

## Chapter

# 2

Rev.	Change History	Change Time	Originator
V1.0	First Release	2017/12/7	John_jin
V1.1	Change the LCD panel and A cover	2018/12/26	John_jin

## Disassembly Procedure

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

**A** SUS UX331UA notebook consists of various modules. This chapter describes the procedure for the complete notebook disassembly and assembly (**Assemble document 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.

The disassembly procedure consists of the following steps:

- [Service overview](#)
- [Appropriate Tools](#)
- [Bottom Case Module](#)
- [Top Case Module](#)
- [Touch Pad module](#)
- [IO Board Module](#)
- [HDD Module](#)
- [WLAN Module](#)
- [Speaker Module](#)
- [Main Board](#)
- [Battery Module](#)
- [Memory Module](#)
- [SSD Module](#)
- [LCD Module](#)
- [Gap Step](#)



- [Block Diagram](#)
- [Screw Torque](#)

## Service Overview

Please pay special attention to the cautions below to prevent any damages to the notebook and also please be sure to select the appropriate tools described in this section to perform any services desired.

### Precautions

Before you perform any service and or repair on the notebook, please follow the steps below first.

1. Be sure that the notebook is powered down.
2. Disconnect the AC plug from the notebook.
3. Remove all rings, watches and any other metal objects from your hands.



4. Always wear a ground strap on your hand to protect the notebook from static discharge.
5. Please refer to “ANSI ESD S20.20” about ESD protection measure.
6. Put disassemble the parts in the functional PE BAG for avoid any damages of the A/B/C/D part.



7. Environment temperature is 20-30 °C and humidity is 40% - 70%.
8. Avoid scratching the surface of the machine, please use anti-static and soft materials to put on desk in repair environment as below photo.



9. Screw Appearance Criteria.

If the screws have the following damaged appearance, please do not use.

- a. Shape deformed
- b. Paint scratched off
- c. Rusty



- d. Damaged head – unable to drive in



- e. Damaged unable to securely tighten


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## Appropriate Tools

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

### Cross Screwdriver

Please according to different screw specification and choose different screwdriver and head.  
Below photos are for reference only.

Use a cross screwdriver to fasten/remove screws. 

RTD120CN



RTD60CN



### Plastic Blade (PN: 20LT0-00050000)



**Tweezers**

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

**Thickness gauge (PN: 20LT0-0002J000)**

Thickness compass specification 0.05mm-1.5mm

Use it to measure the gap.

**Hand rollers (PN: 20LT0-00082000, order or local buy)**

Use the roller to press touch pad mylar.



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## Bottom Case Module

The illustrations below show how to remove and disassemble the Bottom Case Module.

### Remove Bottom Case Module

1. Follow below numbers to remove 11 screws(2 screws of M2.5\*10L, 4screws of M2\*6L, 2screws of M2\*8L, 3screws of M2\*11L,) on the Bottom case module.

Assembly Notice: Follow the reverse numbers to lock screws.

Screw tightening torque (Kg F-cm): 2.0KG±0.2kgf.

Screw tightening torque (Kg F-cm): 2.0KG±0.2kgf.

Screw tightening torque (Kg F-cm): 2.0KG±0.2kgf.

Screw tightening torque (Kg F-cm): 2.0KG±0.2kgf.



SCREW M2.5\*10L (K) B-NI



SCREW M2\*6L (K,D4.6)(K) B-NI,NY



SCREW M2\*8L (K) B-NI,NY



SCREW M2\*11L (4.5,0.8) (K) #1 B-NI

## Parts

- Total screw \*11

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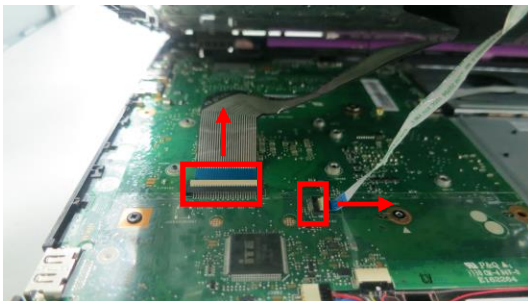
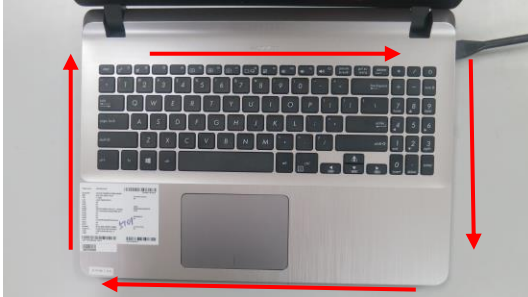
## Top Case Module

The illustrations below show how to remove the Bottom Case Module.

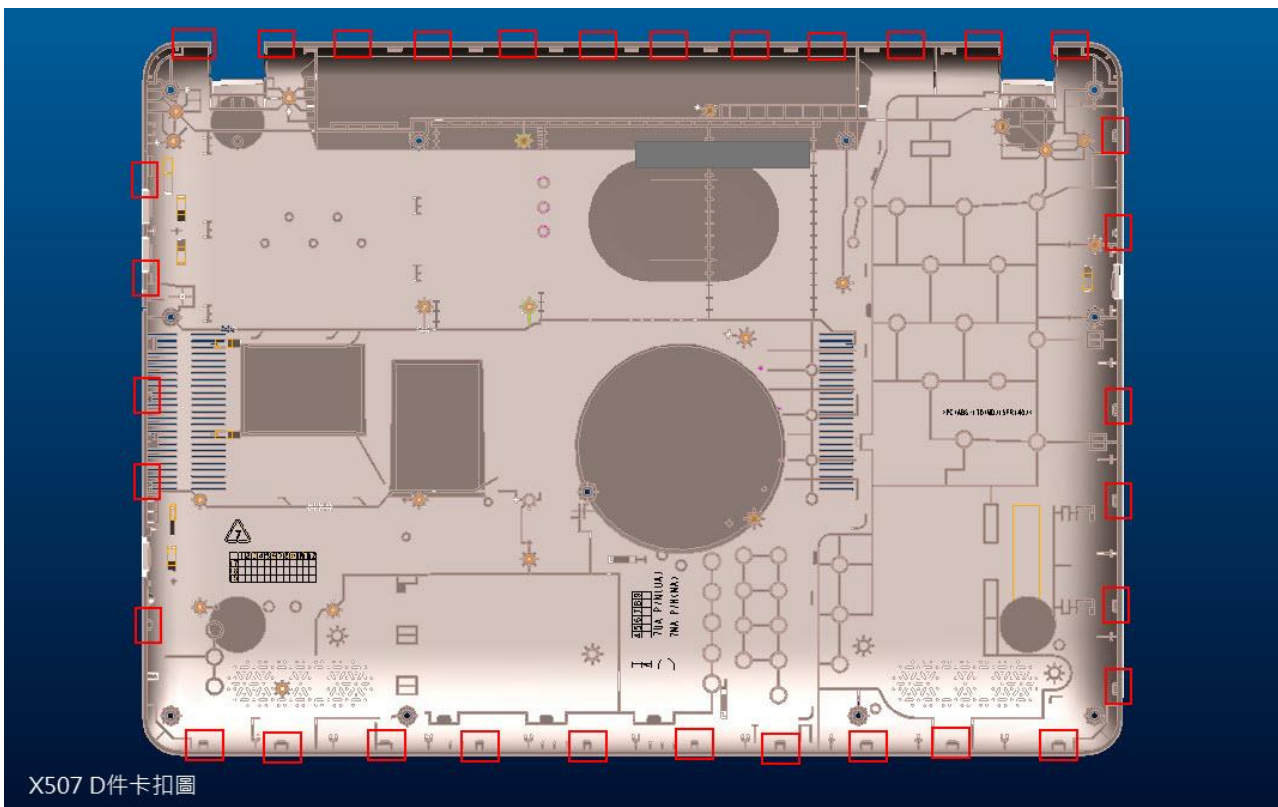
### Remove Top Case Module

1. Use a plastic blade to pry the top case.

Assembly notice: Insert FFC to the bottom until just accord with the line when lock the latch.



Snap as below



## Parts

- X507UA-1C KB TOP CASE HOUS(US) // \*1
- (Actual part name depends on different SKU.)

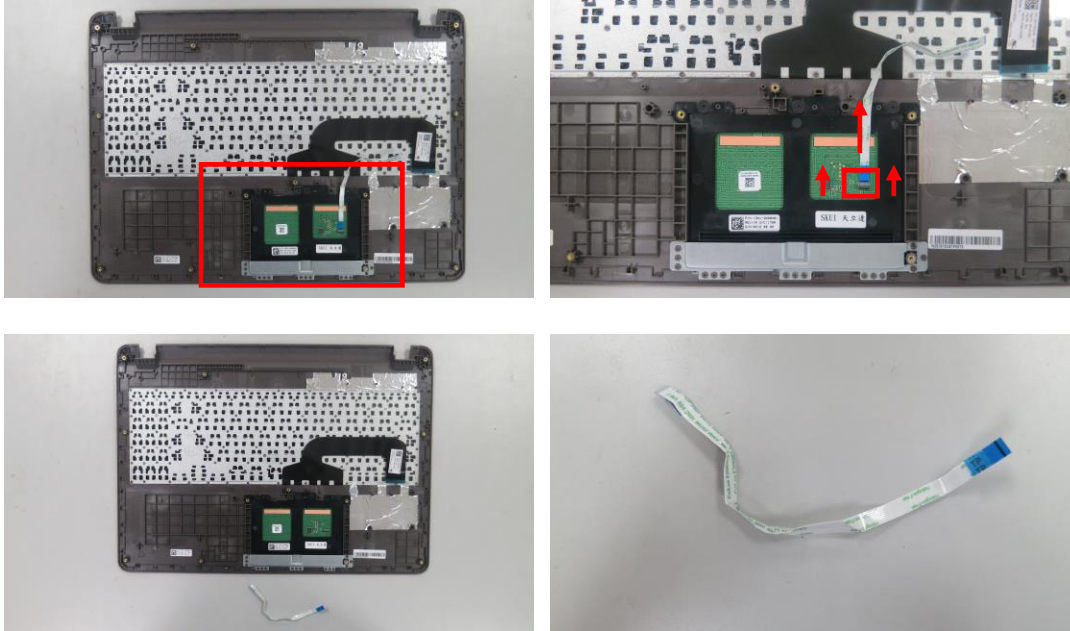
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## Touchpad Module

The illustrations below show how to remove the touchpad module.

### Remove Touchpad Module

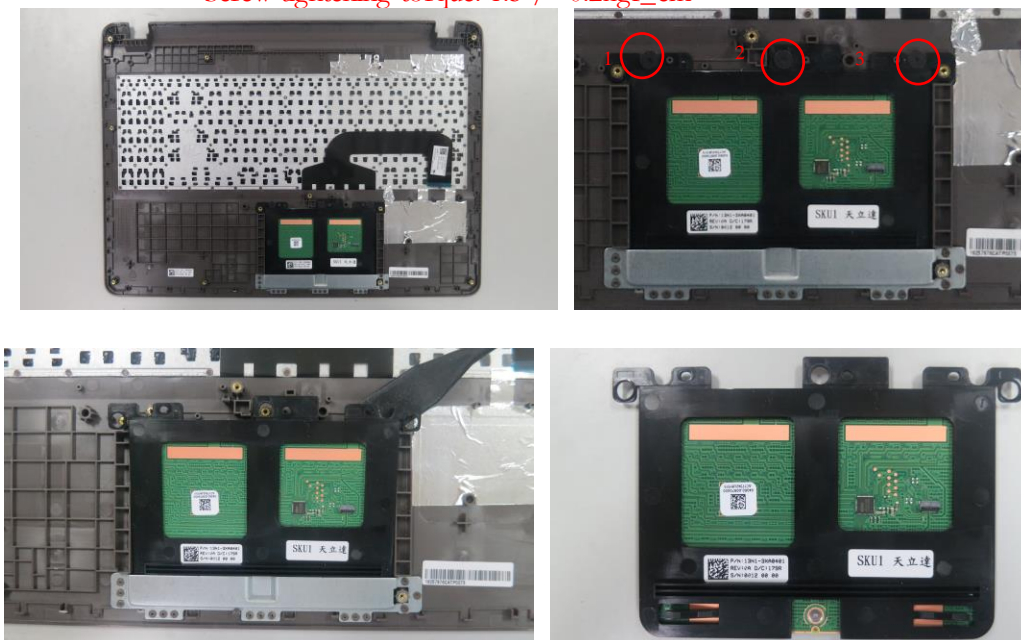
1. Disconnect touchpad FFC from touchpad.



2. Remove 3 screws (M2\*1.5L) on the touchpad and take touchpad away.

Assembly Notice: follow the reverse numbers to lock screws.

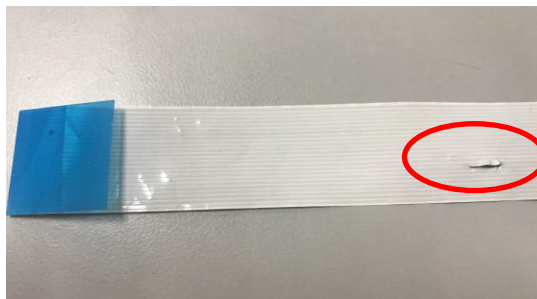
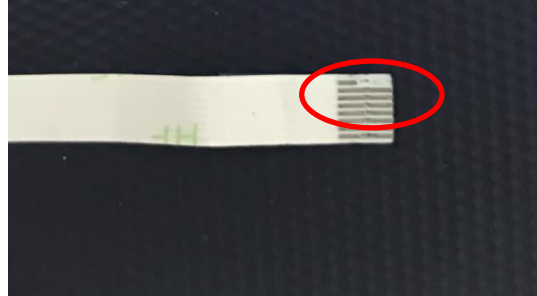
Screw tightening torque: 1.5-/+0.2kgf\_cm





SCREW M2\*1.5L (7,0.4) (K) B-ZN

Assembly notice: Please change the new one, if FFC is damage during disassembly.  
Here are some samples of FFC damage:



## Parts

- Total screws \*3
- TOUCHPAD FP FOR E403NA//ELAN/FA473D-3200 \*1
- X507UA-1C FP MYLAR//HEXIN \*1
- X507UA TP FFC 8P 0. 5MM, L124//CVILUX/FFCE08091B17Q0279-NH \*1

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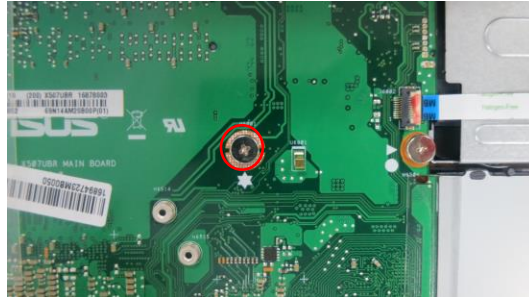
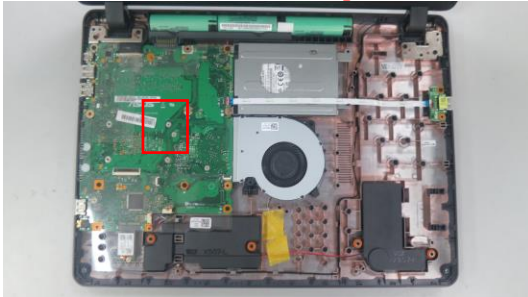


## IO Board

The illustrations below show how to remove the IO Board.

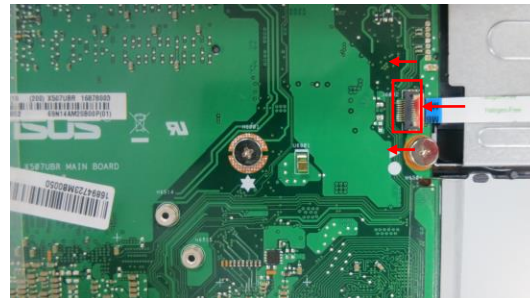
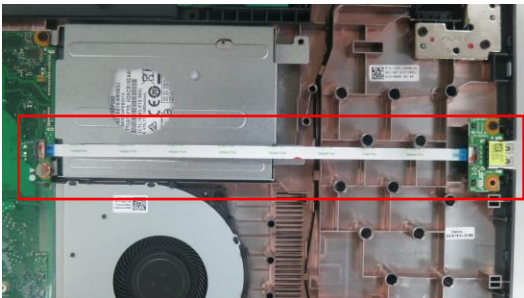
### Remove IO Board

1. Remove 1 screw (M2\*5L) on motherboard to power off.  
Screw tightening torque: 2.5-/+0.2kgf\_cm. The screw must be twisted before assemble C part and D part, otherwise it will lead to no power.

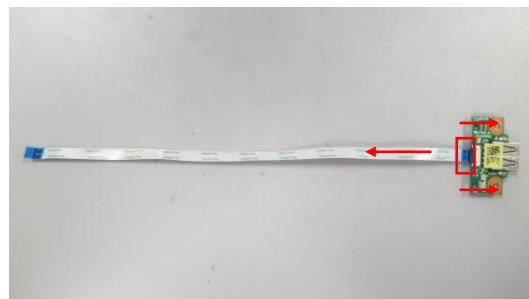
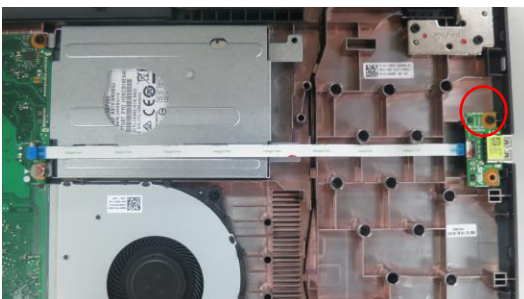


SCREW M2\*5L (7,2.3) (K) #1

2. Remove FFC from Main Board.



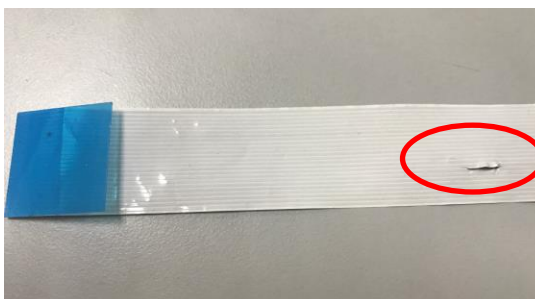
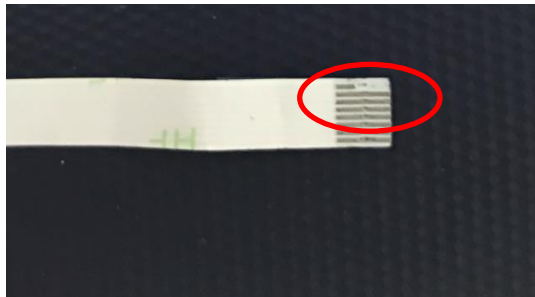
3. Remove 1 screw (M2\*5L) on IO board and take IO board away then remove FFC from IO board.  
Screw tightening torque: 2.5-/+0.2kgf\_cm





SCREW M2\*5L(4.6,0.8) (K)  
B-ZN

Assembly notice: Please change the new one, if FFC is damage during disassembly.  
Here are some samples of FFC damage:



## Parts

- Total screw \*2
- X507UV IO\_BD./AS//R1.1\*1
- FPC CON 10P 0.5MM 1.5H R/A, SMT//ACES/51624-01001-001\*1

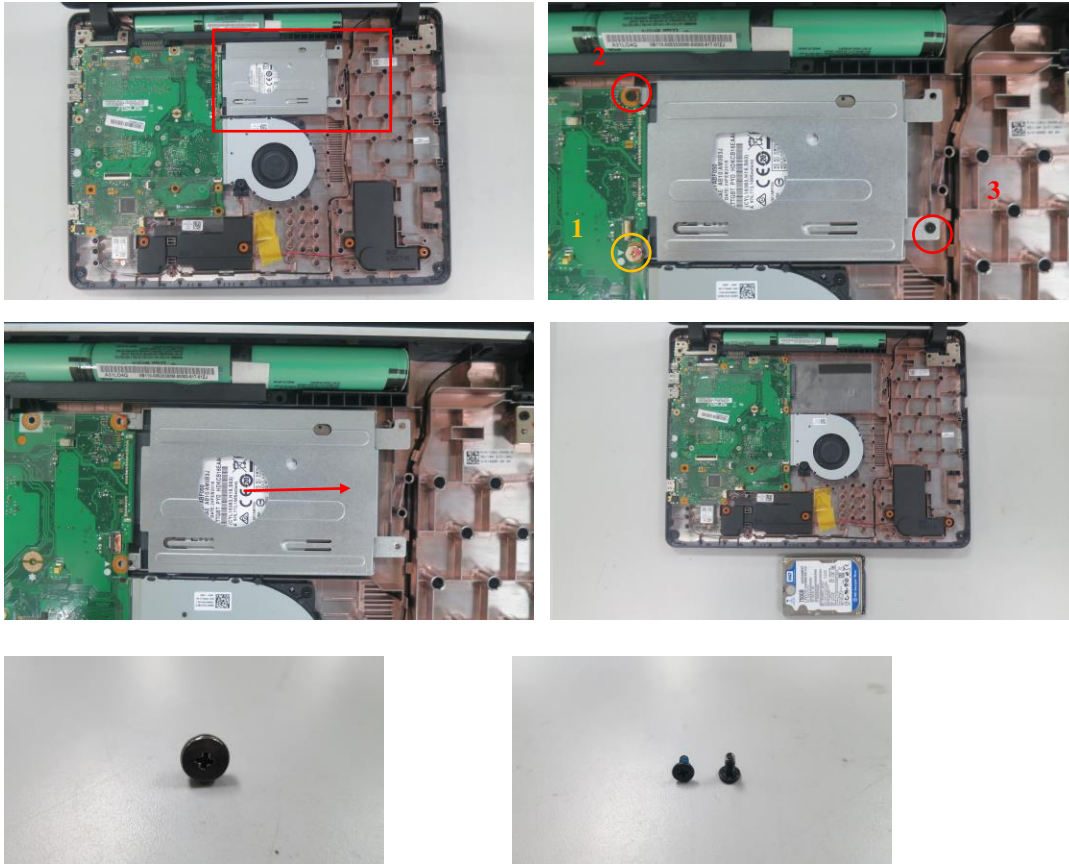
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## HDD Module

The illustration shows how to remove the HDD Module.

### Remove HDD Module

1. Remove 3 screws (1 screw of M2\*5L, 2 screws of M2\*5L) on Main Board and take HDD away.  
 Assembly Notice: follow the reverse numbers to lock screws.  
 Screw tightening torque: 2.5-/+0.2kgf\_cm  
 Screw tightening torque: 2.0-/+0.2kgf\_cm



SCREW M2\*5L (7,2.3) (K) #1

SCREW M2\*5L(4,6,0.8) (K)  
B-ZN

Assembly notice: Please stick the 'WARRANTY VOID' label on HDD when reassemble HDD module as below sample picture.  
 (PN: 15100-06131100 WARRANTY VOID (8mm) CYMMETRIK/V3.0)

**Parts**

- Total screw \*3
- X507UA HDD BKT//ANLI PRECISE \*1

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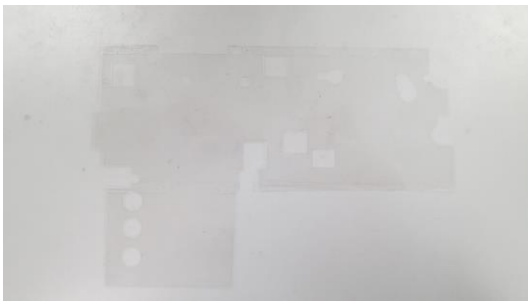
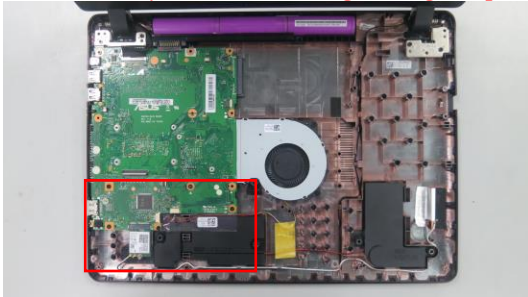


## WLAN Module

The illustrations below show how to remove the WLAN Module.

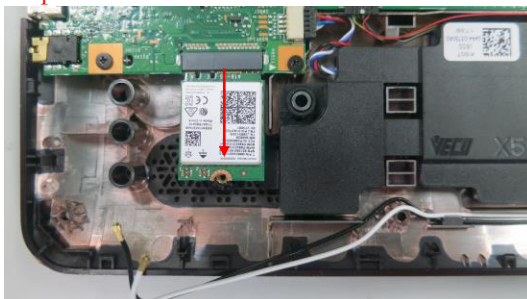
### Remove WLAN Module

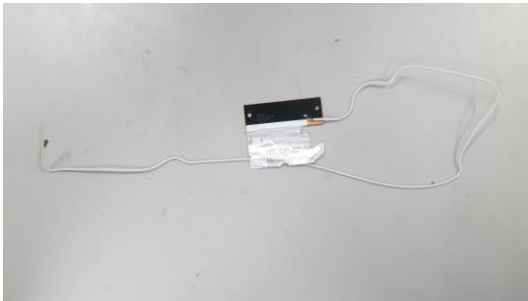
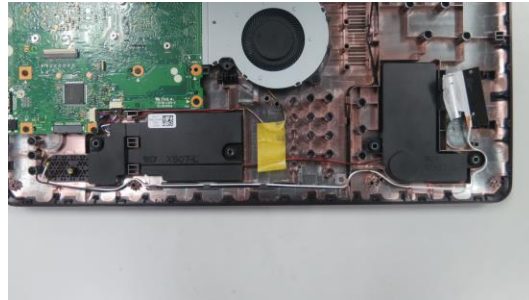
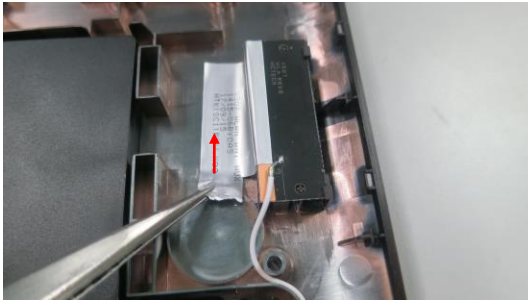
1. Remove the Mylar on the main board then Remove 1 screw(M2\*2.1L) from WLAN.  
*Assembly Notice: Screw tightening torque: 2.0-/ +0.2kgf\_cm*



SCREW M2\*2.1L+1.0(4.5,0.8) (K)

2. Disconnect WLAN cable and then tear WLAN away, remove the write antenna of WLAN on bottom case.  
*Assembly Notice: Please well arrange the cables and put it in the hook slot as below.*





## Parts

- Total screw \*1
- X507UA 802.11AC+BT (2\*2) M. 2\_WW//IN/8265. NGWMG946658/BLK/13A\*1
- X507 WIFI AUX ANTENNA//HIGH TEK/OACAU017006N\*1
- X507UA MB MYLAR B//TENYI \*1  
(Actual part name depends on different SKU.)

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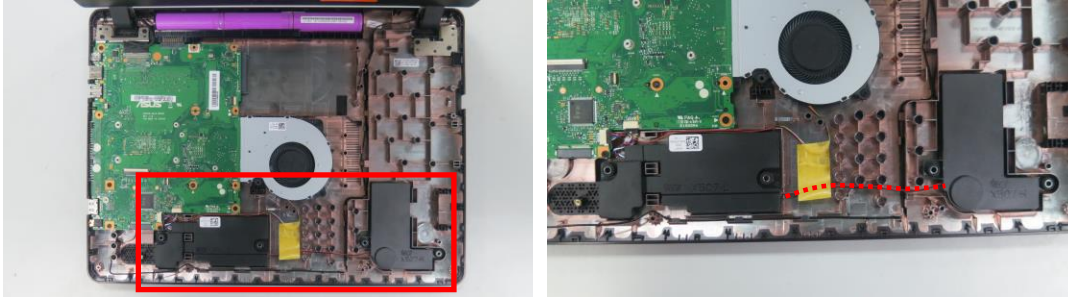
## Speaker Module

The illustrations below show how to remove the Speaker Module.

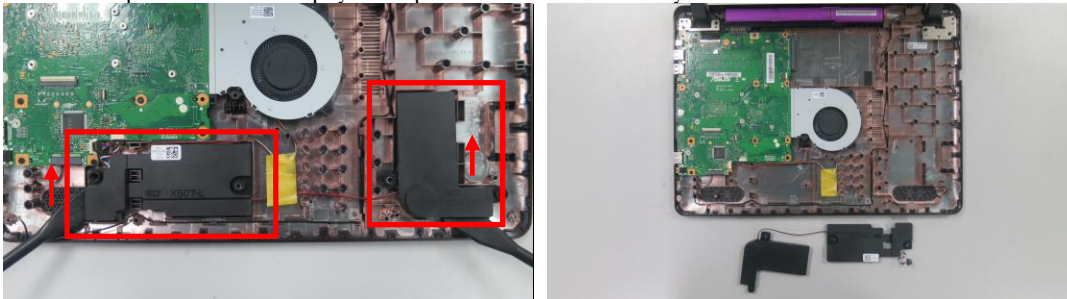
### Remove Speaker Module

1. Disconnect the speak cable on the M/B.

**Assembly Notice:** Please well arrange the cables and put it in the hook slot as below



2. Use a plastic blade to pry the speaker and take it away.



#### Parts

- X507UA SPEAKER MODULE//VECO/PB18-4C-5-9LM2\*1  
(Actual part name depends on different SKU.)

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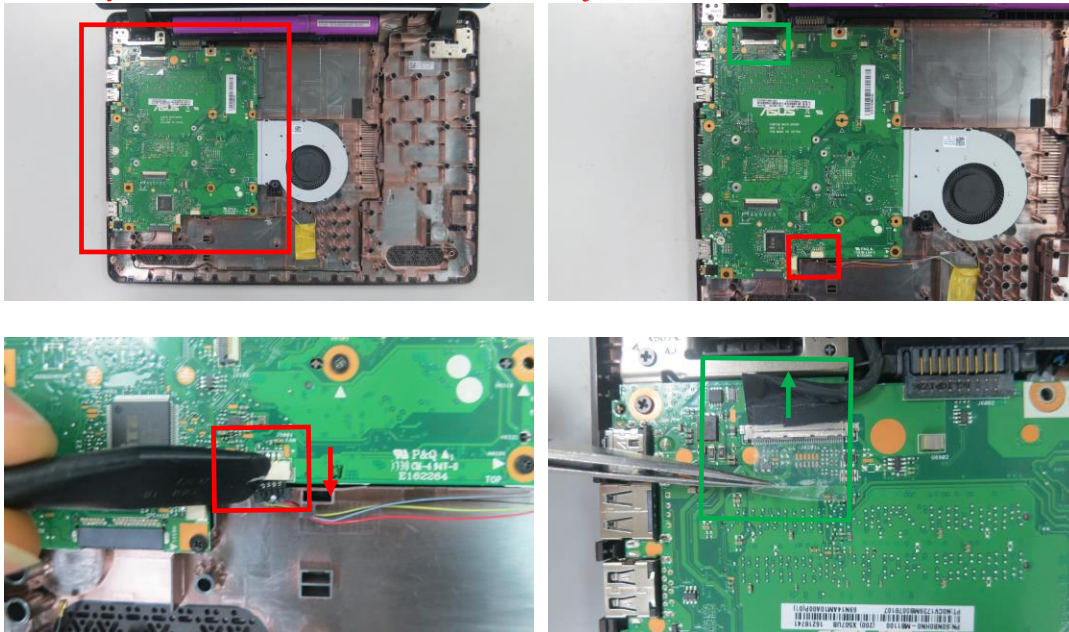


## Motherboard Module

The illustrations below show how to separate the Motherboard module

1. Disconnect the **FAN** and **LED** cable

Assembly notice: Insert cable to the bottom until just accord with the line when lock the latch.

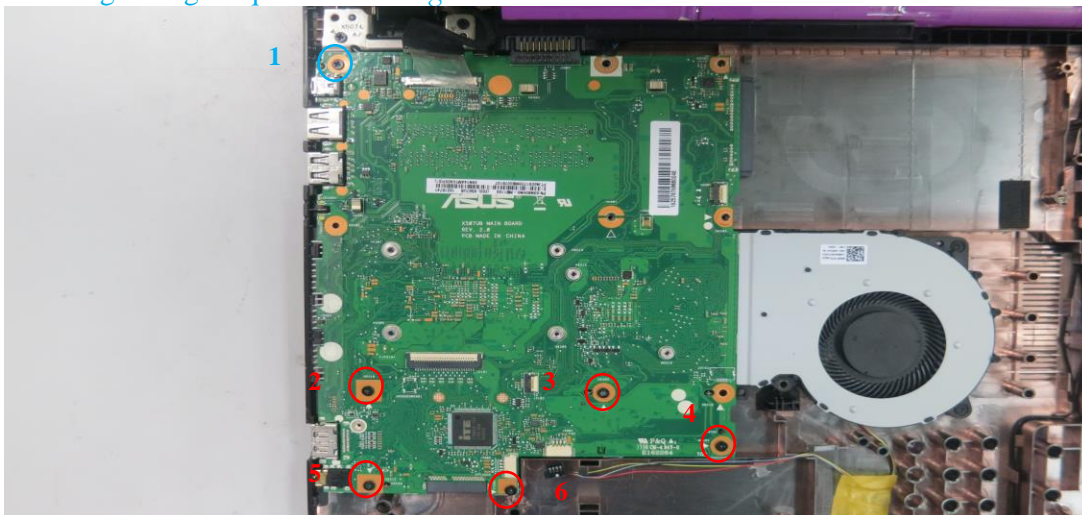


2. Remove 6 screws (1 screws of M2.5\*5L, 5 screws of M2\*5L, ) on the main board and take main board away.

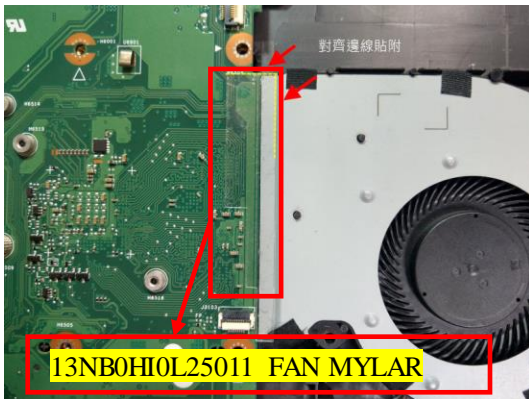
Assembly Notice: follow the reverse numbers to lock screws.

Screw tightening torque:  $2\text{KG} \pm 0.2\text{kgf}$ .

Screw tightening torque:  $2\text{KG} \pm 0.2\text{kgf}$ .



Notice: In order to avoid the fan noise issue. If you disassemble the unit, please must paste the Mylar on between fan and motherboard.

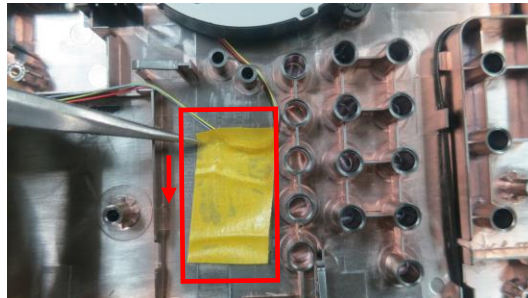
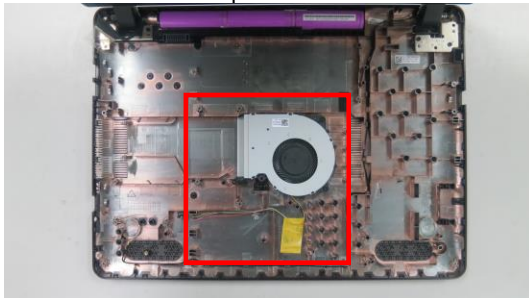


SCREW M2.5\*5L (K) B-ZN NY #1



SCREW M2\*5L(4.6,0.8) (K) B-ZN

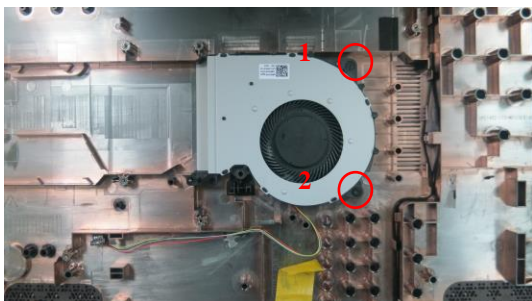
3. Remove the tape of FAN on the bottom case



4. Remove 2 screws (1 screws of M2.5\*5L) on the FAN and take the FAN away.

Assembly Notice: follow the reverse numbers to lock screws.

Screw tightening torque: 2KG±0.2kgf.



Notice : Please use the correct technique of taking fans in order to avoid being out of shape.



**Correct demonstration**



**Wrong demonstration**



SCREW M2\*5L(4.6,0.8) (K) B-ZN

## Parts

- Total Screw: \*8
  - X507UV MAIN\_BD.\_0M/I7-7500U/AS//R1.1 (V2G-MIC)\*1
  - X507UV THE FAN//FORCECON #2\*1
- (Actual part name depends on different SKU.)

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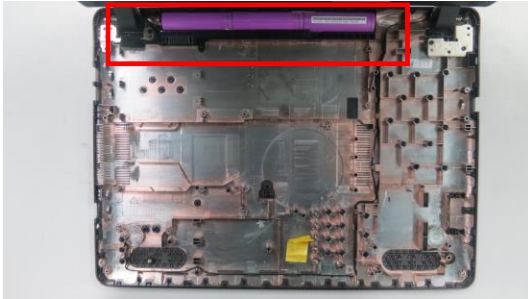


## Battery Module

The illustration below shows how to remove the battery module.

### Remove Battery Module

1. Remove 2 (M2.5\*5L) screws on the Battery module  
*Assembly Notice: follow the reverse numbers to lock screws.*  
Screw tightening torque (Kg F-cm): 2KG±0.2kgf.



SCREW M2.5\*5L (K) B-ZN NY #1

2. Use a plastic blade to pry the battery and take it away.



#### Parts

- X507UA BATT 3CELL 33WH//SMP/UR18650ZTA/3S1P/11.1V\*1
  - Total screw \*2
- (Actual part name depends on different SKU.)

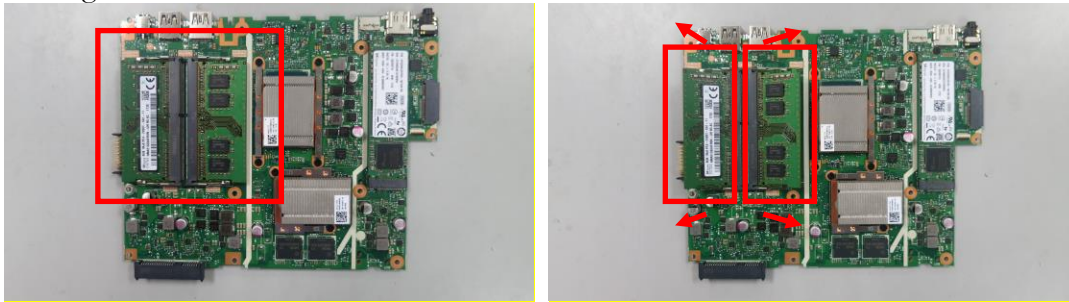
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## Memory Module

The illustrations below show how to remove the Memory Module from the notebook.

### Remove Memory Module

1. Pull two latches here to pop the Memory module up at 45° angles, and then pull out the module at that angle.



2. Take the memory away.



#### Parts

- X507UA DDR4 2400 8G//SAMSUNG/M471A1K43CB1-CRC \*2  
(Actual part name depends on different SKU.)



## SSD Module

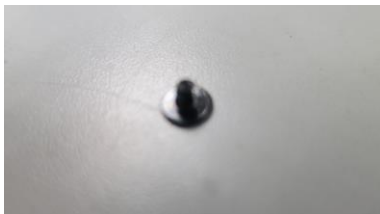
The illustration shows how to remove the SSD Module.

### Remove SSD Module

1. Remove 1 screw (M2\*2.5L) on SSD and take it away.  
Screw tightening torque (Kg F-cm): 2KG $\pm$ 0.2kgf.

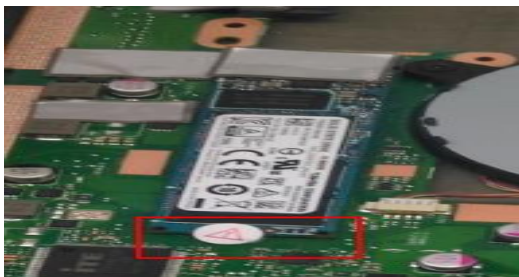


2. Take off the SSD module from M/B

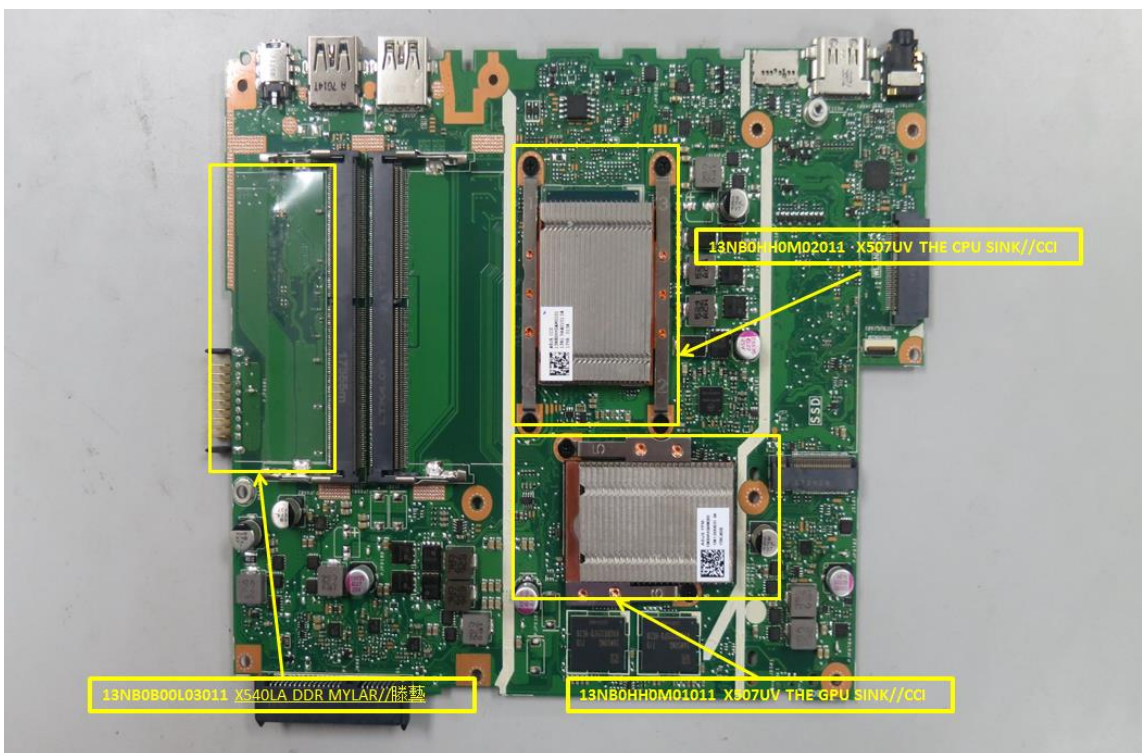
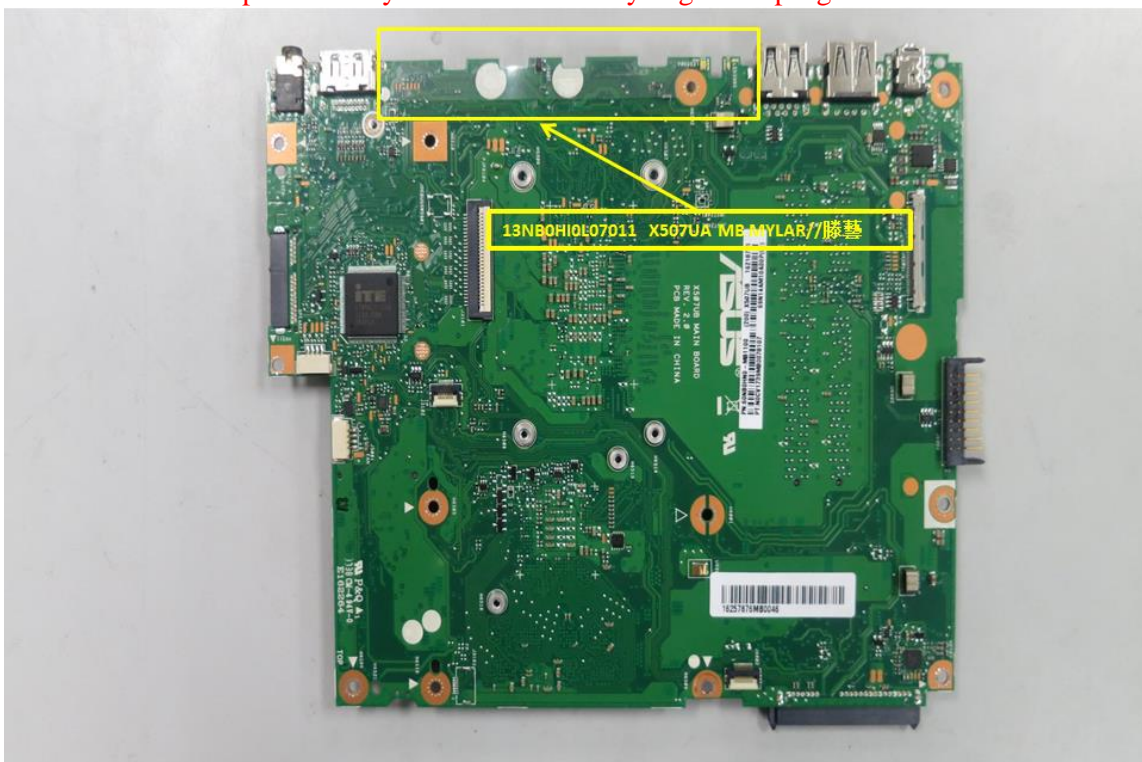


SCREW M2\*2.5L (5,0.5) (K) #1

Assembly notice: Please stick the 'WARRANTY VOID' label on SSD when reassemble SSD module as below sample picture.  
(PN: 15100-06131100 WARRANTY VOID (8mm) CYMMETRIK/V3.0)



Notice: These three pictures for your reference for mylar/gasket/sponge etc. of MB.



**Parts**

- X507UA SSD M2 2280 S3  
256G//MICRON/MTFDDAV256TBN-1AR1ZABYY \*1
- Total screw \*1

(Actual part name depends on different SKU.)

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## LCD Module

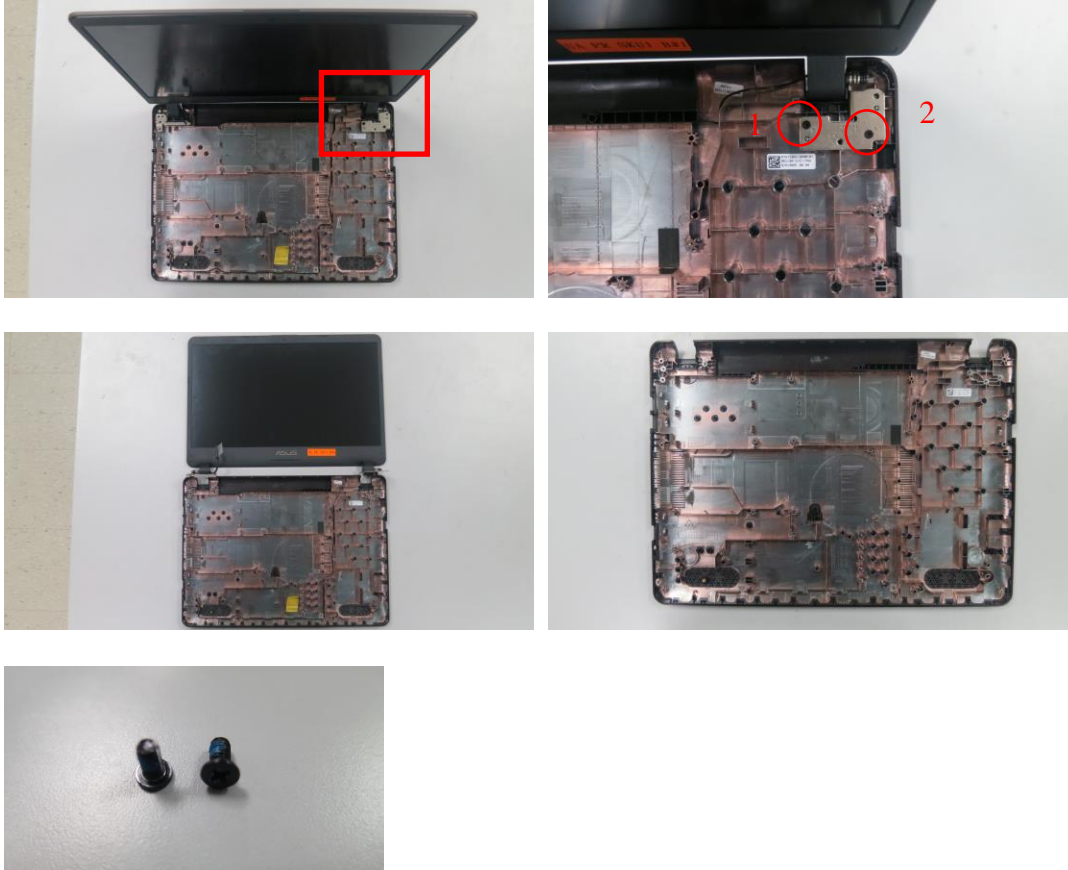
The illustrations below show how to remove and disassemble the LCD Module of the notebook.

### Remove LCD Module

1. Remove 2 screws (M2.5\*5L) on the right hinge and take it away.

Assembly Notice: follow the reverse numbers to lock screws.

Screw tightening torque: 2KG±0.2kgf.



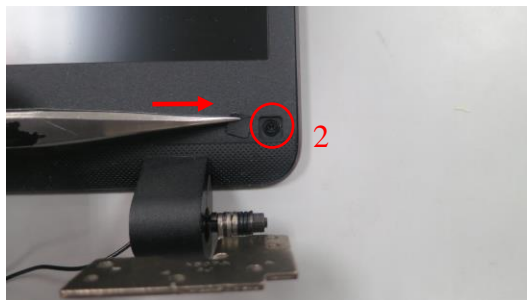
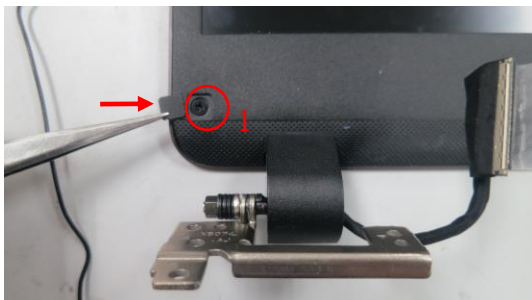
SCREW M2.5\*5L (K) B-ZN NY #1

2. Remove 2 LCD screw mylars. Then and follow below numbers to remove 2 screws (M2.5\*3.5L) on LCD front bezel.

Assembly Notice: follow the reverse numbers to lock screws.

Screw tightening torque: 2KG±0.2kgf.





## IMS 2.5X3.5 BNI+NY

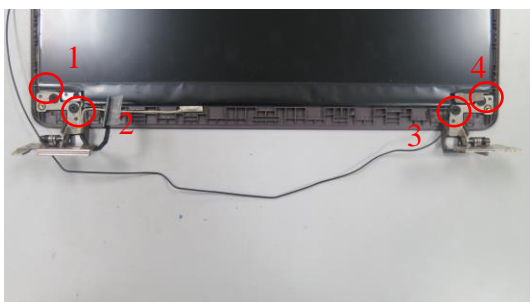
3. Use plastic blade to pry up the edge of the bezel, take the LCD front bezel away.



4. Remove the gasket on the hinge and follow below numbers to remove 4 screws (M2.5\*2.5L) on hinges and take them away.

Assembly Notice: follow the reverse numbers to lock screws.

Screw tightening torque: 2KG±0.2kgf.

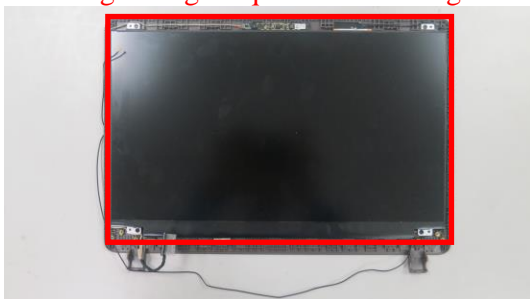


IMS 2.5X2.5 BZN+NY

5. Follow below numbers to remove 4 screws (M2\*2.5L) on LCD panel.

Assembly Notice: follow the reverse numbers to lock screws.

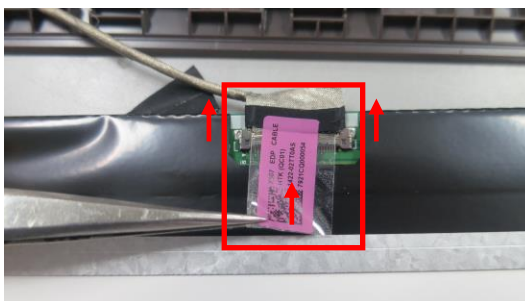
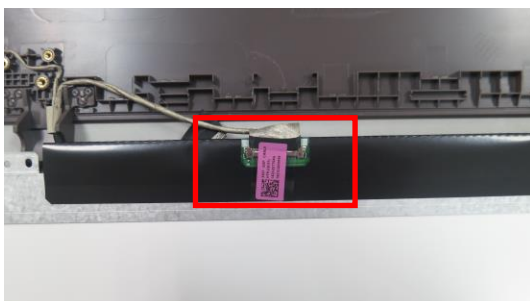
Screw tightening torque: 1.5KG±0.2kgf.



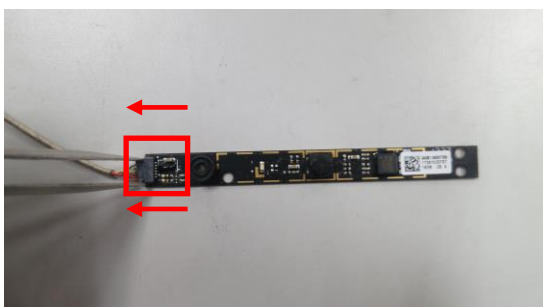


**SCREW M2\*2.5L (5,0.5) (K) #1**

6. Lift up the LCD panel and disconnect the EDP cable.

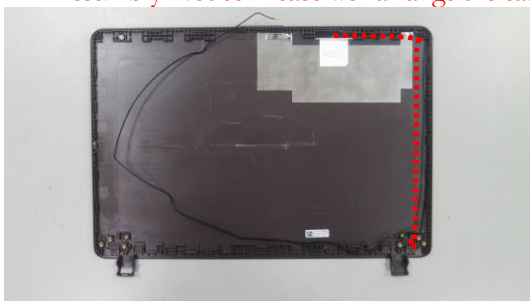


7. Tear off camera on the LCD cover and disconnect the camera cable  
 . Assembly Notice: Please well arrange the cables and put it in the hook slot as below.



8. Tear off the black antenna of WLAN on the LCD cover

*Assembly Notice: Please well arrange the cables and put it in the hook slot as below.*



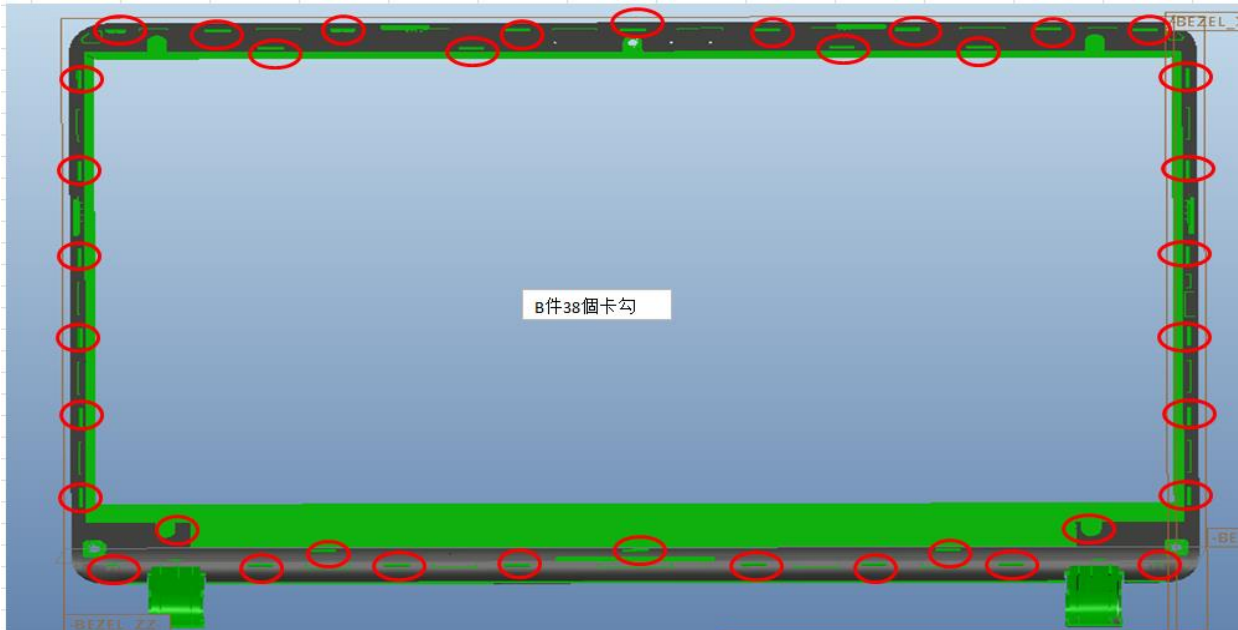




EN-0279084 changed the LCD cover and LCD panel as the below:  
The unit disassemble method same with above the steps.



Snap as below



## Parts

- LCD 15.6" FHD WVVA US EDP//LGD/LP156WF9-SPK2\*1
- X507UA-1C LCD COVER ASSY//CASETEK\*1
- X507 WIFI MAIN ANTENNA//HIGH TEK/0ACAU017005N\*1
- X507UA CAMERA MODULE VGA//AZWAVE/AM-6SF5A01-C \*1
- X507UA HINGE L&R//A&J //MPT\*1
- X507UA-1B LCD BEZEL ASSY//CASETEK\*1
- X507UA EDP CABLE//ASAP/LA05EW003-1H \*1
- X507UA-1C HINGE CAP//CASETEK\*2
- Total screw \*10

(Actual part name depends on different SKU.)

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## Gap Step

REV	DATE	UPDATE DESCRIPTION	REMARK	SIGN	APPROVE

GAP SPEC NO.	DESCRIPTION	GAP(mm) SPEC	STEP(mm) SPEC
1 (1-4)	BOTTOM CASE HINGE CAP	0.6~1.6	-0.5~+0.5
2 (1-4)	TOP CASE HINGE CAP	0.6~1.6	-0.5~+0.5
3	LCD COVER LCD BEZEL	0~0.5	N/A
4	TOP CASE BOTTOM CASE	0~0.35	-0.3~0.3
5	LCD BEZEL HINGE CAP	0~0.3	0~0.3
6 (LCD 100" )	LCD BEZEL LCD PANEL	0~1	N/A
7	TOP CASE TOUCH PAD MYLAR	0.05~0.4	-0.1~0.6
8 (1-4) LCD 120"	RUBBER FOOT GROUND	0~0.3	N/A
9(1-4)	LCD BEZEL HINGE CAP	0.6~1.6	-0.5~+0.5

MATERIAL(SPEC)			
SELECT V	UNIT	UNIT	UNIT
0-10	0.10	0.10	0.10
10-30	0.15	0.15	0.15
30-100	0.20	0.25	0.25
100-300	0.25	0.40	0.40
300-1000	0.40	0.60	0.60
1000-10000	0.50	0.80	0.80
ANG. TOL	°	0.5°	0.5°

SHEET SIZE	
A3	SCALE
0.250	UNIT
mm	mm

ASUSTeK COMPUTER INC.

DESCRIPTION

X507 GAP STEP

MODEL NO. X507

DESIGNED SANDY SU

PART NO.

CHECKED

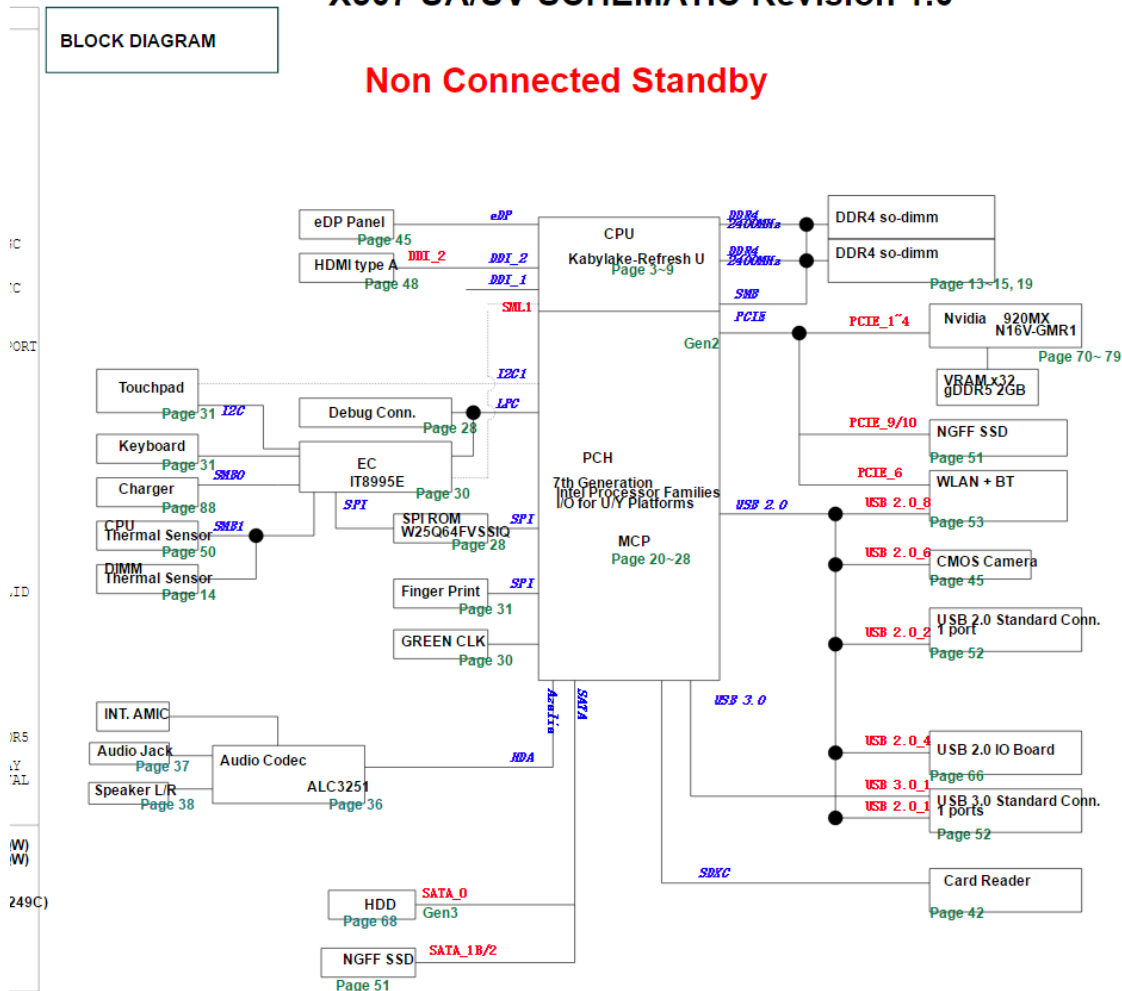
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APPROVED

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## Block Diagram

### X507 UA/UV SCHEMATIC Revision 1.0


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## Screw Torque

Screw Table								
Product :		Model : X507UA			Issued by : Sean_Wu		Issued date : 2017.10.12	
Location	分類	Part number	SPEC	耐落	數量	起子頭號數	扭力值(kgf-cm)	備註
鎖Panel	A/B件	13050-72802020	SCREW M2*2.5L (5,0.5) (K) #1	V	4	#1	1.5 kgf-cm	修正扭力
固定Hinge與A件		13050-B2802010	IMS 2.5X2.5 BZN+NY	V	4	#1	2 kgf-cm	
固定A/B件		13050-B2803100	IMS 2.5X3.5 BNI+NY	V	2	#1	2 kgf-cm	
固定TP Holder	C件	13050-70801010	SCREW M2*1.5L (7,0.4) (K) B-ZN	V	3	#0	1.5 kgf-cm	
固定Hinge與D件	D件	13GMBK3D050Z-1	SCREW M2.5*5L (K) B-ZN NY #1	V	5	#1	2 kgf-cm	
固定PCB與D件(5) 固定HDD BKT與D件(1) 固定USB小板(1) 固定風扇(1)		13GMBKXC050Z-1	SCREW M2*5L(4.6,0.8) (K) B-ZN	V	8	#1	2 kgf-cm	
固定PCB與D件(1)最後鎖導通用		13050-72605020	SCREW M2*5L (7,2.3) (K) #1	V	1	#1	2.5 kgf-cm	10/12修正螺絲Spec. 及扭力
固定WiFi卡與D件(1)		13050-72503400	SCREW M2*2.1L+1.0(4.5,0.8) (K)	V	1	#1	2 kgf-cm	
固定C/D件 前蓋(4)		13GMBKXC062B-1	SCREW M2*6L (K,D4.6)(K) B-NI,NY	V	4	#1	2 kgf-cm	
固定C/D件 中間兩側		13GMBKXC080B-1	SCREW M2*8L (K) B-NI,NY	V	2	#1	2 kgf-cm	
固定C/D件 後端兩側		13GMBKXD100B-1	SCREW M2.5*10L (K) B-NI	V	2	#1	2 kgf-cm	
固定C/D件 後端及正中心		13050-72611100	SCREW M2*11L (4.5,0.8) (K) #1 B-NI	V	3	#1	2 kgf-cm	
鎖SSD		13050-72802020	SCREW M2*2.5L (5,0.5) (K) #1	V	1	#1	2 kgf-cm	10/12 修改SSD螺絲Spec.
鎖Heatsink	PCB	13GMBK3C036Z-1	SCREW M2*3L (K) B-ZN,NY #1	V	6或4或2	#1	2 kgf-cm	
鎖HDD Bracket	其他	13GMBKXF030Z-1	SCREW M3*3L (K) B-ZN,NY	V	4	#1	2 kgf-cm	

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