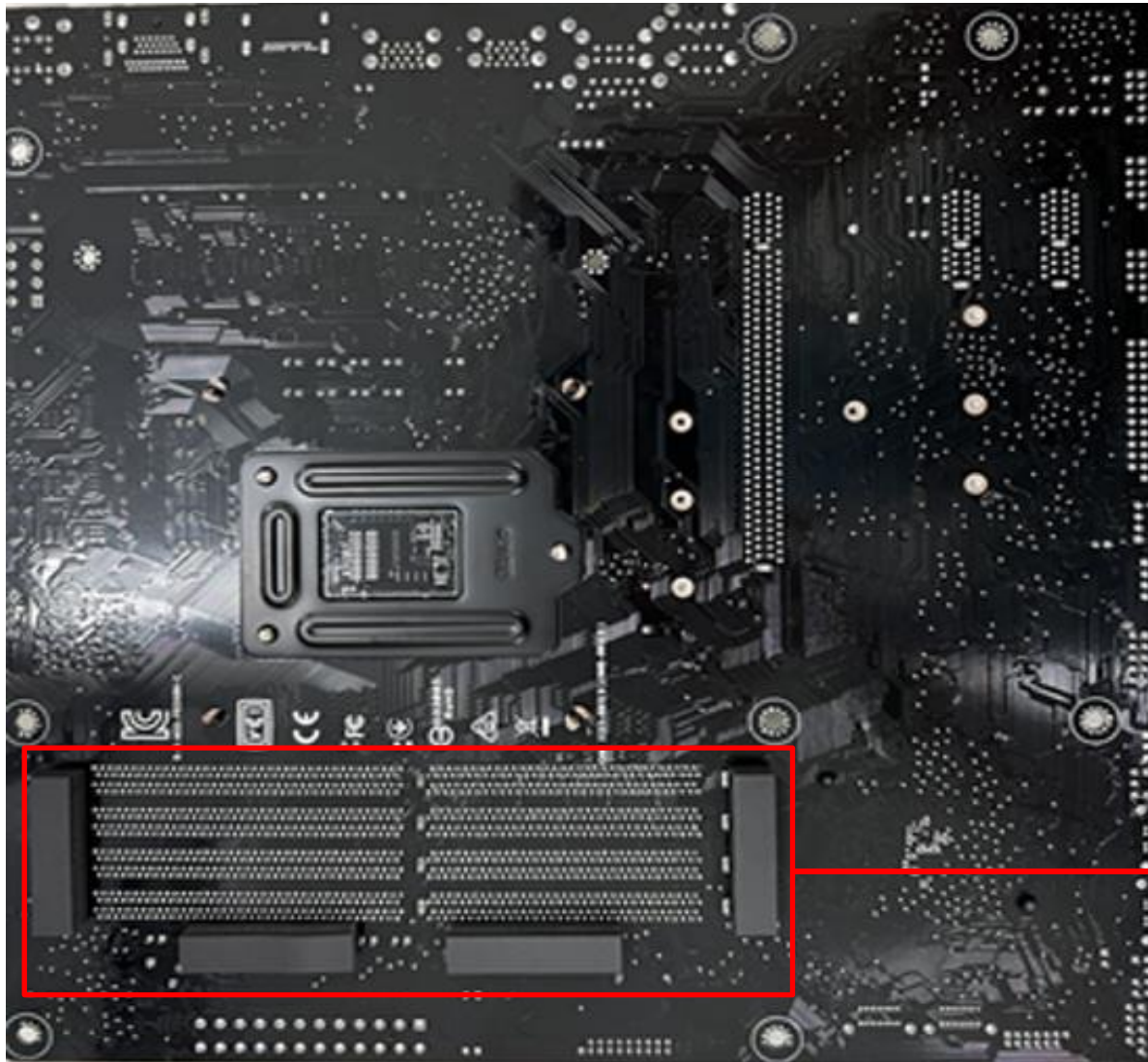


CPU triangle must be aligned to MB triangle.



## Assembly Notice

⚠ Please follow the below image to Add sponge \*4pcs (red mark) on motherboard DIMM Area.



D700TD MB SPONGE L35 W8 T8//L35 W8 T8

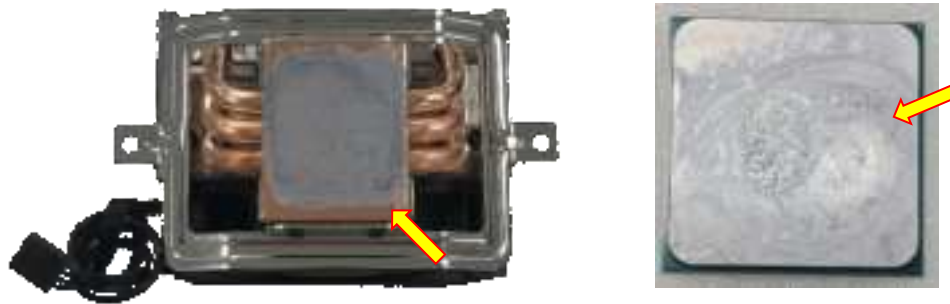
**Assembly Notice**

Please be sure to pull out adapter and disconnect the battery. 

 Please make sure that re-smear thermal material on CPU Die, if thermal module have to be reassembled.

Step-1 :

Using dust-free cloth with 95% alcohol to clean up the residual thermal grease on CPU& GPU Die.



Step-2 :

Please use plastic tool (Plastic stick) to get Thermal Grease, and smear over CPU around 0.2~0.3mm thick.



Attention:

1. Please clean plastic tool with Dust-free cloth and 95% alcohol before using.
2. Please mix well before Thermal grease using (In case Oil-Grease separation).

## Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.

- Step 1 : Pull the latch slightly away.
- Step 2 : Turn over the front case and disconnect the connectors \*3pcs of the cable inside.
- Step 3 : Tear off the Mylar.
- Step 4 : Disconnect FFC \*2pcs.
- Step 5 : Remove screws \*7pcs.
- Step 6 : Disconnect the connector.
- Step 7 : Remove screws \*2pcs located on the LED BD. SIDEDOWN .
- Step 8 : Take out the LED BD. SIDEDOWN \*1pcs.

Screws	QTY	Spec	Torque (kgf-cm)
T	7	M3*8L (X) W-NI	4.0±0.5
T	2	M2.5*4L (K) B-ZN NY #1	2.5±0.5

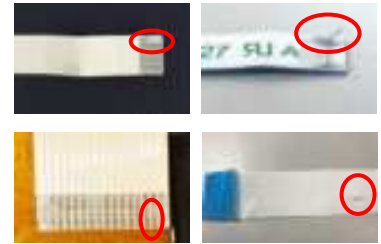
### ① Pull the Latch (Blue mark)



Please notice there have cable retaining on the front case and mainframe.

## Assembly Notice

If FFC is damage during disassembly, please replace new one. Here are some samples of FFC damage:



### ② Turn over and Disconnect



### ③ Tear off



### ④ disconnect



### ⑤ Unscrew



### ⑥ Disconnect



### ⑦ Unscrew



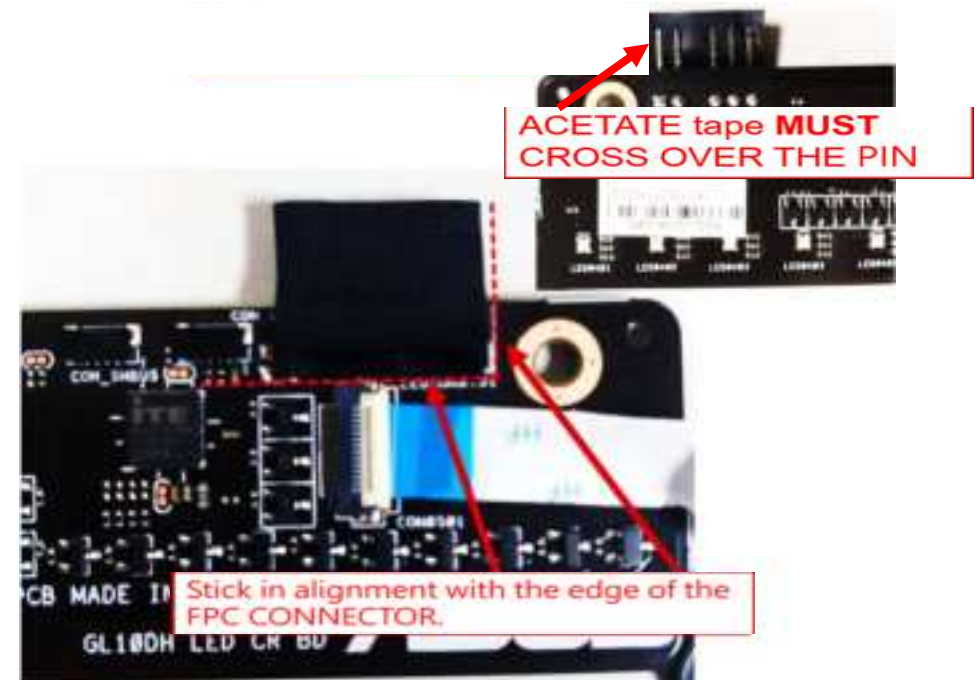
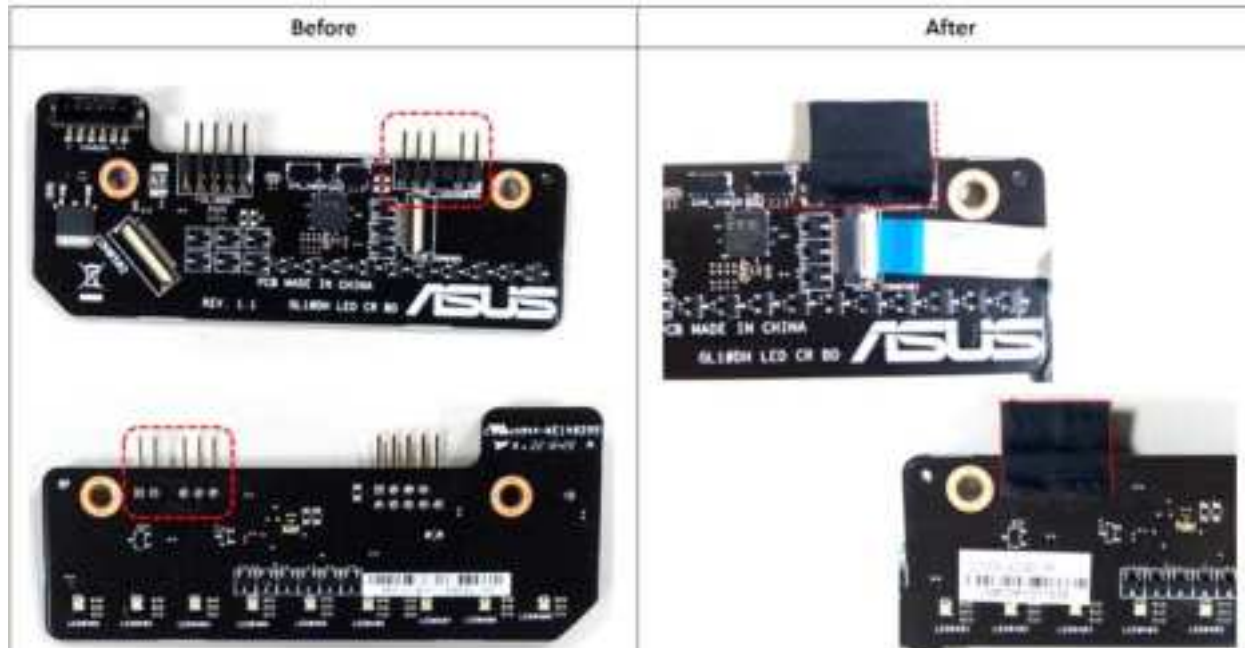
### ⑧ Take out



## Assembly Notice

⚠ Before assemble cable on LED CR BD, Please add 2pcs ACETATE tape on the LED CR BD Pin as below picture.

QTY	Spec
2	G35CA PINHEADER ACETATE FABRIC





**Assembly Notice**

⚠ Before assemble two cables, please follow below to paste ACETATE TAPE.

QTY	Spec
2	G15DK USB CABLE ACETATE TAPE

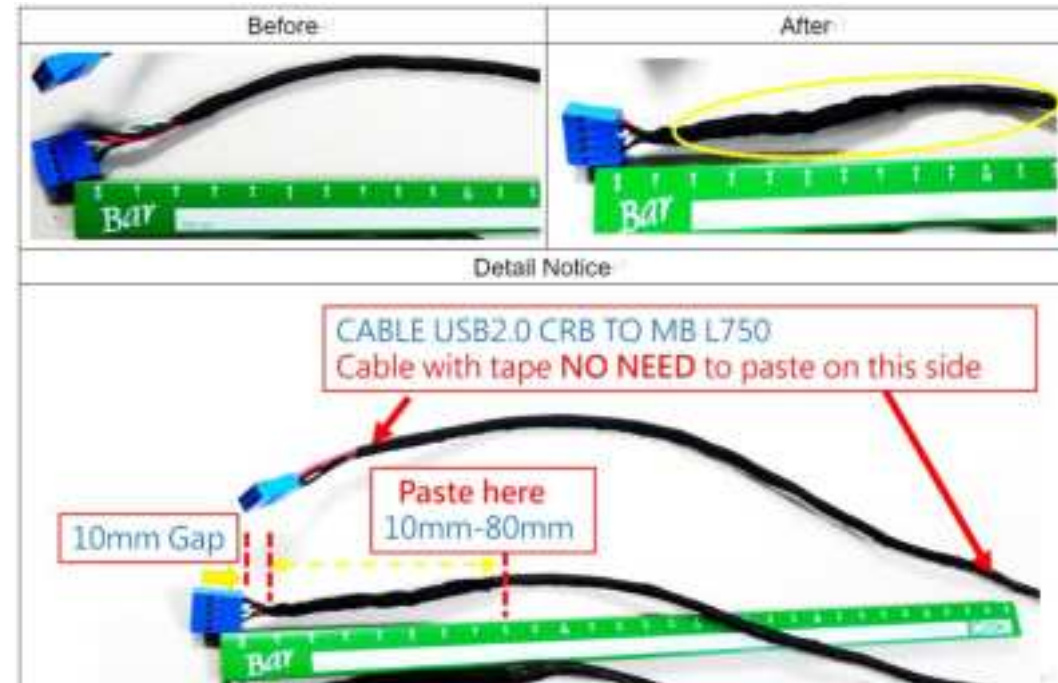
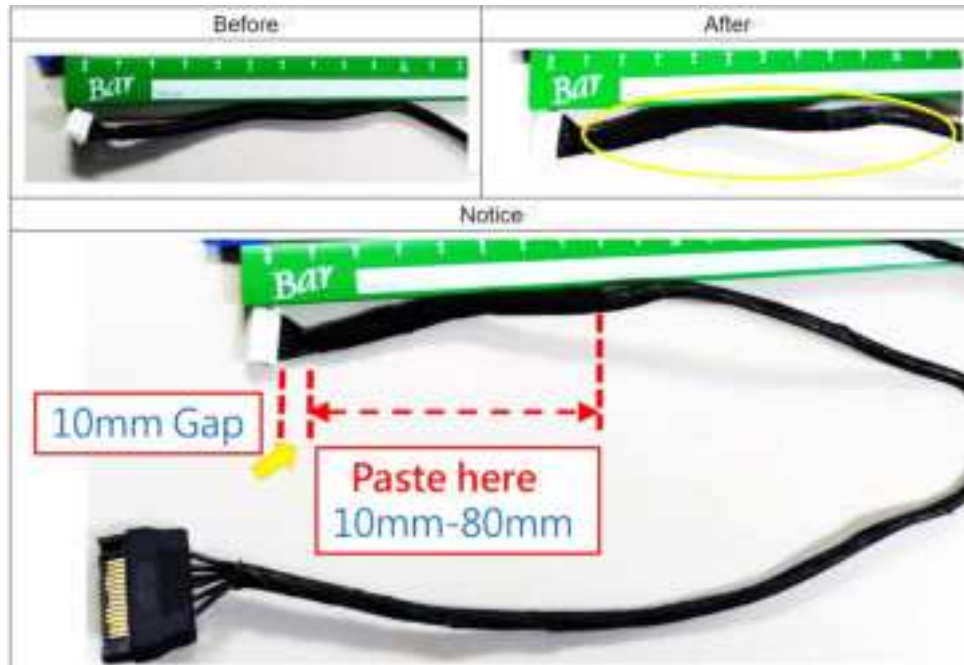
**Step1-1 :** Winding the two cables with ACETATE TAPE to increase the insulation layer.

**Step1-2 :** Double arrow (angle between 10~80mm)

**Note:** The two cables are GL10DH SATA CABLE 15P F/P 430MM and CABLE USB2.0 CRB TO MB L750.

GL10DH SATA CABLE 15P F/P 430MM

CABLE USB2.0 CRB TO MB L750



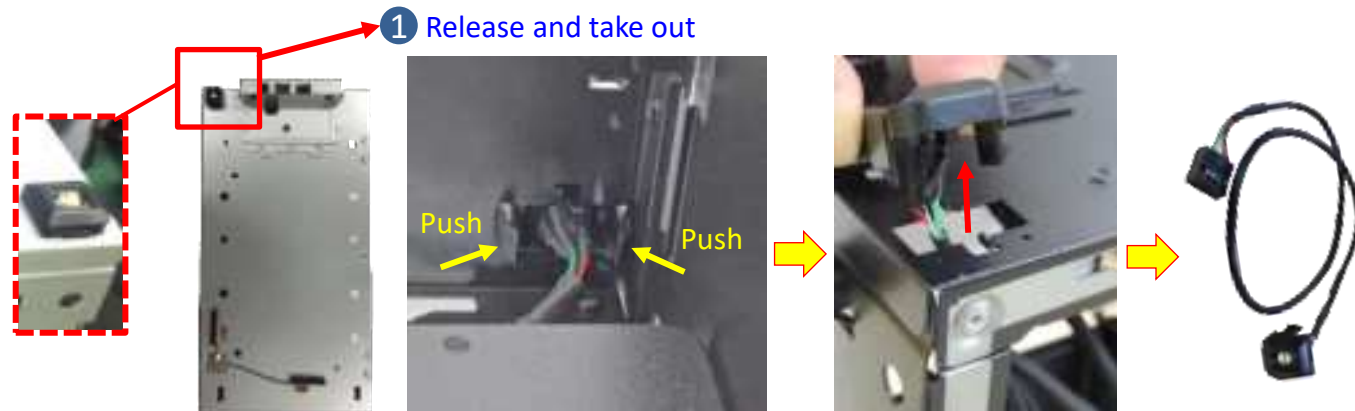
## Disassembly Notice

Please be sure to pull out AC POWER CORD.



Step 1 : Push hooks then take out POWER SW CABLE with POWER SWITCH HOLDER from CHASSIS.

Step 2 : Push hooks then separate POWER SW CABLE and POWER SWITCH HOLDER.



② Release and separate

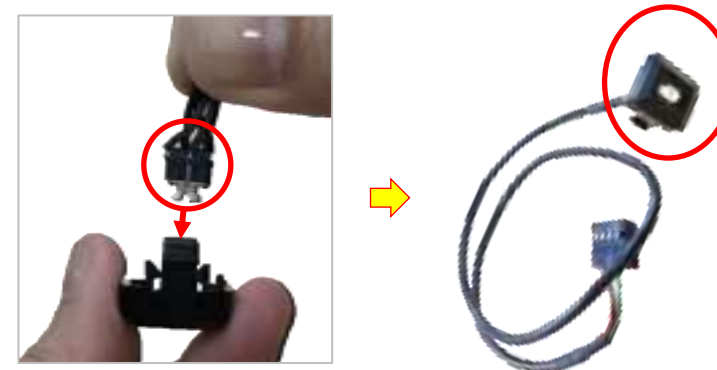


## Assembly Notice

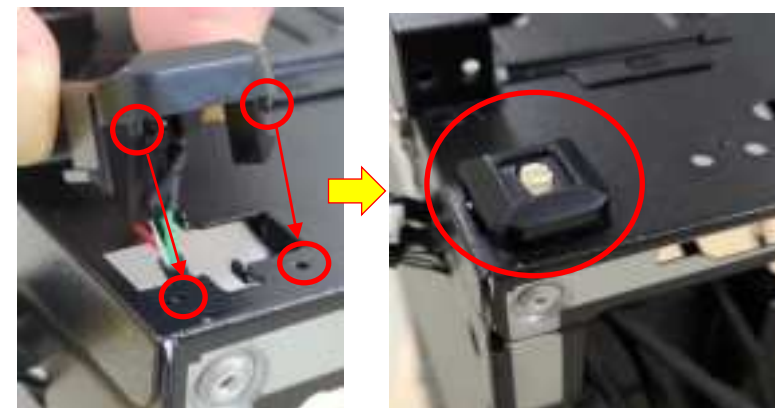
⚠ When need to reuse old POWER SWITCH HOLDER, please make sure the hooks no broken or deformation.



⚠ Please according to below image to assemble POWER SW CABLE and POWER SWITCH HOLDER.



⚠ Please according to below image to assemble POWER SW CABLE(with HOLDER).



## Disassembly Notice

Please be sure to pull out adapter and disconnect the battery. 

Step 1 : Disconnect connectors \*1pcs and remove screws \*3pcs located on the LED BD. SIDEUP.

Step 2 : Remove screws \*2pcs.

Step 3 : Pull the latch slightly away from the edge case until it's detached.

Step 4 : Take out the Top Case.








Step 5 : Disconnect connectors \*2pcs and remove screw \*1pcs on the Front IO BD.

Step 6 : Remove screws \*2pcs.

Step 7 : Pull the IO BD bracket.

Step 8 : Remove Screws \*2pcs.

Step 9 : Remove the Front IO BD.

Screws	QTY	Spec	Torque (kgf-cm)
 	3	M2.5*4L (K) B-ZN NY #1	2.5±0.5
 	4	#6-32 L6*H2.3 (B) W-NI//UNEEC	8.0±0.5
  	3	M3*4L (6.3,2.05) (P) #2	6.0±0.5

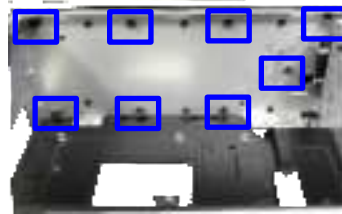
① Disconnect and Unscrew



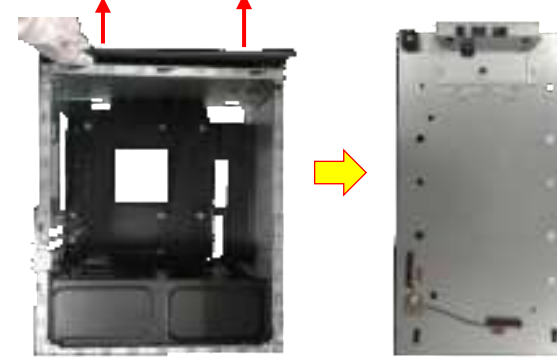
② Unscrew



③ Pull the Latch (Blue mark)



④ Take out



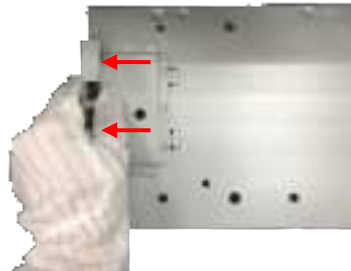
⑤ Disconnect and Unscrew



⑥ Unscrew



⑦ Pull the bracket



⑧ Unscrew



⑨ Remove



## Assembly Notice

Please be sure to pull out adapter and disconnect the battery.



Please follow the below criteria to assemble FIO USB CABLE.

Step-1 : Make sure the acetate is attached to the Cable plug.

Step-2 : Make sure the acetate is attached to the connector.

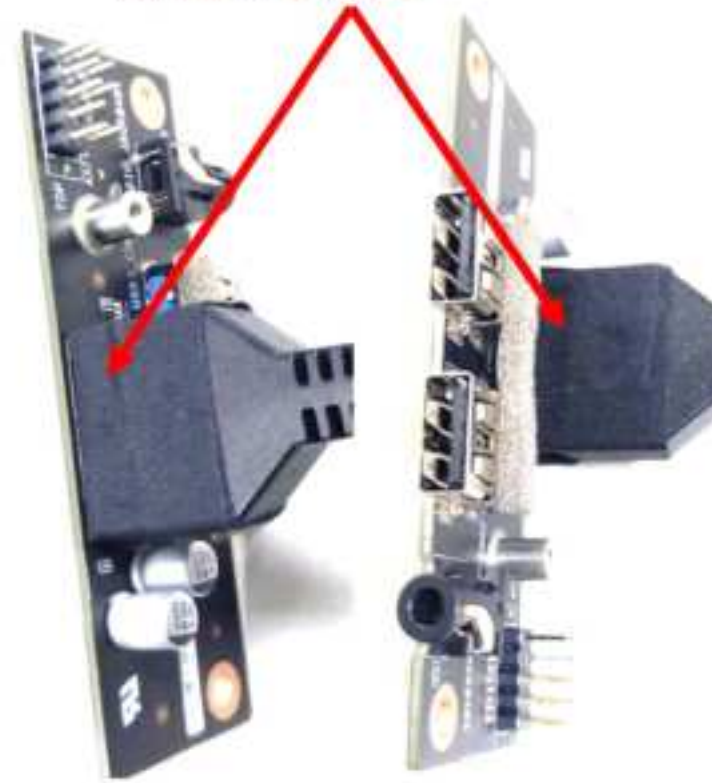
Step-3 : Make sure the acetate is securely attached to the surface of the part on each side when wrapping.

STAND OFF

3 Confirm



繼續時請確保每面都有將醋酸布確實貼合於零件表面







**Disassembly Notice**

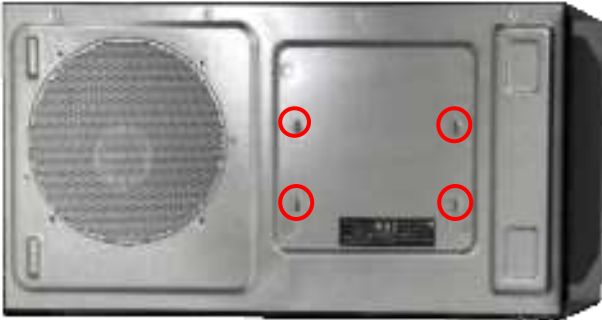
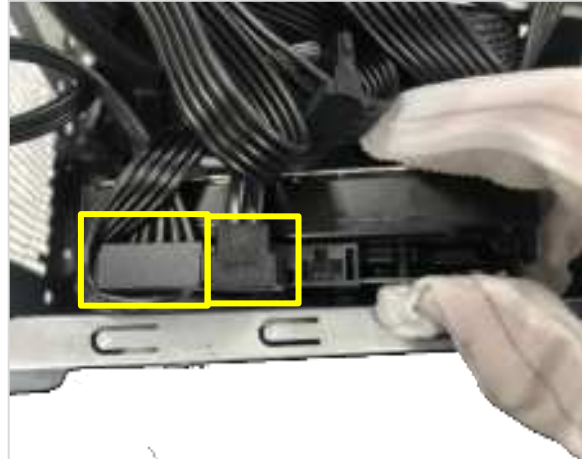
Please be sure to pull out adapter and disconnect the battery. 

Step 1 : Remove screws \*4pcs.

Step 2 : Disconnect the connectors \*2pcs.

Step 3 : Take out the HDD.

Screws	QTY	Spec	Torque (kgf-cm)
 	4	SCREW #6-32*6L(7.1,2.3) (B) #2	6.5±0.5

**① Unscrew****② Disconnect****③**



## Disassembly Notice

Please be sure to pull out adapter and disconnect the battery. 

Step 1 : Disconnect the connector \*1pcs.

Step 2 : Remove screws \*4pcs.

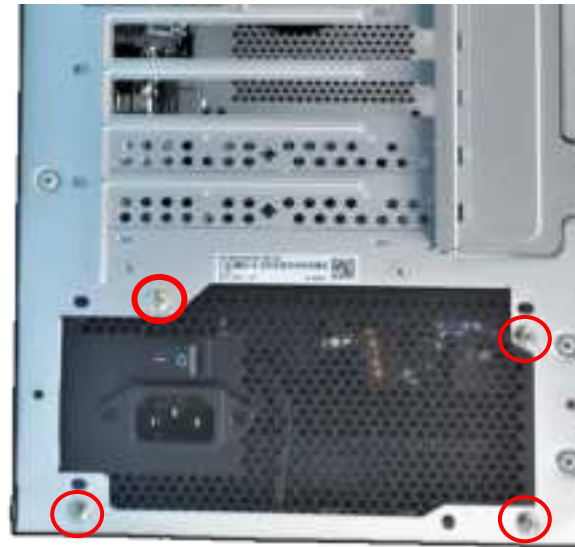
Step 3 : Take out the POWER SUPPLY.

Screws	QTY	Spec	Torque (kgf-cm)
 	4	#6-32*6L(7.1,2.3) (B) #2	8.0±0.5



1 Disconnect

2 Unscrew



3 Take out



**Disassembly Notice**

Please be sure to pull out adapter and disconnect the battery. 

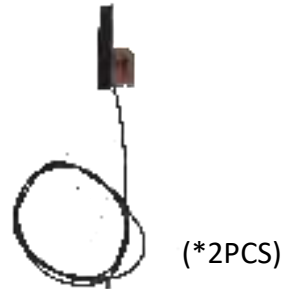
Step 1 : Tear off the Gasket and ANTENNA\*2pcs.


Step 2 : Take out ANTENNA.

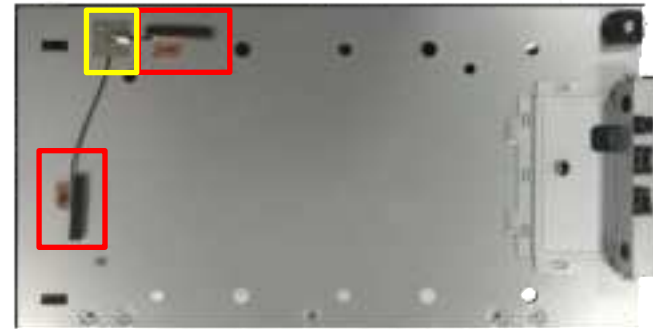
① Tear off



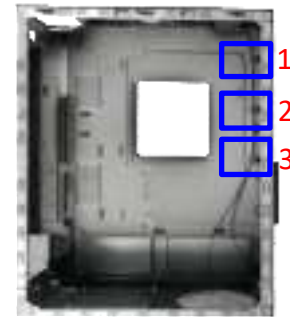
②

**Assembly Notice**

 Please follow the red and yellow mark to paste the Antenna and gasket.



 Clip the 2 Antenna cables into a hook at the place Point 1~3.



**Assembly Notice**

Please be sure to pull out adapter and disconnect the battery.



Tidy up the cable of the back mainframe as illustrated.

