

D700SC_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.

Service Overview

Carefully read through this chapter for a look at various components of the Desktop and necessary cautions and tools before performing any service and repairs.

To provide the best service and support for the ASUS DESKTOP **D700SC D700SA** we have provided the below information for technicians from distributors and resellers to perform the complete Desktop disassembly and assembly. But before performing the procedures, please be sure to read through the overview in this chapter for component overview, cautions and tools to avoid any unwarranted damages to the Desktop's hardware.

The following chapter includes:

- ◆ [Overview](#)
- ◆ [Components](#)
- ◆ [Cable & others](#)

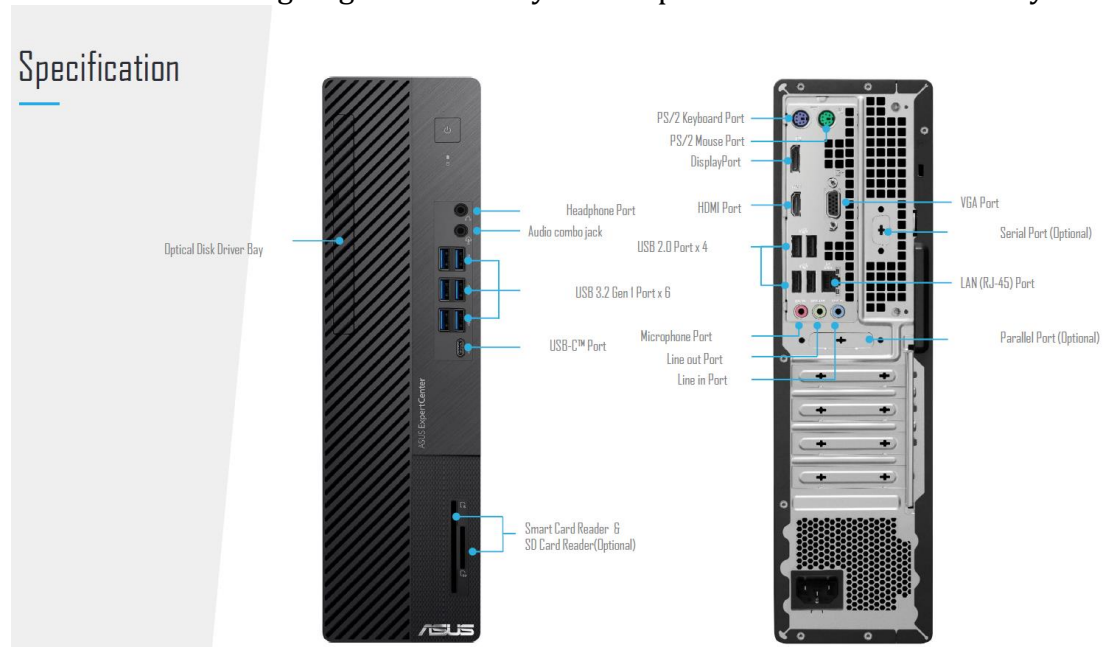
DESKTOP PC D700S

Overview

The illustrations below show the Desktop PC's overview from front view, side view and back view. Most of the parts will be discussed in this manual.

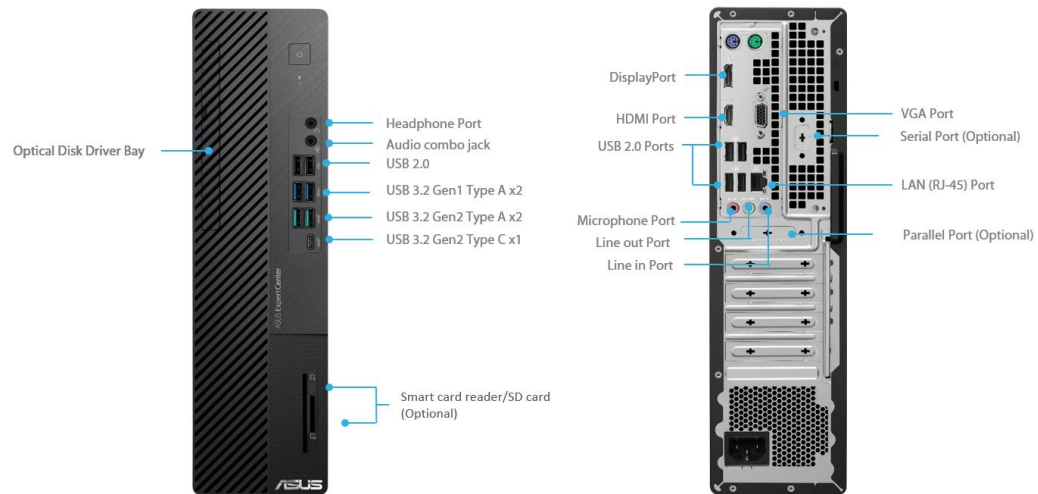
FRONT VIEW(D700SA)

Refer to the following diagram to identify the components on this front of the system.



FRONT VIEW(D700SC)

Refer to the following diagram to identify the components on this front of the system.



Components

The illustrations below show the components of the D830MT/D630MT/D520MT-K.

FRONT BEZEL

FRONT BEZEL ASSY

According to shipments on location



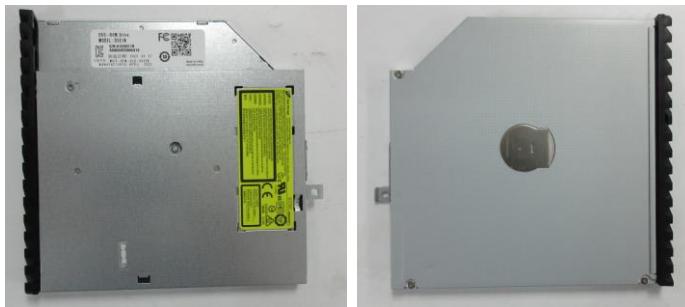
Hard Disk Drive

According to shipments on location



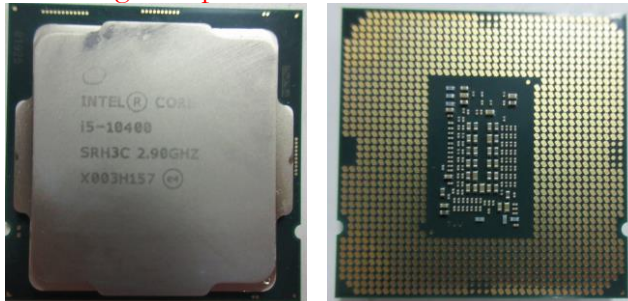
ODD

According to shipments on location

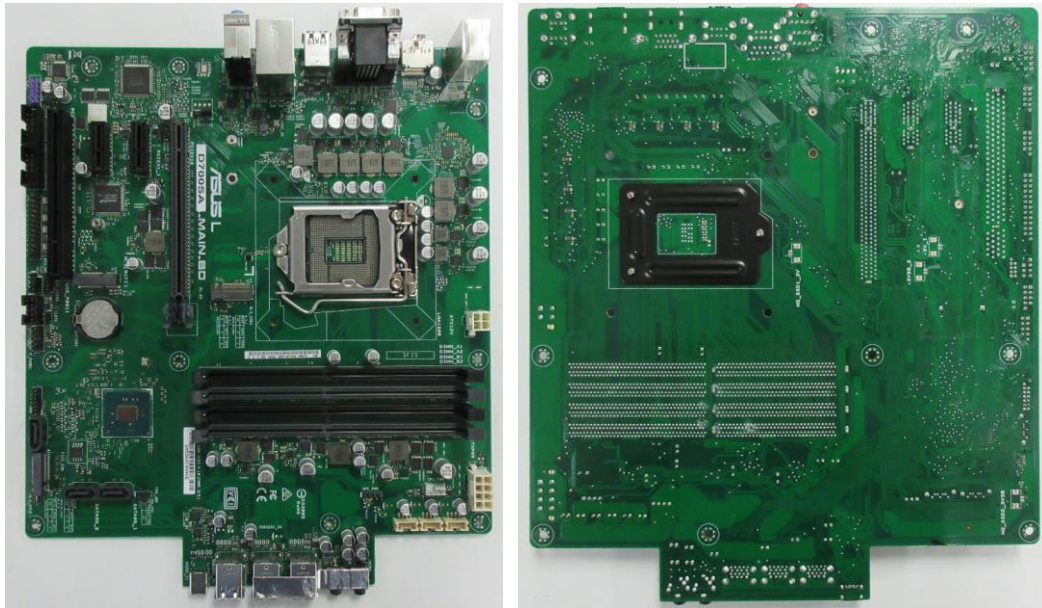


CPU

According to shipments on location



Mother Board



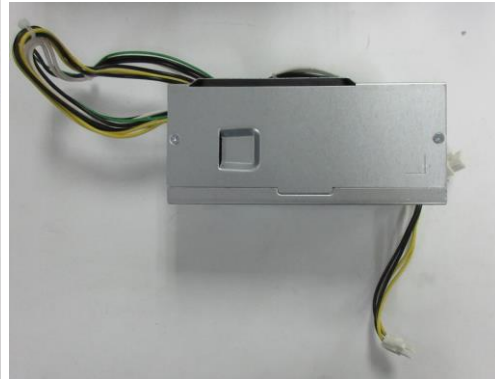
Memory

According to shipments on location



Power Supply

According to shipments on location



VGA CARD

D700SA



WLAN Module

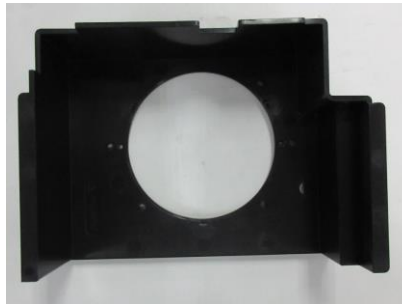


SSD



FAN DUCT

According to shipments on location



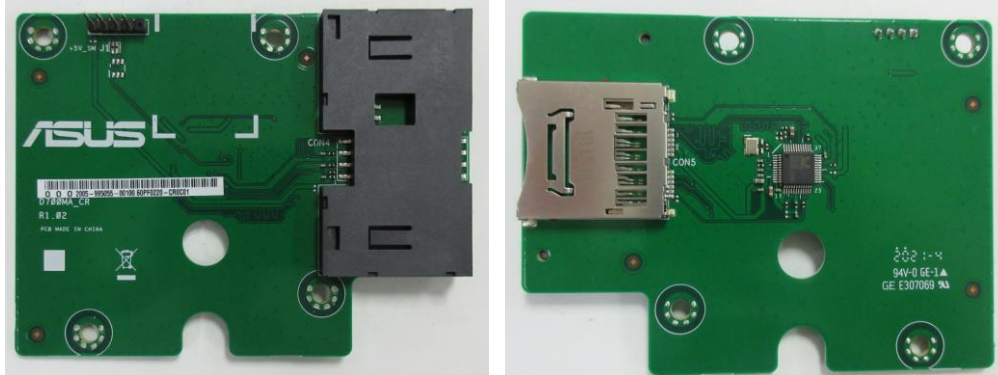
SW BOARD

According to shipments on location

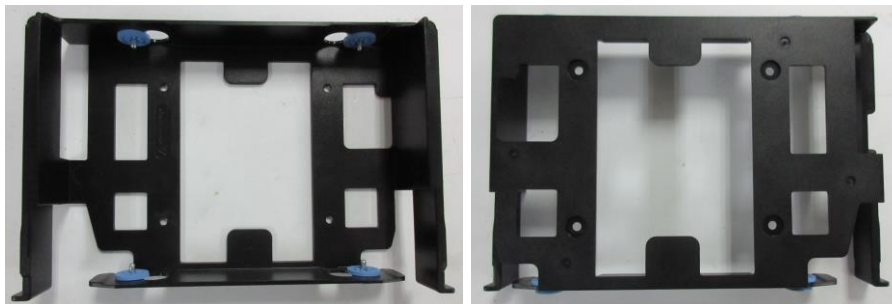


SMART BOARD

According to shipments on location



HDD HOUSING



Cable & Others

ODD & Cable

According to shipments on location

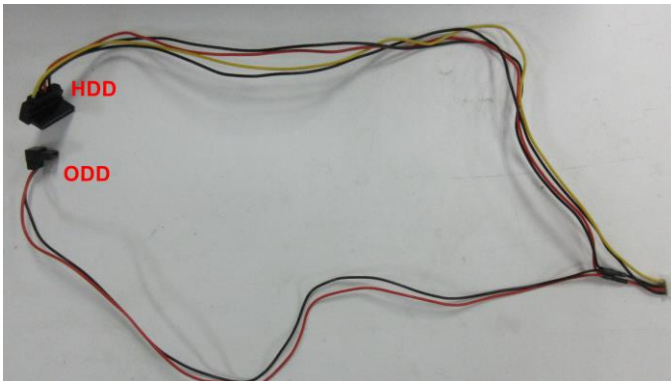


HDD CABLE

According to shipments on location



HDD PW CABLE



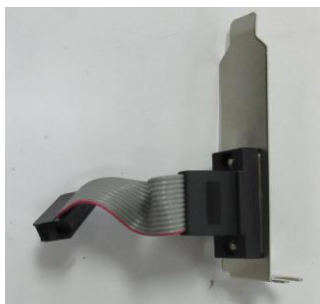
SW cable



SMART BOARD cable (W.H CABLE 2.54 1*5P TO 5P)



COM PORT



Disassembly and Assembly

Please follow the information provided in this section to perform the complete disassembly procedure of the. Be sure to use proper tools described before.

A SUS Desktop PC **D700SC SA** consists of various modules. This chapter describes the procedures for the complete Desk Top PC disassembly and assembly (Assemble process please look up from the last page). In addition, in between procedures, the detailed disassembly procedure of individual modules will be provided for your service needs.

A. Disassembly Caution

B. Appropriate Tools

**C. Disassembly and
Assembly steps 1~13**

(Assemble process please look up from the bottom of this guide to top)

Step:

- [1. POWER OFF](#)
- [2. SIDE COVER](#)
- [3. Front Bezel](#)
- [4. FAN DUCT](#)
- [5. Memory Module](#)
- [6. VGA CARD](#)
- [7. WLAN MODULE](#)
- [8. SSD](#)
- [9. POWER SUPPLY](#)
- [10. ODD & HDD](#)
- [11. SW BD & SMART BD](#)
- [12. CPU COOLER&CPU](#)
- [13. MAIN BOARD](#)

Appropriate Tools

The illustrations below show the appropriate tools that should be used for the Desktop service and repair.

Automatic Screwdriver

Screwdriver Model	Torque	Torque adjustment	Apply screw size
0#	2~10 kgf/cm	± 0.5 kgf/cm	1.8~2.0mm
1#			2.0~2.6mm
2#			3.0~4.0mm



Plastic Blade



Antistatic Gloves



POWER OFF

The illustrations below show how to remove the power cable from the Desk Top PC.

[Top](#)

- 1 . Remove the power cord by pulling it from the arrow side.



Parts

- AC POWER CORD BSMI/3P/3C

SIDE COVER

The illustrations below show how to remove the side cover from the Device.

[Top](#)

1. Loosen the screw of red circle, if you will latch it, please following the step back. (the example is D700SC D700SCES M700SC)



扭力值：4.0+/-0.5kgf-cm
Torsion value: 4.0+/-0.5kgf-cm

2. Pulling out the left side deco bezel.



Parts

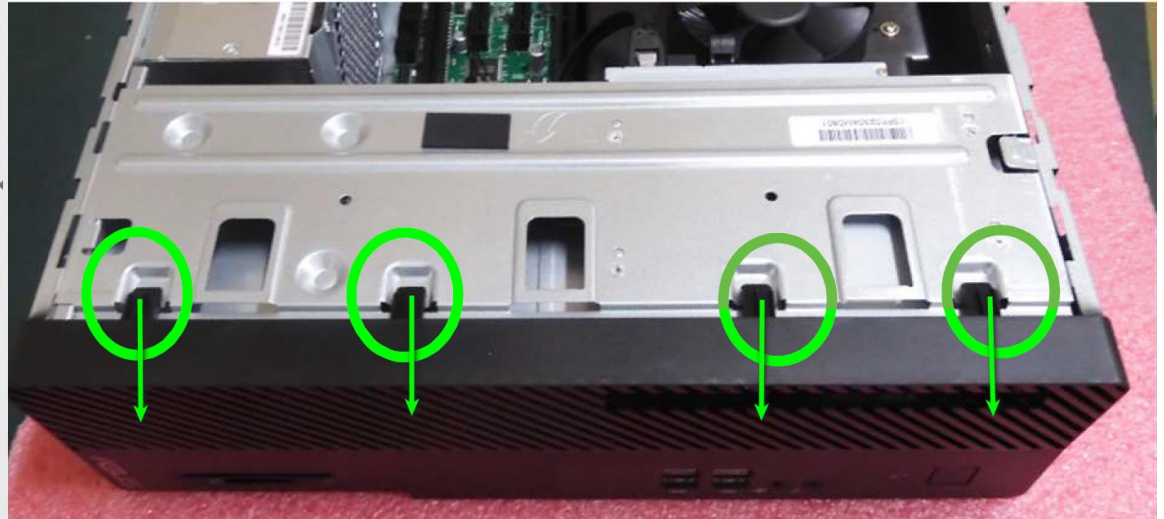
- Total screw *2

Front Bezel

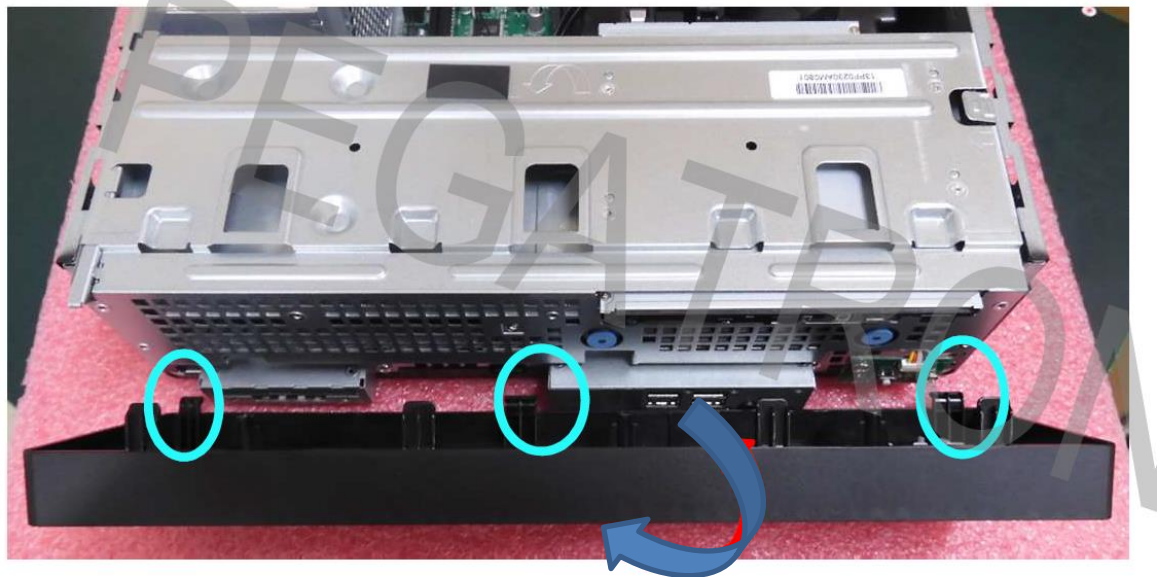
[Top](#)

The illustrations below show how to remove the Front Bezel from the Device

1. Press the arrow to lift the clasp

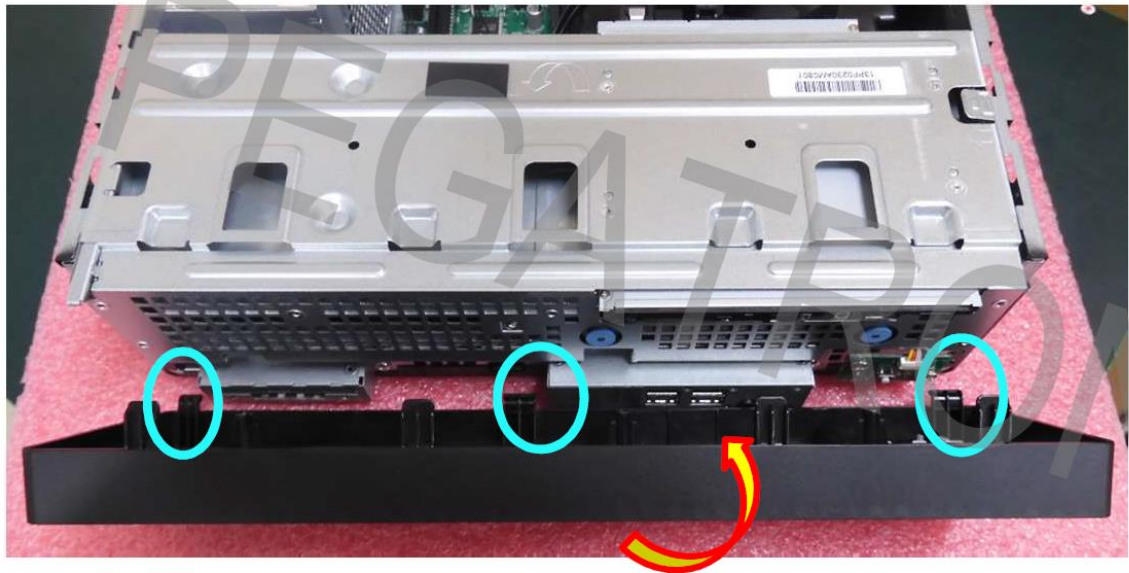


2. Remove the Front Bezel slowly.



Assemble Notice :

Installing three fastenres below the top cover and then installing another four fasteners above the top cover.



3. The Front of device.



Parts

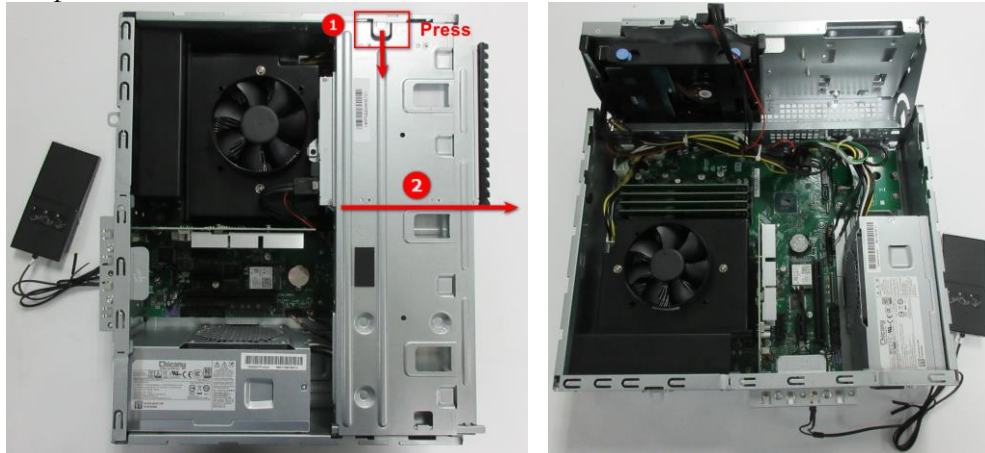
- FRONT BEZEL ASSY//SUNPRO

FAN DUCT

The illustrations below show how to remove the FAN DUCT from the Desk Top PC.

[Top](#)

1. Open the cover in the direction of the arrow



2. Remove 2 Screw from the FAN DUCT.



M3*6L (6.0,0.95) (F) 4+/-10% kgf-cm

For D700SC

There are some differences between D700SA and D700SC on FAN DUCT.



Assemble notice

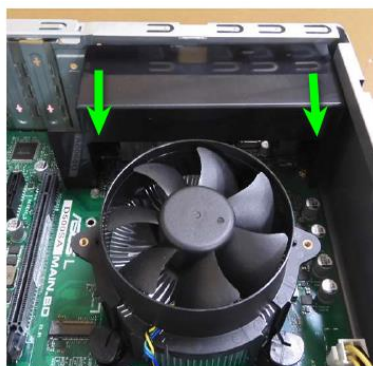
Installing the FAN DUCT in the chassis and lock 2 screws into the holes indicated by circles to secure the FAN DUCT follow the picture as shown.



扭力值：4 +/-0.5kgf-cm
Torsion value: 4 +/-0.5kgf-cm



3. Remove 2 Screw from the FAN DUCT REAR



扭力值：4 +/-0.5kgf-cm
Torsion value: 4 +/-0.5kgf-cm



SCREW M3*6L F *2



Parts

- Total screw *11
- FAN DUCT//順榮興
- FAN DUCT REAR//順榮興

Memory Module

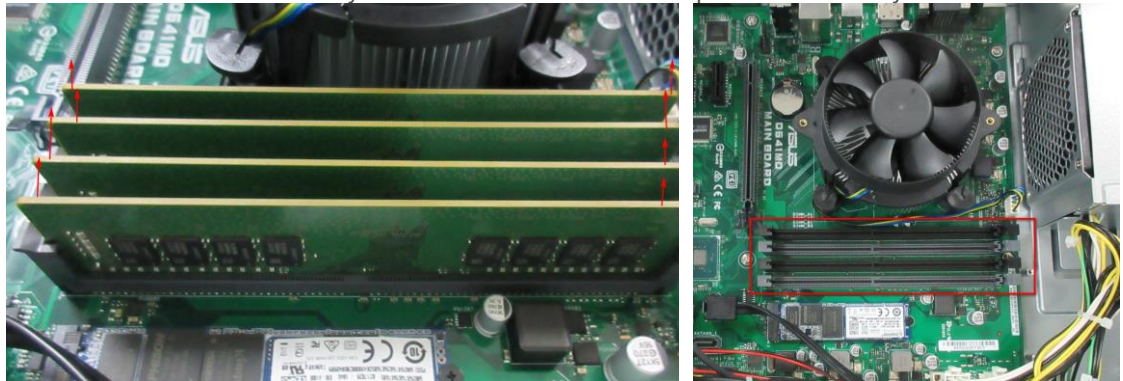
The illustrations below show how to remove the power cable from the Desk Top PC.

[Top](#)

1. Press the button in the direction of the arrow.



2. Hold both sides of the memory module with both hands and pull it out vertically.



Parts

● MEMORY *2

VGA CARD

[Top](#)

The illustrations below show how to remove the VGA CARD from the Desk Top PC

1.Remove 2 screws on the PCI iron of the top cover

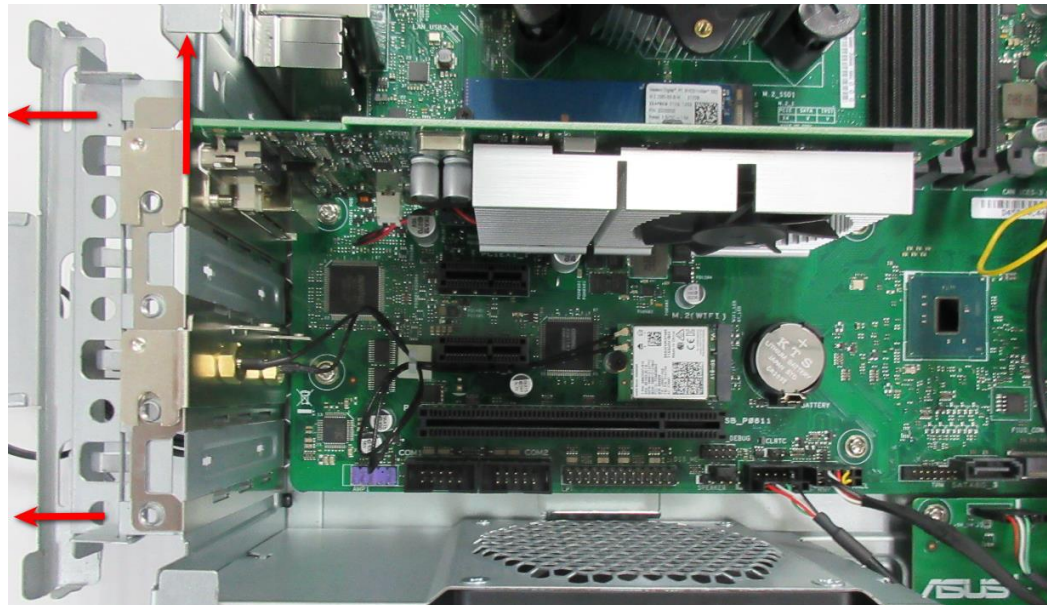


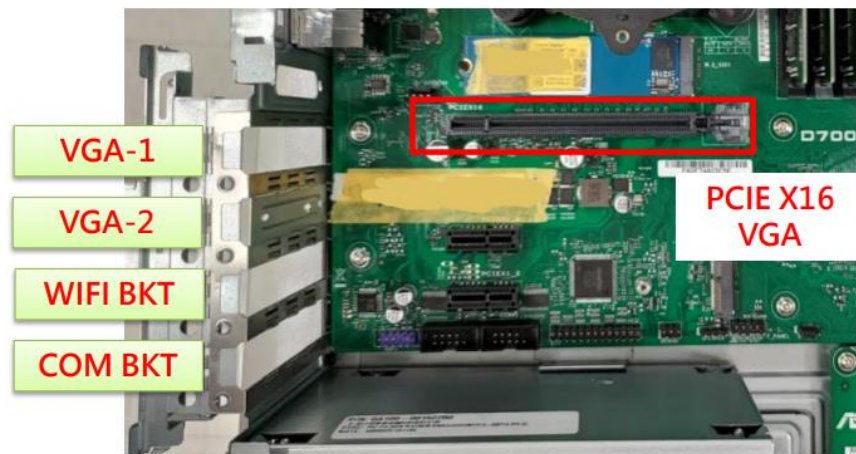
Torsion value: 4.0+/-0.5kgf-cm



#6-32 6L (P) W-NI * 2

2.Take out the VGA CARD





Parts

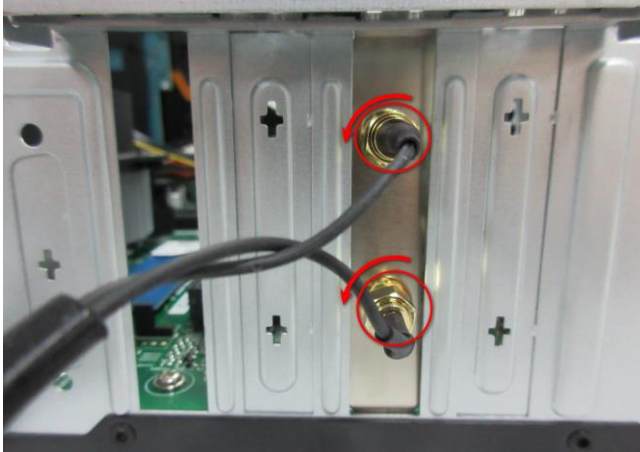
- VGA CARD*1
- Total screws 2

WLAN Module

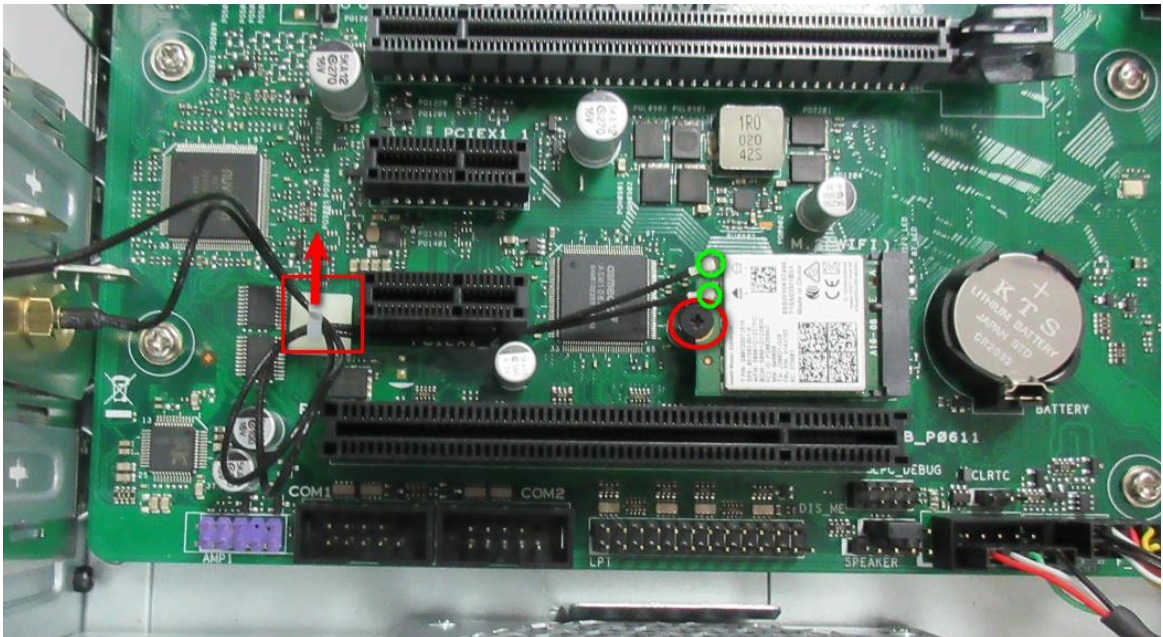
The illustrations below show how to remove the WLAN Module from the Desk Top PC

[Top](#)

1.Remove the external WIFI antenna



2.Remove 1 screw on the WLAN card and disconnect WIFI antenna.



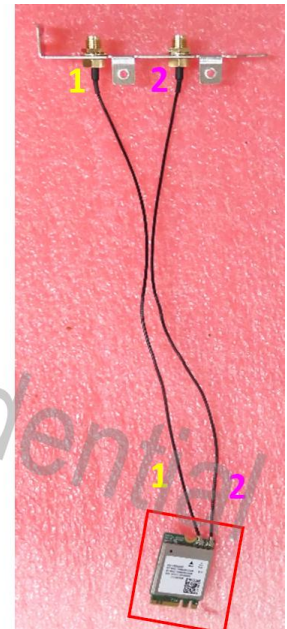
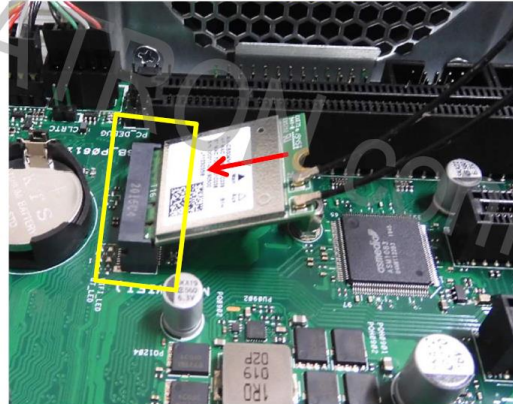
Assemble Notice

1

Connect the RF cable on the connector of wifi board in accordance with graphic presentation.

2

Connect the wifi board on the connector of MB in accordance with graphic presentation.



Lock screw for fixing the wifi board on the MB in accordance with graphic presentation.



Arrange the RF cable into the wire saddle follow the picture as shown.



Torque: 2 +/-0.5kgf-cm



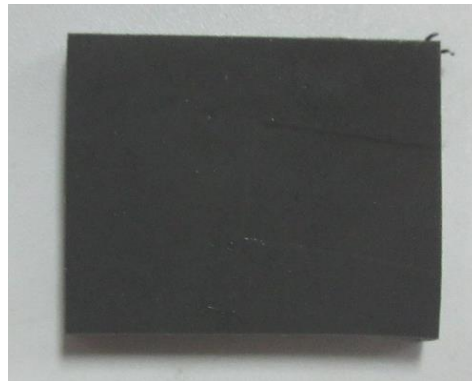
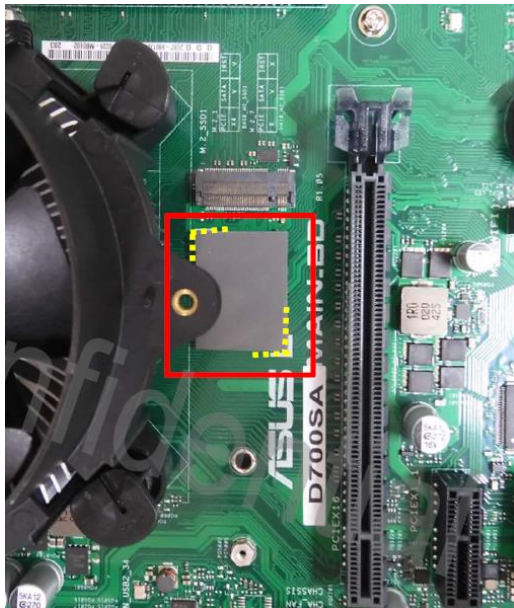
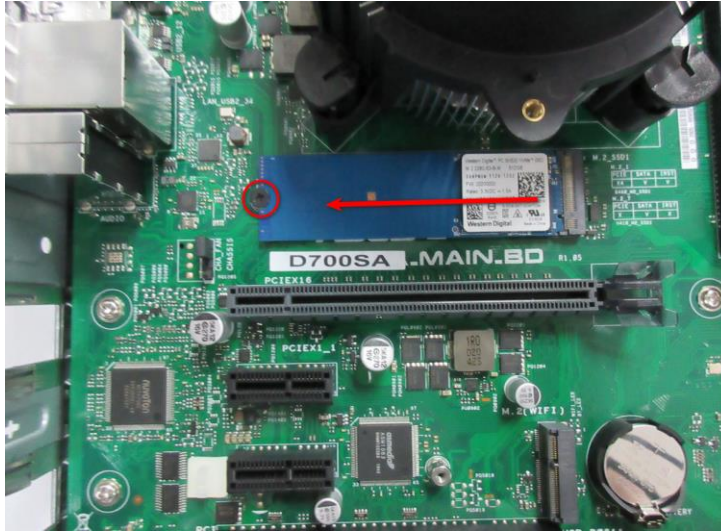
M2*3L K B-ZN #1 *1

Parts

- WIFI5 AC+BT4.2(2*2) M.2//INTEL/8265.NGWMG 946658*1
- Total screws 1

SSD

The illustrations below show how to remove the SSD from the Desk Top PC
Remove 1 screw on the SSD and take out it.

[Top](#)


Torque: 2 +/-0.5kgf-cm



Parts

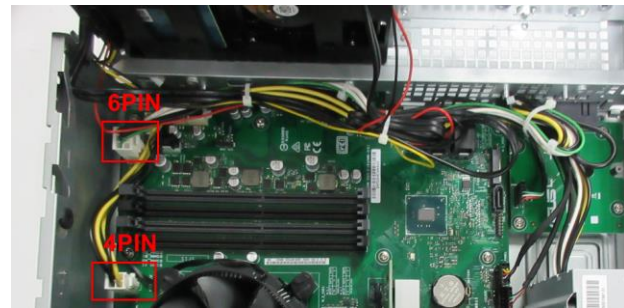
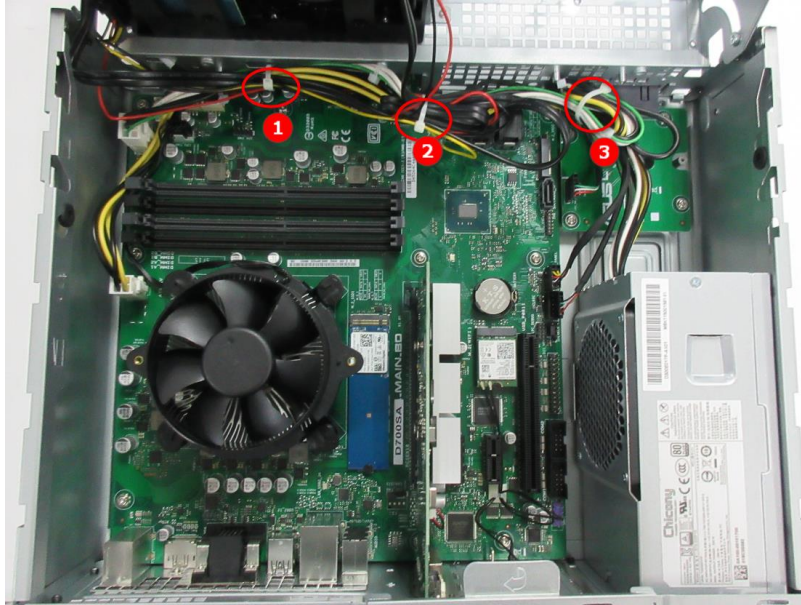
- SSD P3X2(VAL) 512GB M2 2280*1
- SSD PAD*1
- Total screws 1

POWER SUPPLY

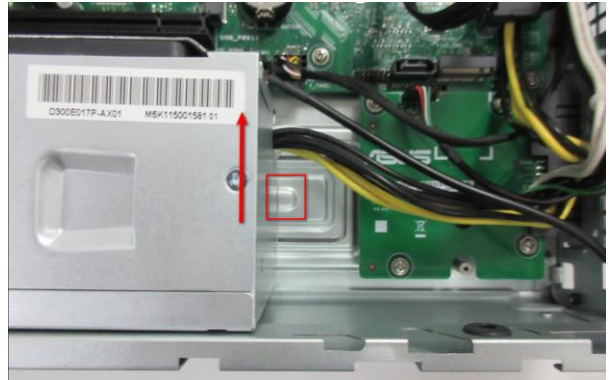
The illustrations below show how to remove the power supply from the Device.

[Top](#)

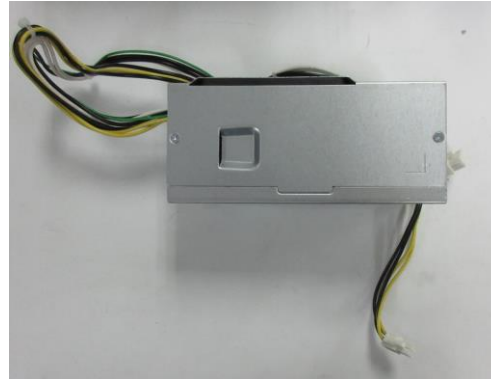
1. Cut the white cable tie and disconnect and disconnect CPU Power Supply cables (4 PIN and 6PIN)



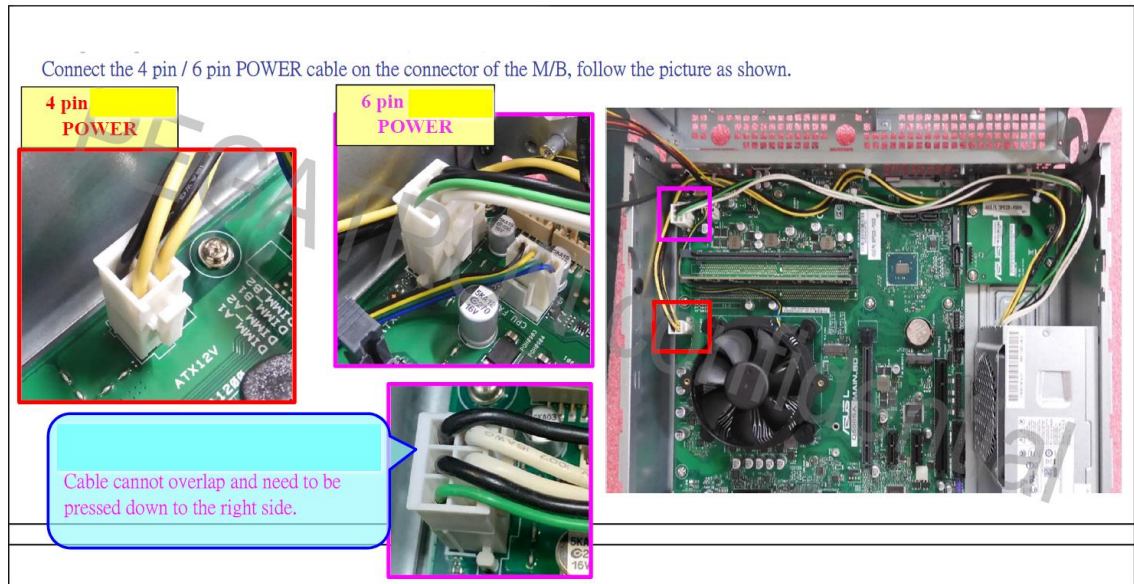
2.Remove 3 screws from the PSU and take out it



SCREW #6-32 L6*H2.3 (B) :8+0/-0.5 kgf-cm



PSU assemble Notice:



Parts

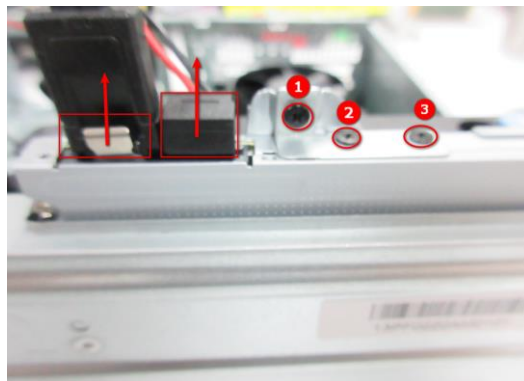
- Total screw *3
- PSU TFX

ODD & HDD

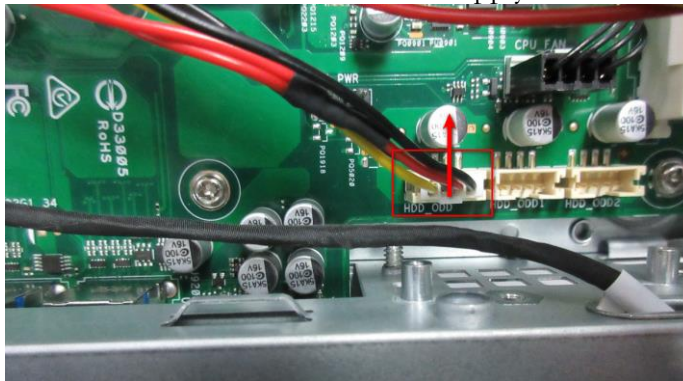
[Top](#)

The illustrations below show how to remove the ODD & HDD from the Device.

1. Disconnect ODD cable , ODD power cable. Remove 3 screws from the ODD TOOLESS HOLDER and take out it



2.Disconnect HDD&ODD Power Supply cable.



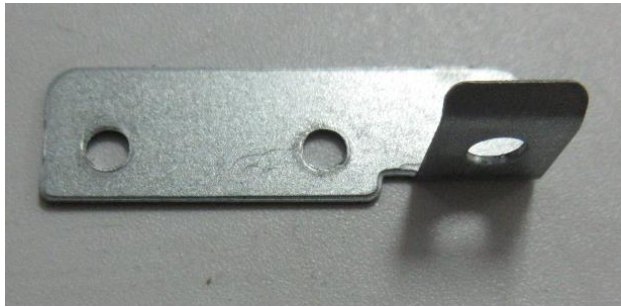
Torque: 2.0 +/-0.5kgf-cm



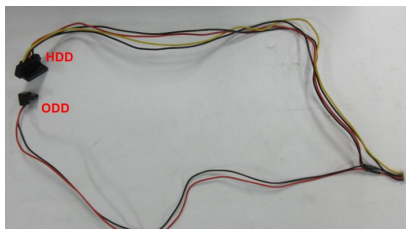
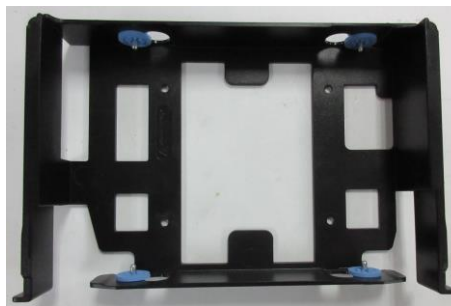
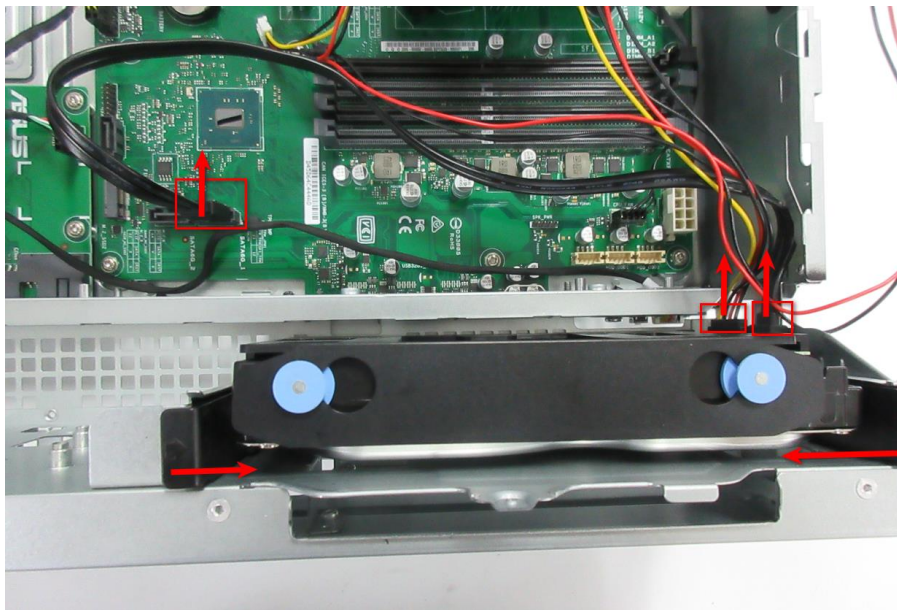
SCREW M2*3L K *2

Disconnect the ODD BEZEL.





3. Disconnect HDD cable , HDD power cable and take out it





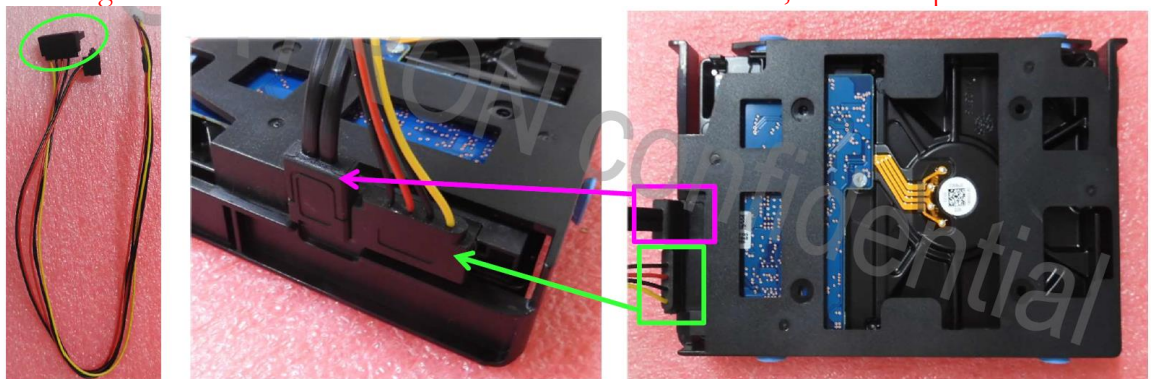
HDD Assemble notice:

Install HDD to the HDD tray of the chassis in accordance with picture.

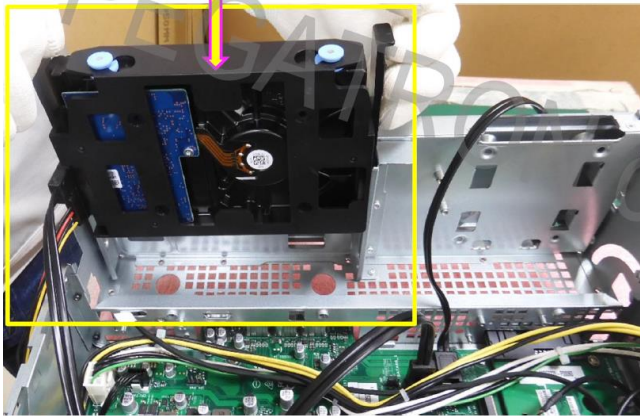


Installing the 90° SATA HDD CABLE to the connector of the HDD, follow the picture as shown

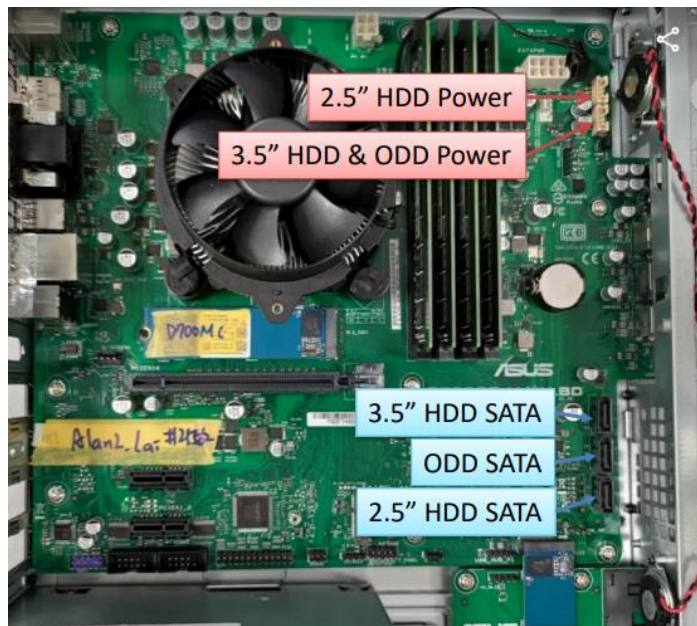
Installing the HDD PW CABLE to the connector of the HDD, follow the picture as shown.



Take out the hdd tray and install HDD to the HDD tray of the chassis in accordance with picture.

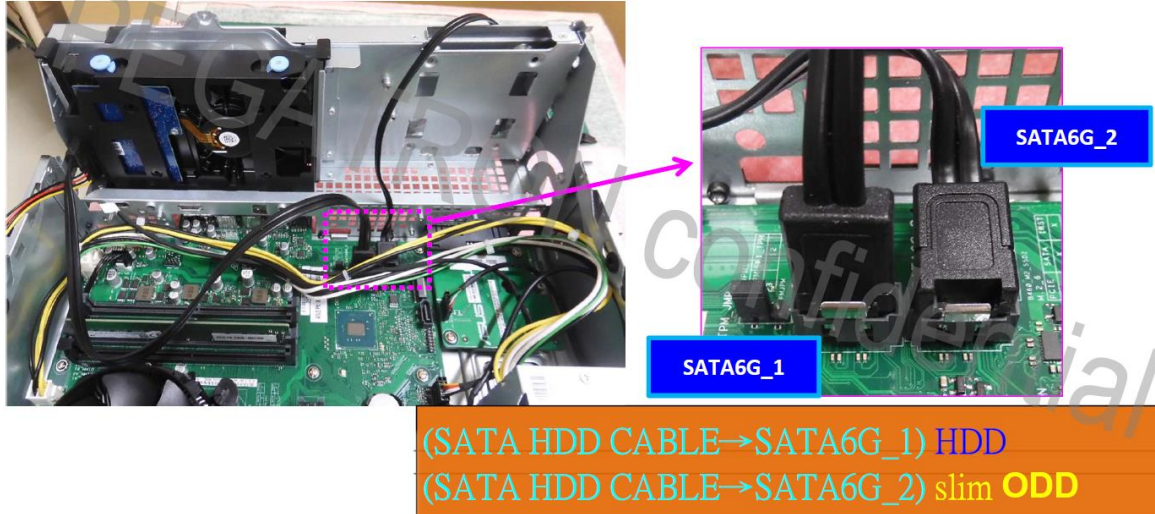


HDD Tray 兩側卡勾需卡到位
the HDD tray 2 side hooks need to be locked in place.



HDD ODD cable assemble notice

Connect the 90° / 180° SATA cable on the SATA connector of the M/B ,follow the picture as shown.



Parts

- SATA3 HDD 1TB 7200RPM 3.5'*1
- HDD HOUSING *1
- DVD S-MULTI DL 8X/6X/8X6X/5X *1
- D641SC HDD PW CABLE
- Total screw *3

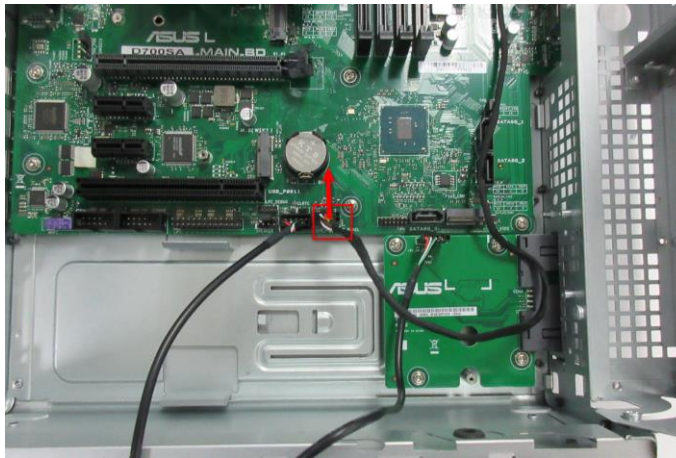
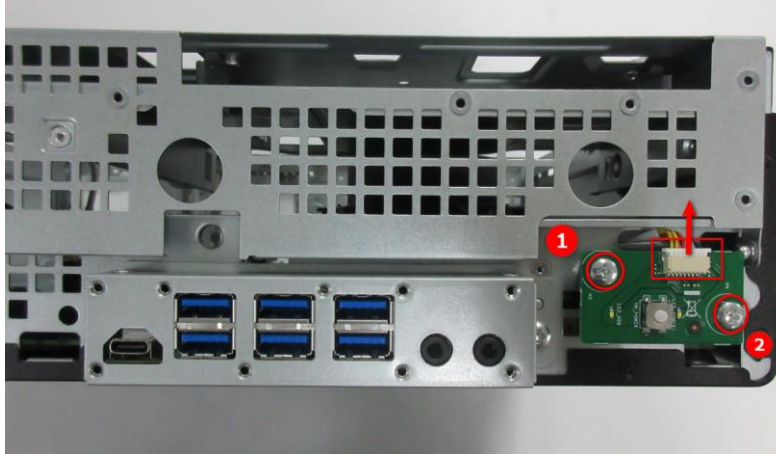
[Back](#)

[Top](#)

POWER SWITCH BOARD & SMART BOARD

The illustrations below show how to remove the SW BOARD board and SMART BOARD from the Device

1. Remove 2 screws SW board, disconnect the SW cable .



For D700SC SCREW #6-32 L6*H2.3 8+/-10% kgfcm For D700SA

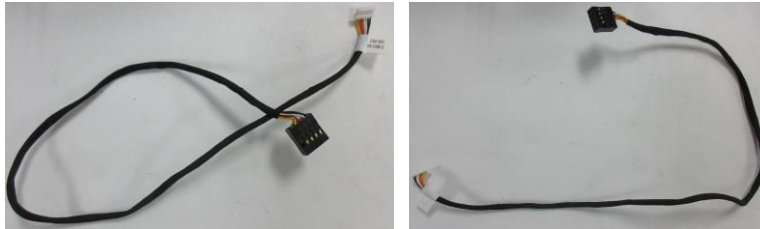
Torsion value: 4.0+/-0.5kgf-cm



#6-32 6L (P) * 2

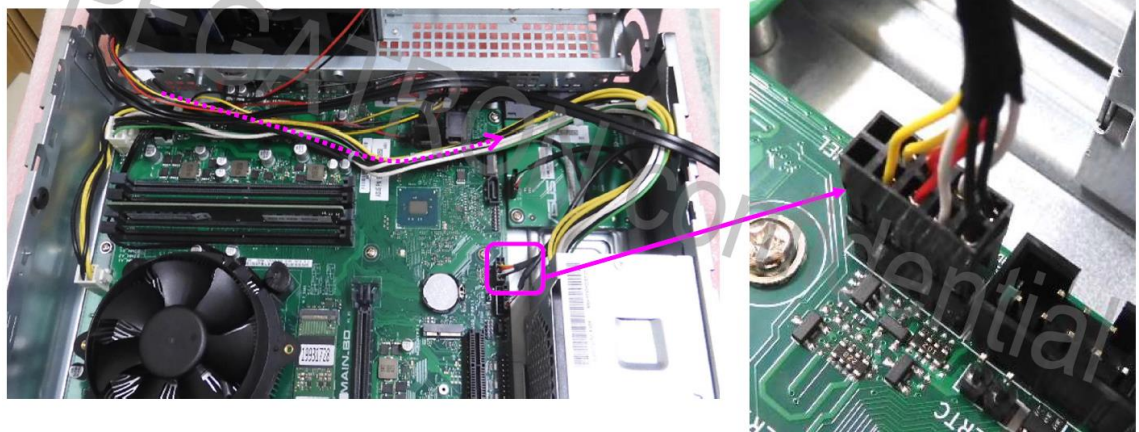


POWER SWITCH BOARD

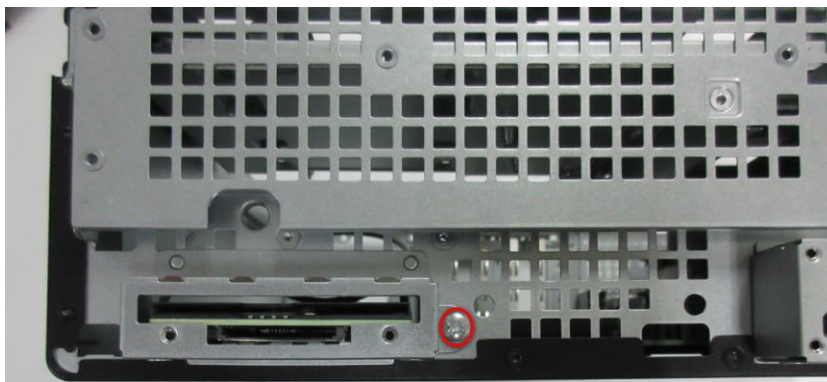


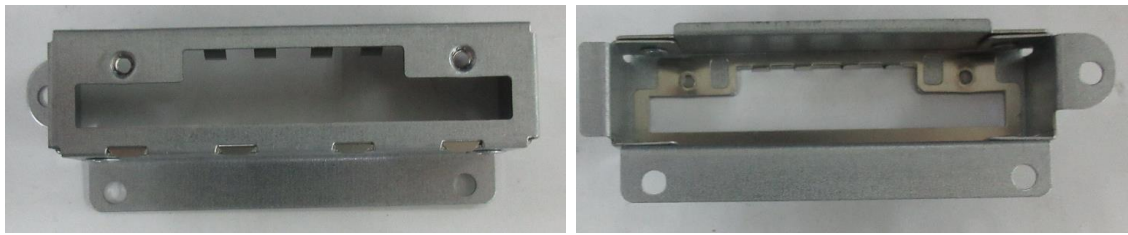
SW CABLE
assemble notice

Connect the SW cable on the connector of the M/B by polarity, follow the picture as shown.

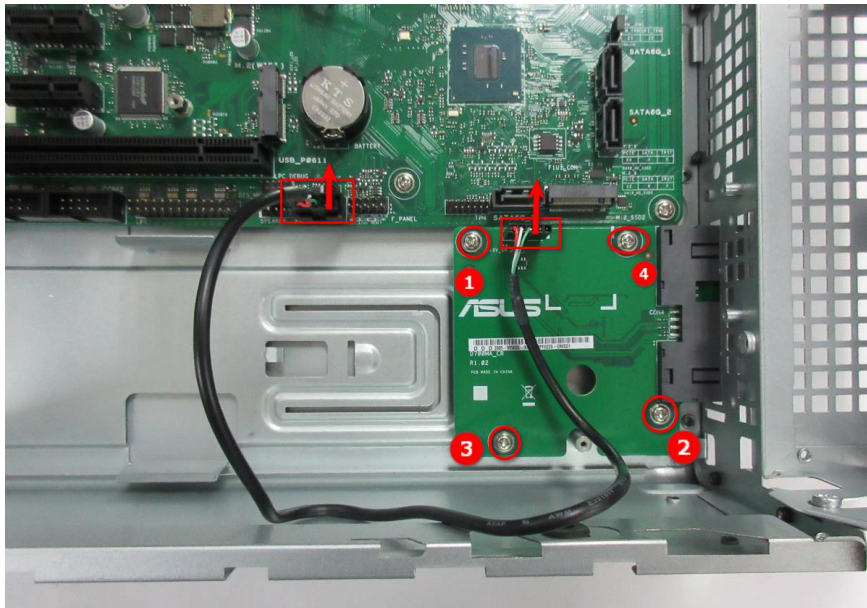


2. Remove 1 screw on the FIO SHIELD





3. Remove 4 screws on the SMART BOARD and disconnect the W.H 1*5P cable .

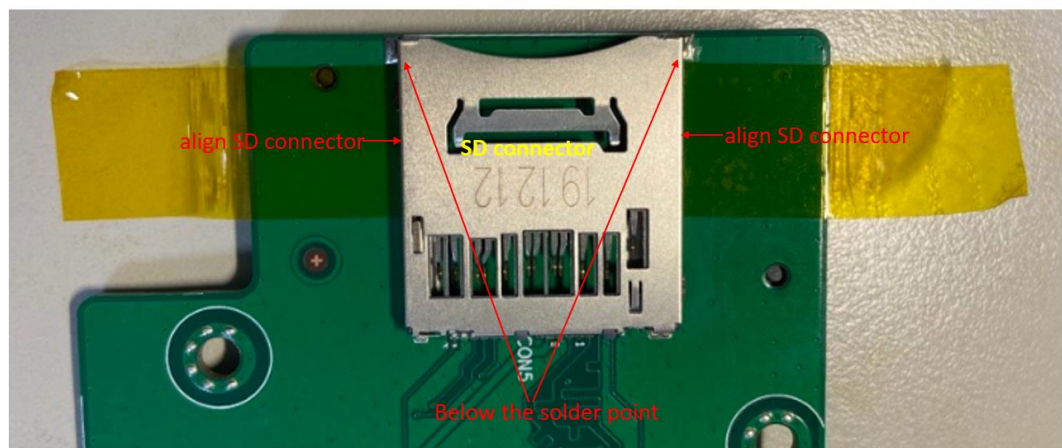


Torsion value: 6.0+/-0.5kgf-cm



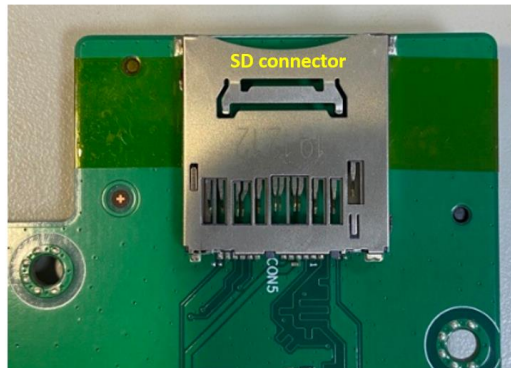
Notice: Please add CRD MYLAR * 3 when you assemble the Card Reader Board.
MYLAR 35mm*15mm Q'ty 3pcs

Back view



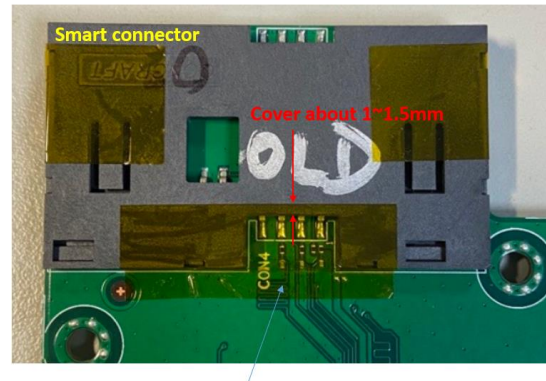
Align side of SD connector and wrap the tape backward

Back view



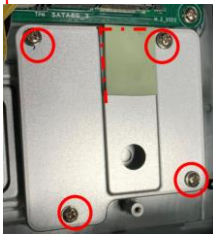
Align side of SD connector and wrap the tape backward

Top view



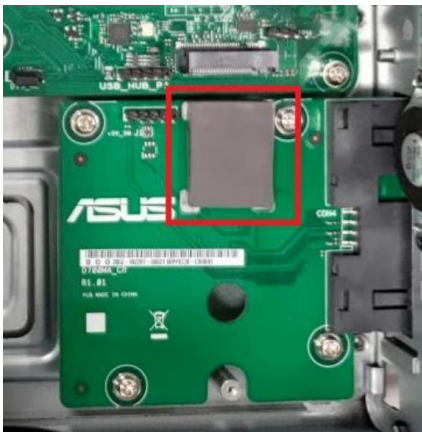
center alignment of horizontal on the smart card connector.

If there is not Smart Card Reader , please use screw*4 to lock the CRDUMMY BRACKET and paste the SSD PAD to assemble the SSD.

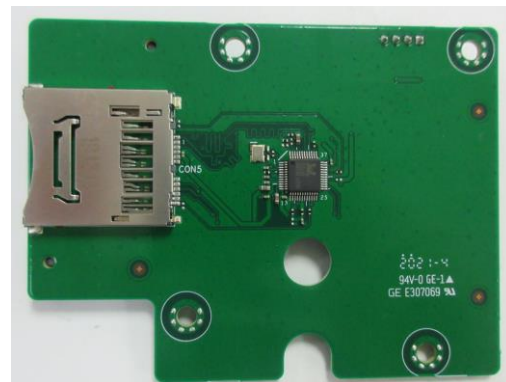
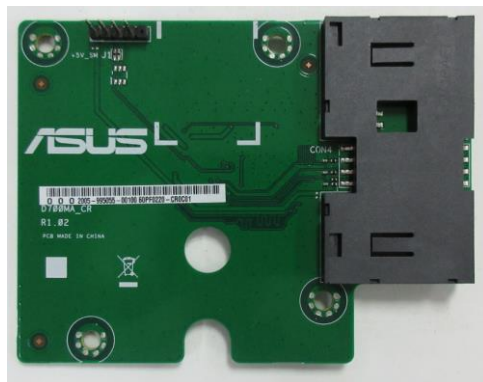
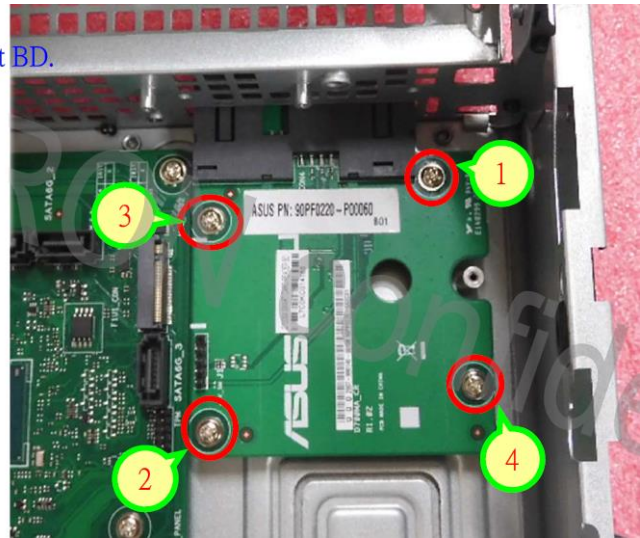


SCREW M3*4L (W) W-NI / 5.5 kg f-cm+/-10%

If there is Smart Card Reader , the SSD PAD should be pasted well.

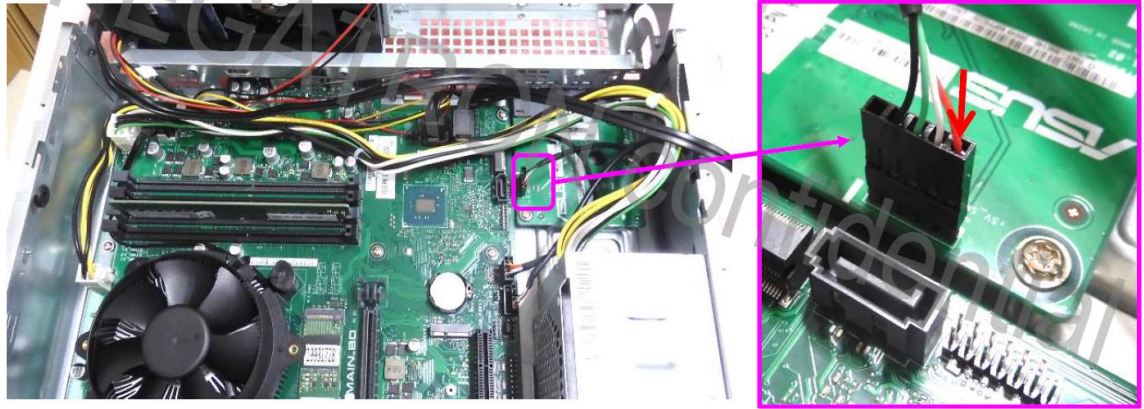


SMART BOARD assemble notice
 Locking 4 screws in diagonal sequence
 (from 1 to 4) then use screws to secure the smart BD.



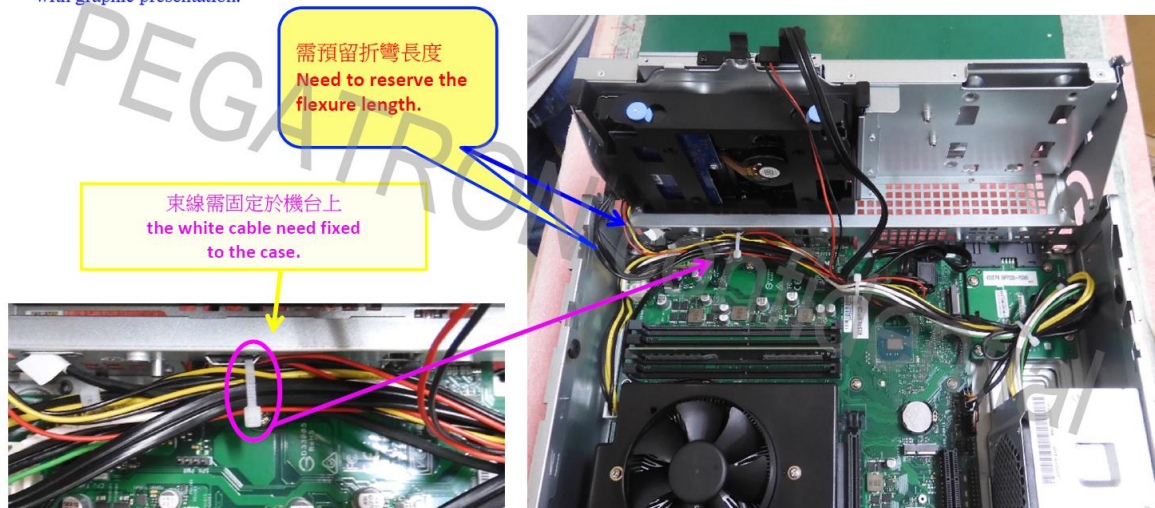
Smart BD Cable assemble notice

Connect the W.H 1*5P cable on the connector of the smart BD. by polarity, follow the picture as shown.



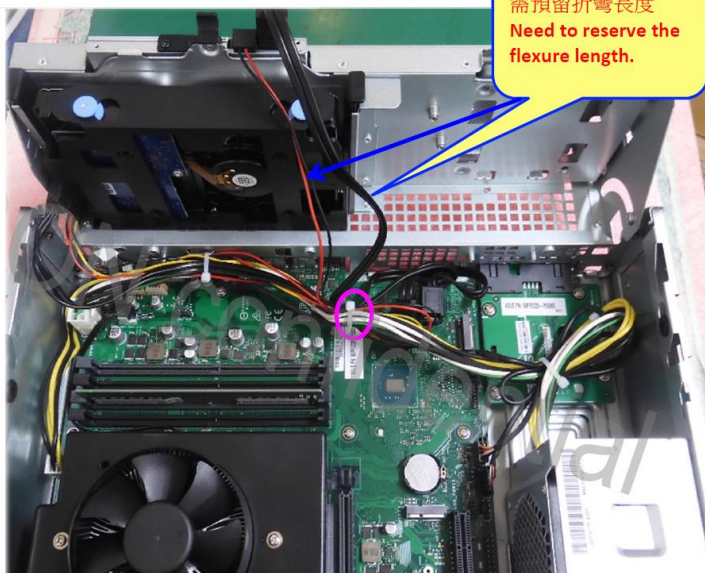
Cables arrange notice!!!

- 1 Arrange HDD SATA / HDD PW cable / POWER cable / W.H 1*5P cable by white wire in accordance with graphic presentation.



2

Arrange ODD SATA / SW cable / HDD PW cable by **white wire** in accordance with graphic presentation.



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Parts

- POWER SWITCH BD.*1
- SW cable *1
- SMART BOARD *1
- FIO SHIELD*1
- W.H 1*5P cable*1
- Total screw *6

CPU COOLER & CPU

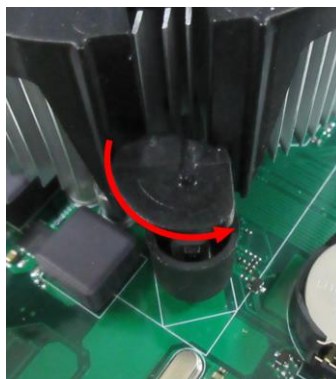
The illustrations below show how to remove the CPU from the Device.

1. Disconnect the Cooler Cable.

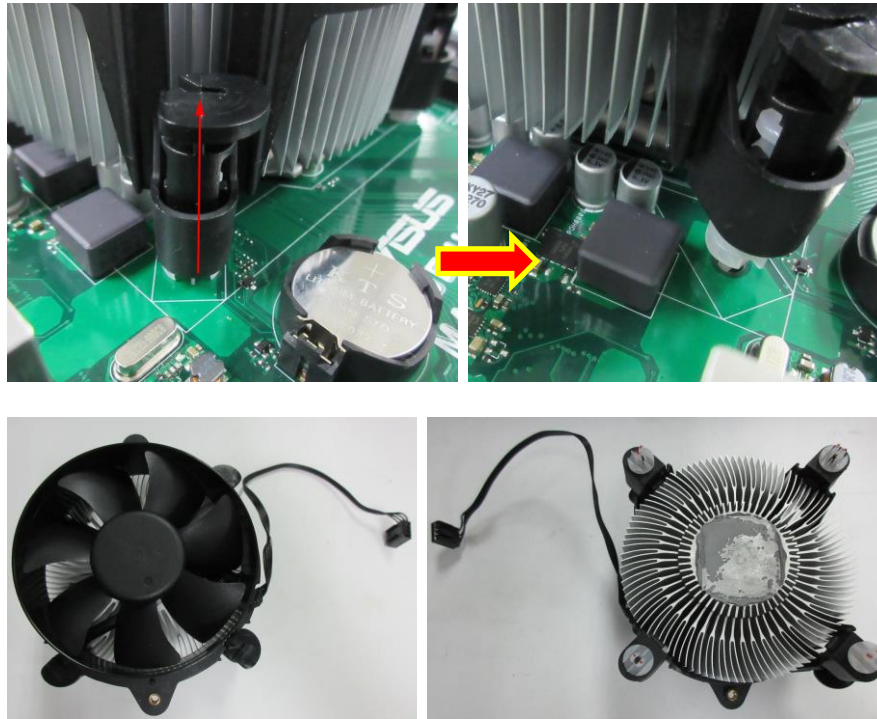
[Top](#)



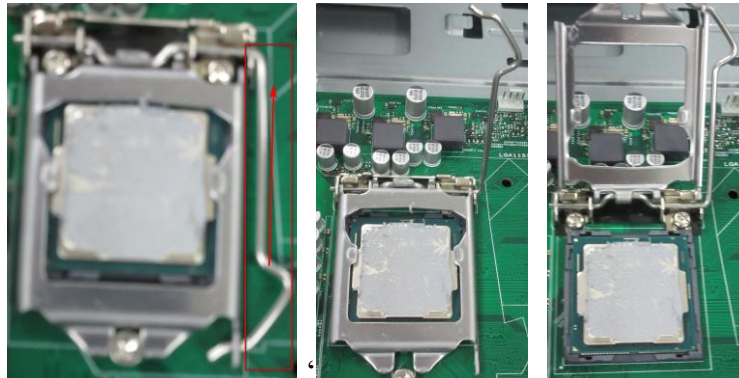
2. Rotate the 4 snaps in the direction of the arrow and lift them vertically.



3. Pull the fixed foot out of the slot and take off the thermal.



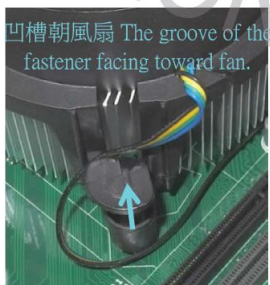
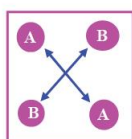
4. Pull out the CPU pole and Lift the other end of the CPU bar about 100° and take CPU away.
Lift the other end of the CPU bar about 100° and take CPU away.



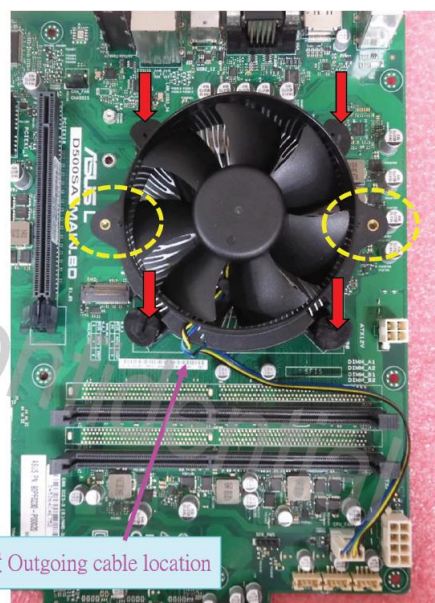
Notice: Please clean remaining CPU and CPU Fan before paste GA500 Grease

CPU installation notice

- 1 Place the cooler on top of the installed CPU, making sure that the four fasteners match the holes on the M/B.
- 2 Push down two fasteners at a time in a diagonal sequence to secure the heatsink assembly in place.



出線口位置 Outgoing cable location



the location of Cooler assembly as below:



Parts

- CPU COOLER*1
- CPU CM8070104290715 999TJA//I5-10400 2.9G/12M 6C G1 SRH3C*1

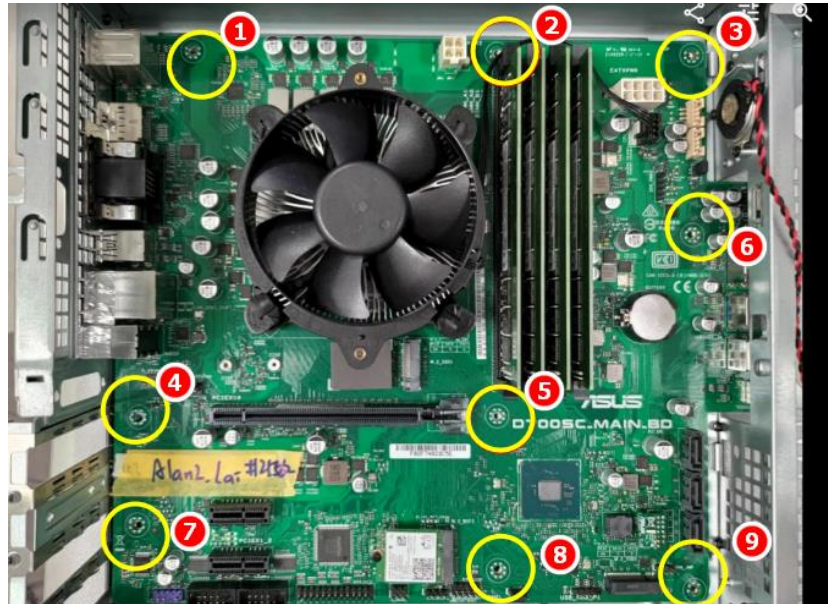
[Top](#)

MAIN BOARD

The illustrations below show how to remove the MB from the Device

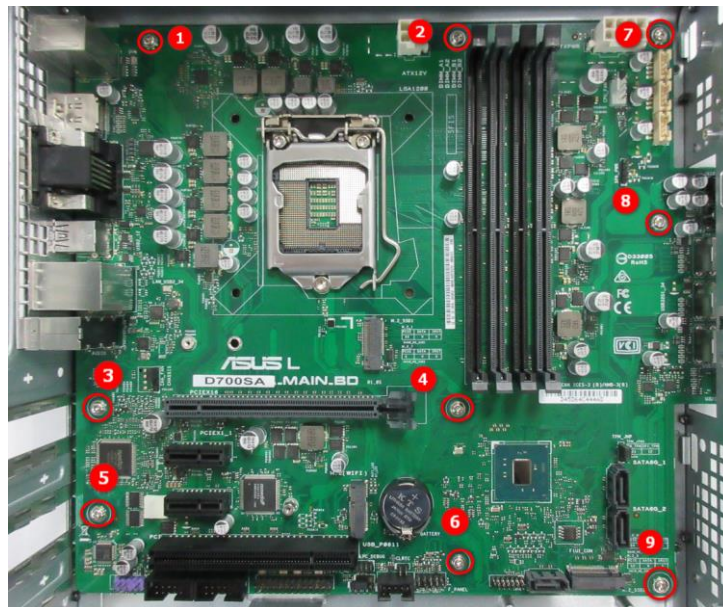
Remove 9 screws from MB.

For D700SC



SCREW M3*4L (W) W-NI 5.5 kgf-cm+/-10%

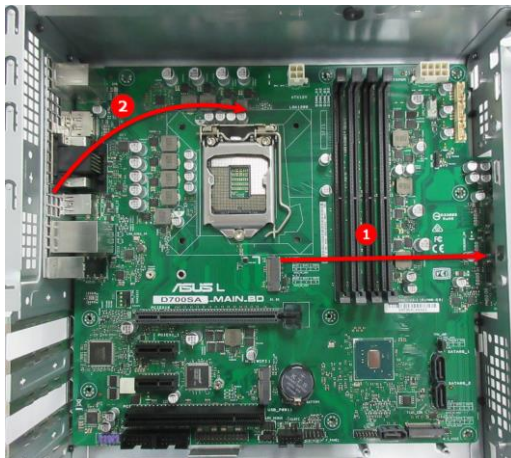
For D700SA



Torsion value: 6.0+/-0.5kgf-cm



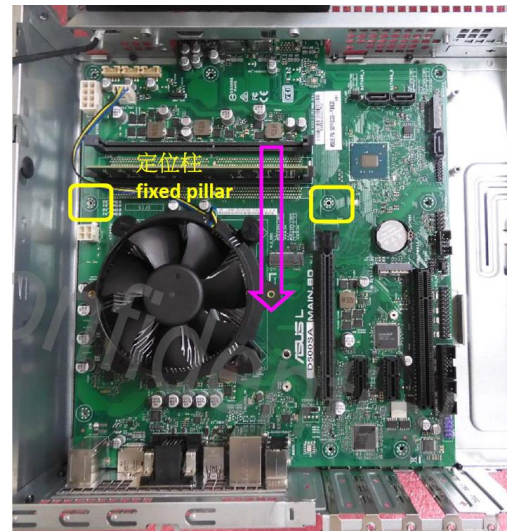
SCREW M3*4L W * 9



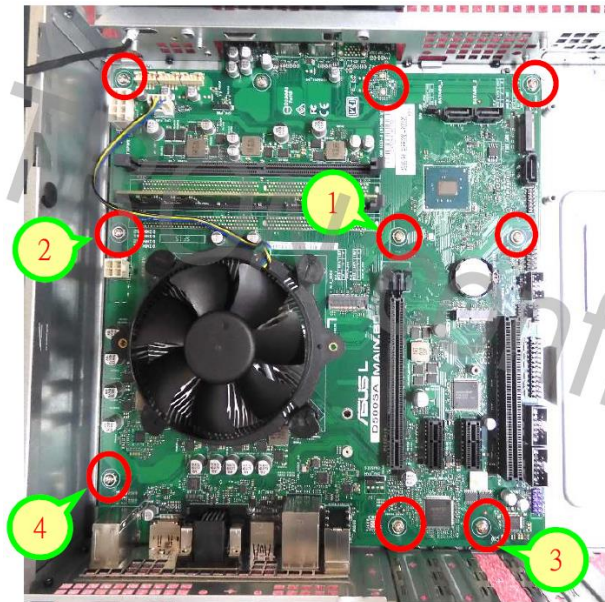
For D700SA

Assemble notice:

a. Install the M/B into Chassis in accordance with graphic presentation. Can't shave and can't leak to injure M/B and I/O shell fragment

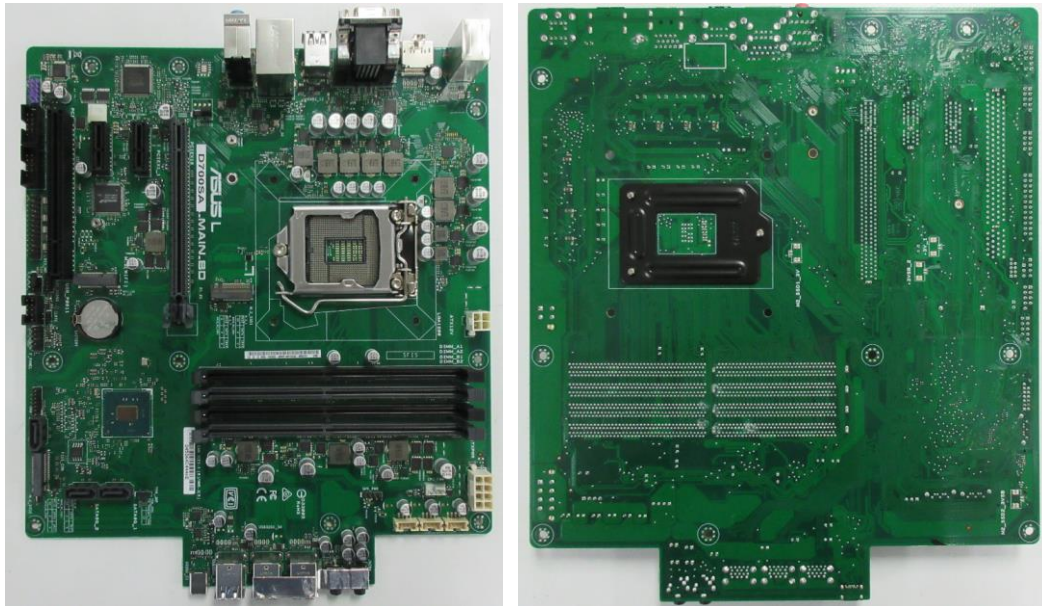


b. Locking 4 screws in diagonal sequence (from 1 to 4) then use screws to secure the MB in clockwise from outside to inside way (refer the below MB).



c. After installing M/B to chassis make sure that all of the port of M/B have already faced outwards.





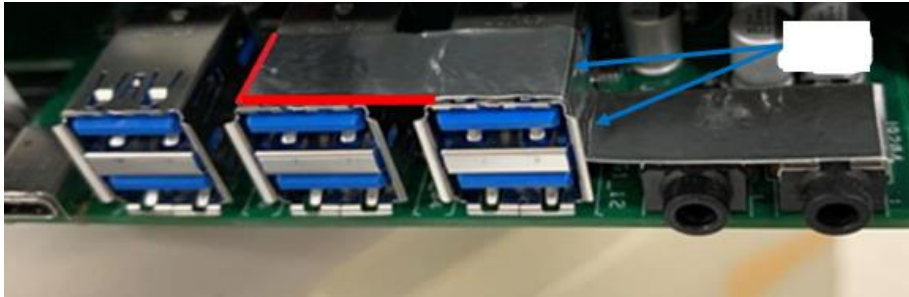
Mainboard Assembly Notice:

1. Please follow below information to assemble the RAM.



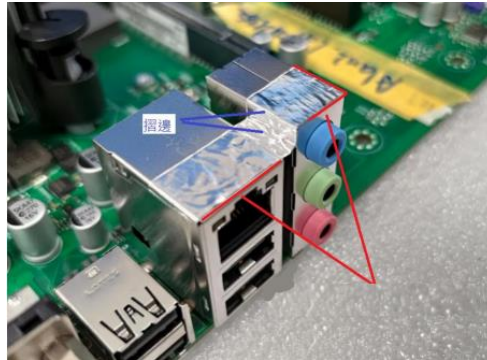
D700SC SKU	from left to right			
	DIMM-A1	DIMM-A2	DIMM-B1	DIMM-B2
1xDIMM	X	V	X	X
2xDIMM	X	V	X	V
3xDIMM	V	V	X	V
4xDIMM	V	V	V	V

2. The EMI Foil should be pasted well when you assemble the Mainboard.
Front I/O



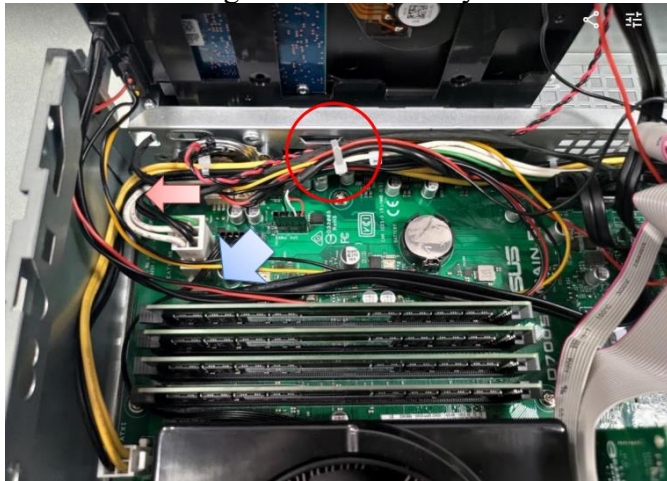
13PF0230L02011 USB AL FOIL

Rear I/O



13PF0250L06011 AUDIO AL FOIL

Please well arrange the cable when you assemble the mainboard.



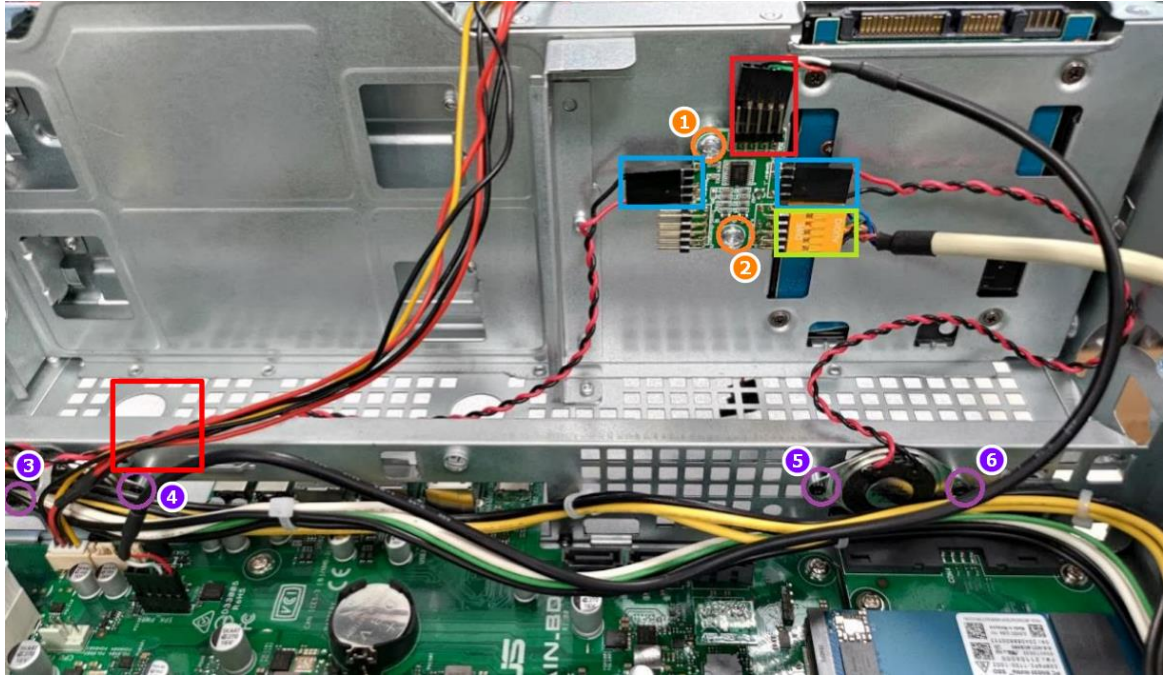
Parts

- Total screw *9
- D700 MAIN BD.

Speaker Module (Optional By SKU)

The illustrations below show how to remove the Speaker Module.

1. Disconnect the Speaker Cable, Remove 6 screws and take out the speaker module.



6#-32 L6 8+/-10% kgf-cm



M2*3 2 kgf-cm+/-10%



Parts:

- Total screw * 4
 - Speaker Module *1
 - (Actual part name depends on different SKU.)

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