

Acer Chromebook CB514-6H, CB514-6HT, CBE594-3, CBE594-3-TCO, CBE594-3T, CBE594-3T-TCO

Roric_TKN

Lifecycle Extension Guide

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Self-Repair

This chapter highlights the limited self-repair capabilities of the product.

Prior performing self-repair, familiarize yourself with the Safety Guidelines and Recommended Equipment sections first as described in the chapter "Disassembly Procedures".

Depending on model, the following key components are eligible for self-repair (if applicable)

- Battery pack
- HDD/SSD module
- WLAN module

If a particular key component is listed and thus would be eligible for self-repair, but is not described in the "Disassembly Procedures" section, then this component is either not present on the respective model, or it is present but embedded on the motherboard and therefore not eligible for self-repair.

⇒ NOTE:

Do not attempt to replace other components than those listed above

⇒ NOTE:

For replacement parts, always use only Acer certified components in order to safeguard quality, optimum system performance, stability and reliability of the product.

⇒ NOTE:

Any damage to the product that occur during self-repair, or which has occurred as a result of a careless or unsuccessful self-repair attempt, is not covered by the standard product warra

Machine Disassembly and Replacement

Introduction

This chapter contains general information about the computer, a list of tools needed to do the required maintenance and step by step procedures on how to remove and install components from the computer.

General Information

The product previews seen in the following procedures may not represent the final product color or configuration. Cable paths and positioning may also differ from the actual model. During the removal and installation of components, make sure all available cable channels and clips are used and that the cables are installed in the same position.

All prerequisites must be completed prior to starting maintenance.

Recommended Equipment

The following equipment are recommended to do the following maintenance procedures:

- Wrist grounding strap and conductive mat
- Flat screwdriver
- Philips screwdriver
- Polydrive screwdriver
- Plastic tweezers
- Flat plastic pry

Replacement Requirements

Do the following prior to starting any maintenance procedures:

1. Place the system on a stable work surface.
2. Remove the power adapter from the USB Type-C port (A) as shown in Figure 3-1 or from the USB-C port (B) as shown in Figure 3-2.

3. Remove all cables from system.



Figure 3-1. AC Adapter Outlet

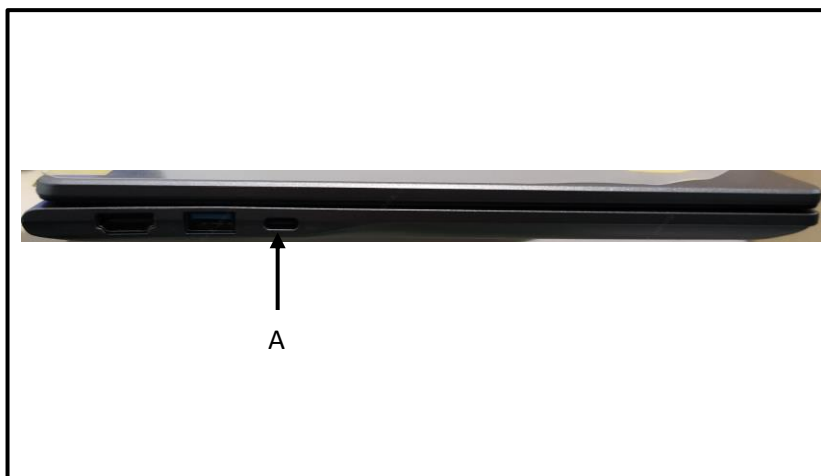


Figure 3-2. AC Adapter Outlet

⇒ **NOTE:**

Make sure the system is completely powered off.

Disassembly Process

The disassembly process is divided into the following sections:

- Main unit disassembly
- LCD module disassembly

The flowcharts provided in the succeeding disassembly sections illustrate the entire disassembly sequence. Observe the order of the sequence to avoid damage to any of the hardware components. For example, when removing the mainboard, remove first the Base Cover, Battery, and Keyboard in that order.

Table 3-1. Main Screw List

Size	Quantity	Acer Part No.
SCREW_M2.0MM_L2.5MM_D4.5MM_T0.5MM	2	86.J02N8.001
SCREW_M2.0MM*L2.3MM_D7.5MM_T0.6MM	8	86.KT8N8.002
SCREW_M2.5MM*L4MM_D4.5MM_T0.8M	6	86.KKAN8.003
SCREW_M2.0MM*L3.5MM_D5.0MM_T0.5MM	5	86.KKAN8.002
SCREW_M2.0MM_L6.0MM_D4.5MM_T0.8MM	10	86.KKAN8.006
SCREW_M2.0MM_L3.5MM_D4.0MM_T0.6MM	1	86.JFCN8.001
SCREW_M1.6MM*L1.7MM_D5.5MM_T0.5MM	3	86.KVPN8.002
SCREW_M2.0MM*L2.5MM_D5.0MM_T0.5MM	5	86.KT8N8.001

Main Unit Disassembly Flowchart

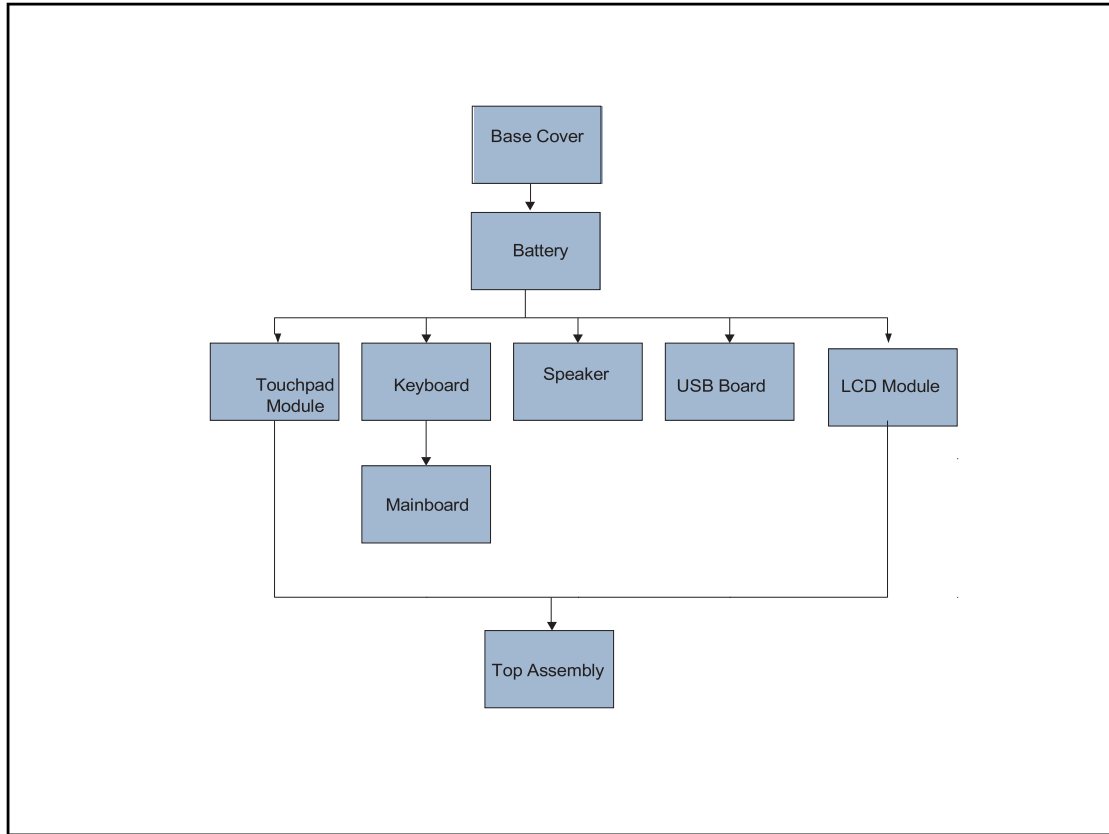


Table 3-2. Main Unit Screw List

Step	Size	Quantity	Acer Part No.
Base Cover Removal	M2.0*6.0	10(Base Cover)	86.KKAN8.006
Touchpad Removal	M1.6*1.7	3(Touchpad)	86.KVPN8.002
Thermal and SSD Removal	M2*2.5	4(Thermal)	86.KT8N8.001
		1(SSD)	86.KT8N8.001
MB BKT remove	M2*3.5	1(MB BKT)	86.JFCN8.001
Hinge to C cover remove	M2.5*4	6(hinge)	86.KKAN8.003
Battery, FAN and MB remove	M2*3.5	2(battery)	86.KKAN8.002
	M2*3.5	2(fan)	86.KKAN8.002
	M2*3.5	1(MB)	86.KKAN8.002

Base Cover Removal

1. Remove twelve (10) screws from the base cover (Figure 3-3).

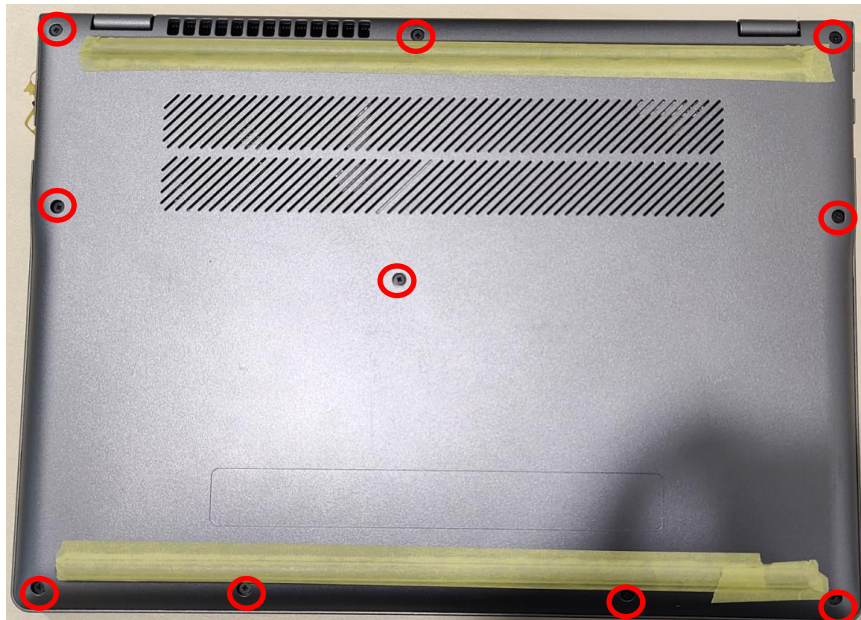


Figure 3-3. Base Cover Removal

2. Carefully pry up the base cover starting from the upper side to release the latches. Then continue releasing the remaining latches on the left, right, and bottom sides (Figure 3-4).

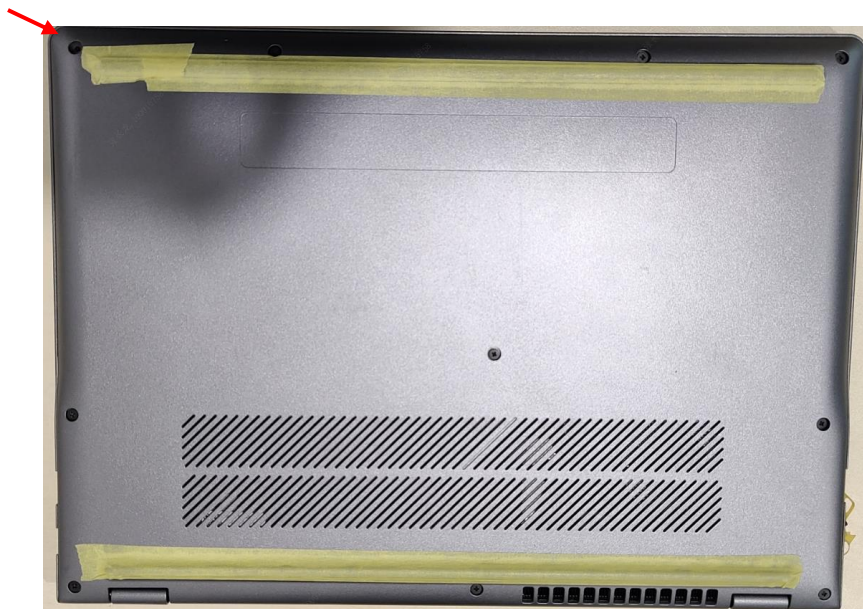


Figure 3-4. Base Cover Removal

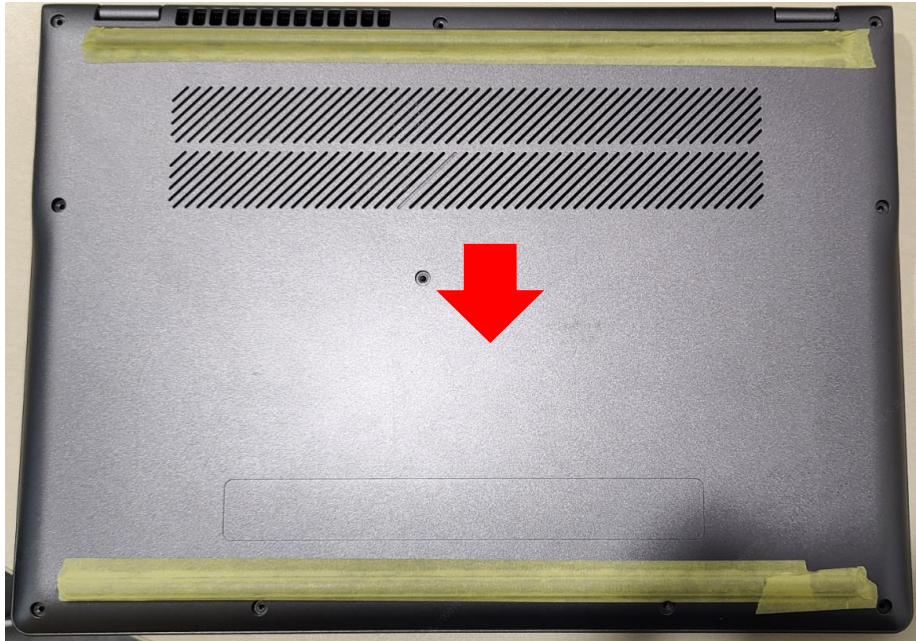



Figure 3-5. Base Cover Removal

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L6.0	2.0±15%kgf-cm	10 (base cover)	

Removing the Battery

Prerequisite:

Base Cover Removal

1. Find the battery pack (A) on the top assembly (Figure 3-6).
2. Detach the mylar (B) securing the mainboard connector (Figure 3-6).

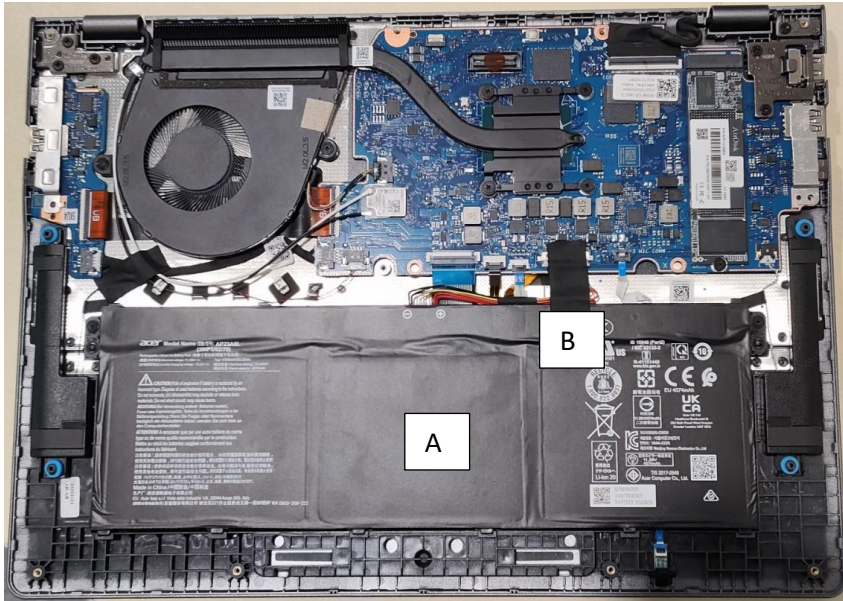


Figure 3-6. Battery Pack Removal

3. Detach the transparent mylar (C) securing the battery cable (Figure 3-7).
4. Disconnect the battery cable from the mainboard connector (C) (Figure 3-7).

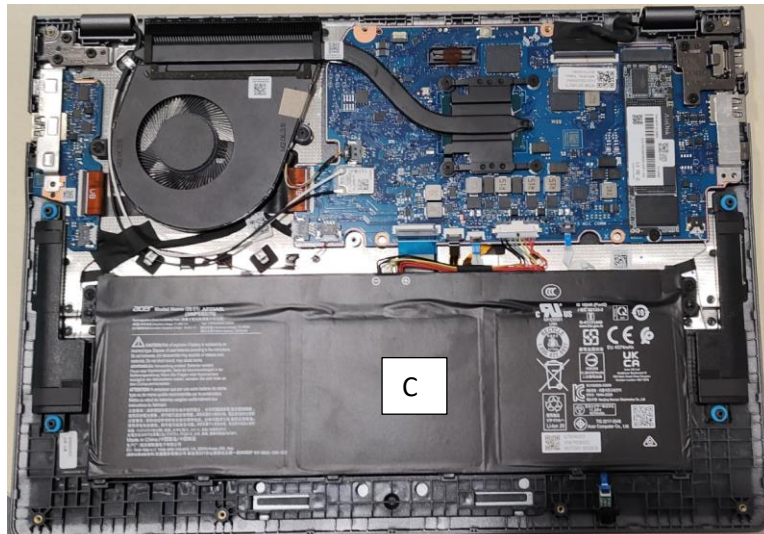



Figure 3-7. Battery Pack Removal

- Remove two (2) screws securing the Battery (Figure 3-8).



Figure 3-8. Battery Pack Removal

ID	Size	Torque	Quantity	Screw Type
Orange Call out	M2.0*L3.5	2.0+20%kgf-cm	2	

- Lift to release the battery pack from the guide pins (F) (Figure 3-9). Then remove the battery pack from the top assembly.



Figure 3-9. Battery Pack Removal

+ IMPORTANT:

Follow local regulations for battery disposal.

Touchpad Module Removal

Prerequisite:

Battery Pack Removal

1. Detach the adhesive tape (A) securing the touchpad FFC on the touchpad module. (Figure 3-10).

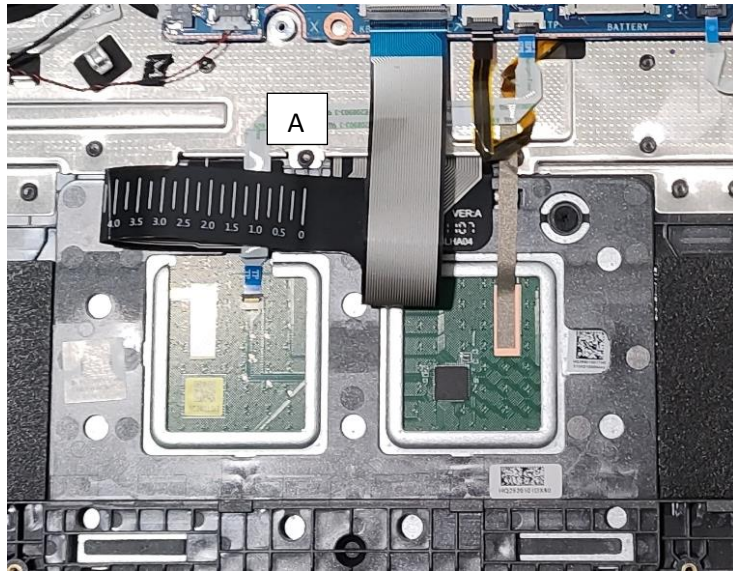


Figure 3-10. Touchpad Module Removal

2. Disconnect the touchpad FFC (B) from the touchpad module and mainboard connectors. Then carefully detach the FFC from its underneath adhesive to remove it from the top assembly (Figure 3-11).

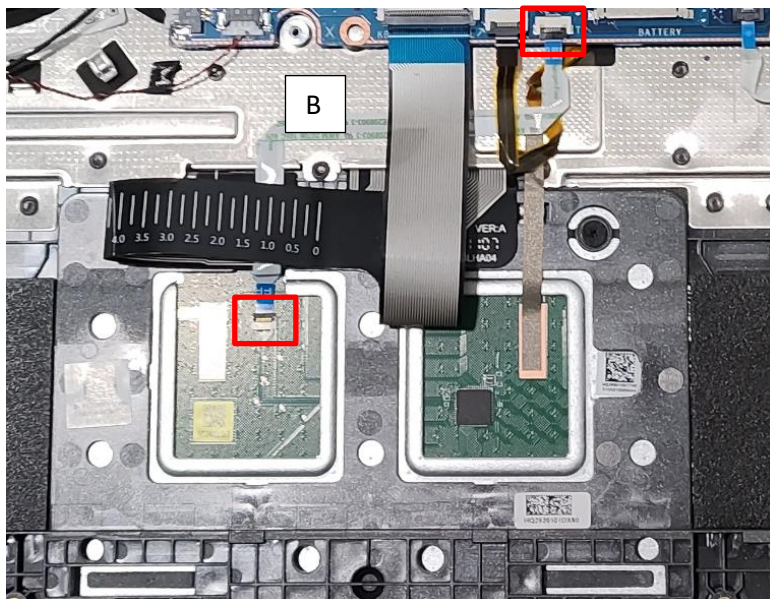


Figure 3-11. Touchpad Module Removal

⚠ CAUTION:

Touchpad FFC (Flexible Flat Circuit) can be damaged if removed while the mainboard and touchpad module connectors are locked.

3. Detach the conductive tape (C) from the touchpad module (Figure 3-12).

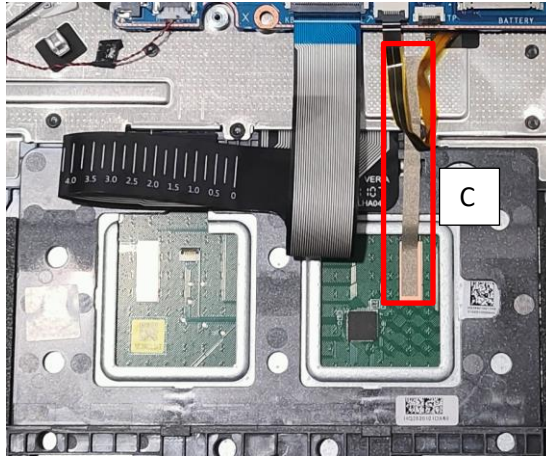


Figure 3-12. Touchpad Module Removal

4. Remove three (3) screws securing the touchpad module (Figure 3-13).

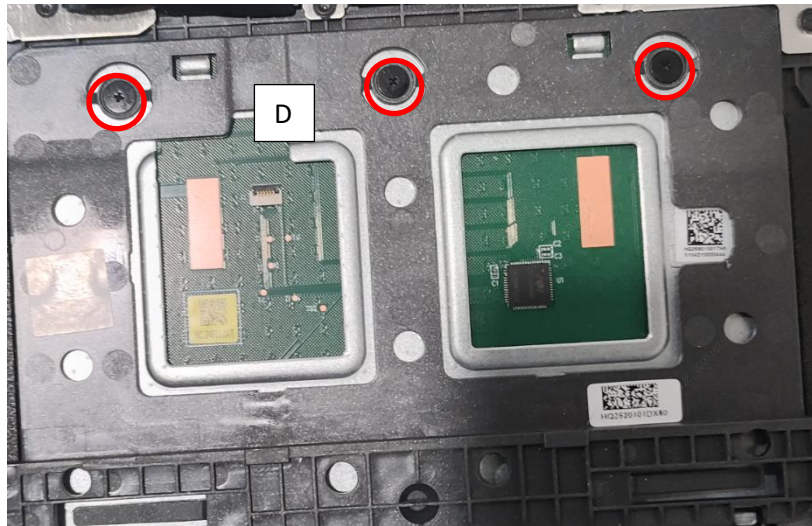



Figure 3-13. Touchpad Module Removal

ID	Size	Torque	Quantity	Screw Type
Red Call out	M1.6*L1.7	2.0+20%kgf-cm	3	

5. Using the screwdriver, push the guide pins (D) firmly to release them from the top assembly (Figure 3-14).
6. Slide the touchpad module slightly to disengage it from the bottom latches (E), and then remove the touchpad module from the top assembly (Figure 3-14).

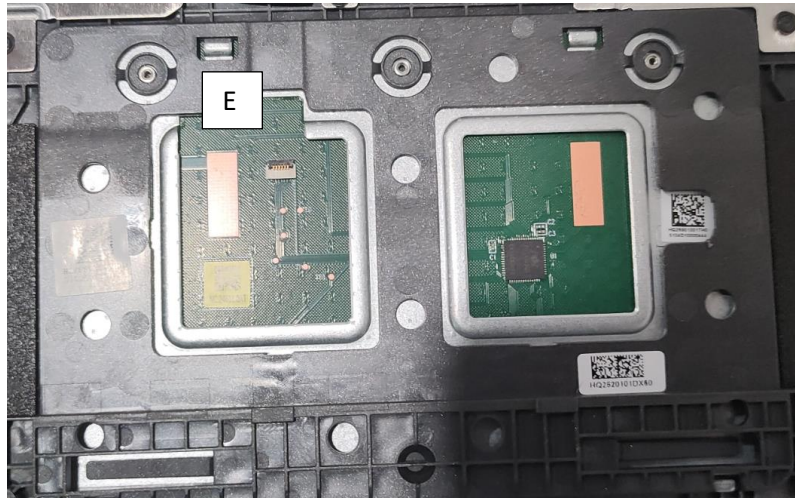


Figure 3-14. Touchpad Module Removal

Removing SSD

Prerequisite:

Battery Pack Removal

1. Unscrew the screws on the MB. (Figure 3-15).

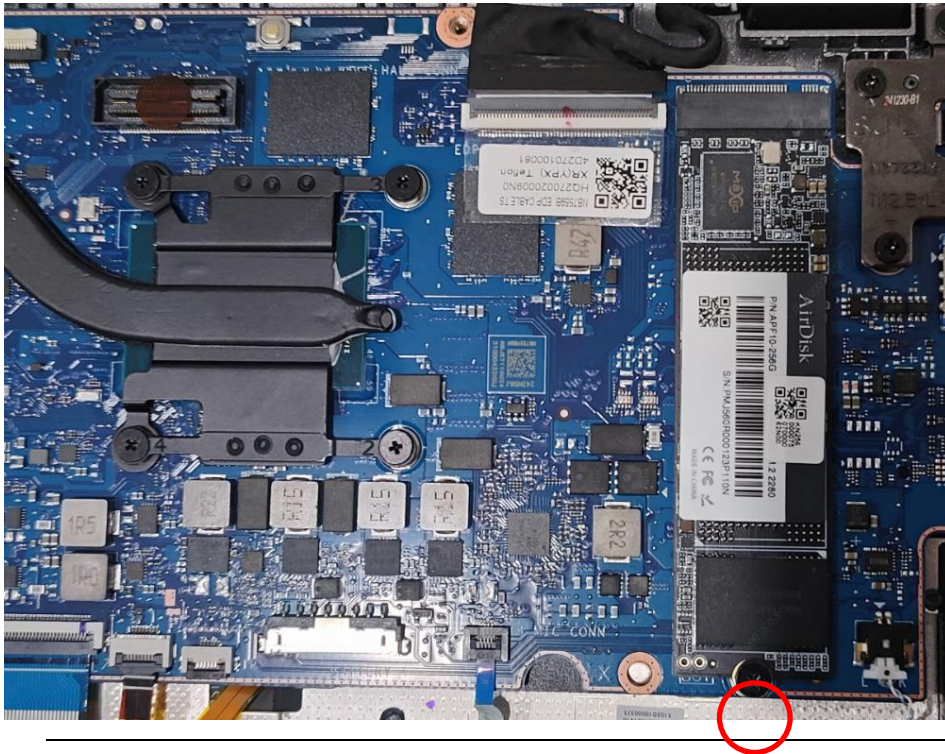



Figure 3-15. SSD Removal

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L3.5	2.0±15%kgf-cm	1	

2. Remove the SSD from MB (Figure 3-16).



Figure 3-16. SSD Removal

Speaker Module Removal

Prerequisite:

Battery Pack Removal

1. Find the speaker module (A) on the top assembly (Figure 3-20).
2. Disconnect the left speaker cable from the mainboard connector (B) (Figure 3-20).
3. Disconnect the right speaker cable from the mainboard connector (C) (Figure 3-20).

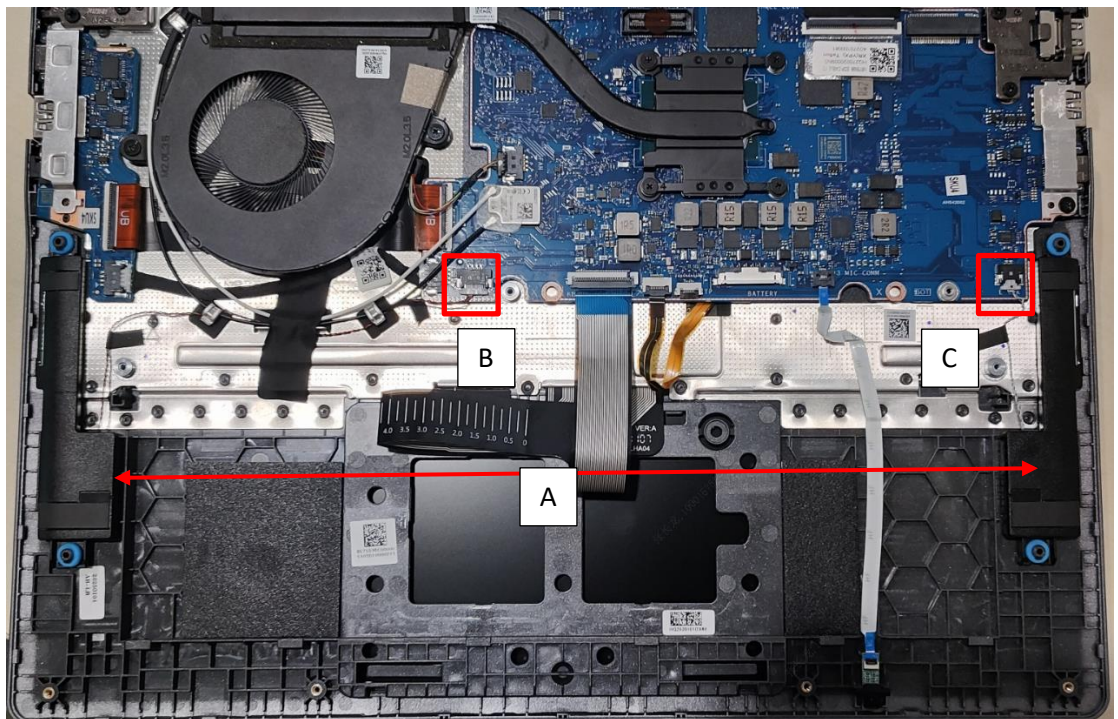


Figure 3-20. Speaker Module Removal

4. Lift the speakers to release them from the guide pins (D) (Figure 3-21). Then remove the speakers from the top assembly.

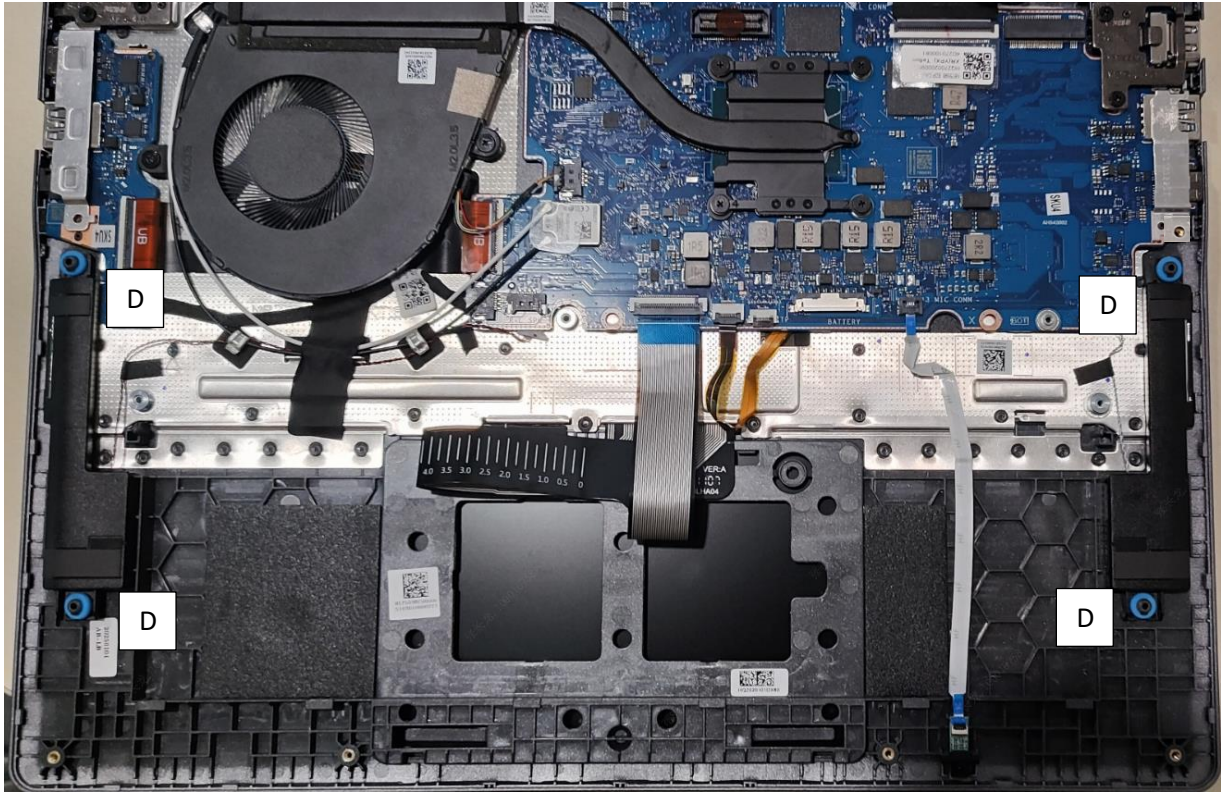


Figure 3-21. Speaker Module Removal

Removing THERMAL

Prerequisite:

Battery Pack Removal

1. Unscrew the screws on the MB. (Figure 3-22).

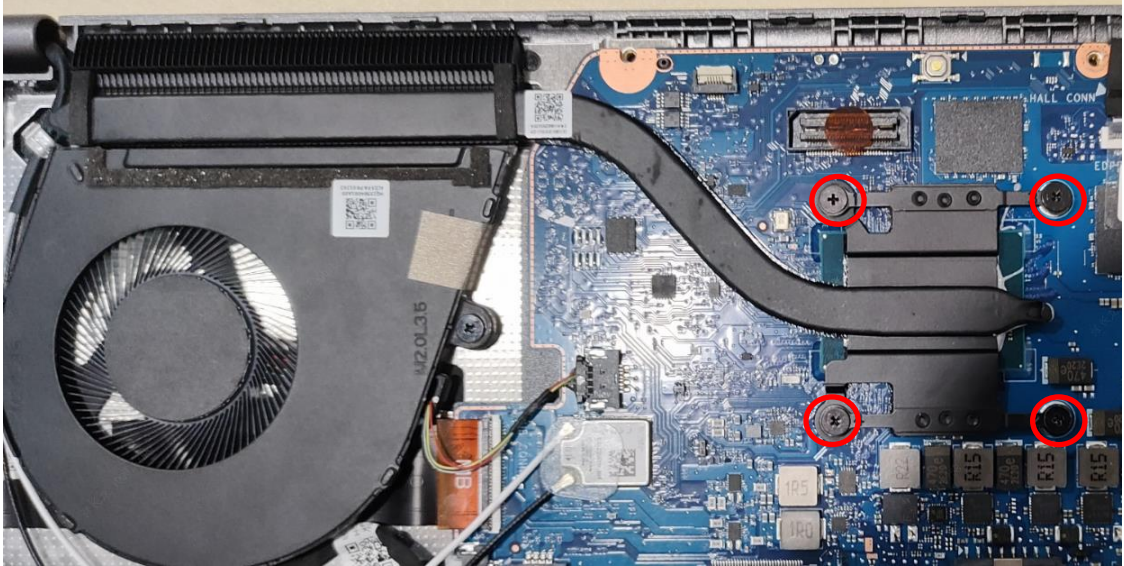



Figure 3-22. THERMAL Removal

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L3.5	2.0±15%kgf-cm	4	

2. Remove the THERMAL from MB (Figure 3-23).

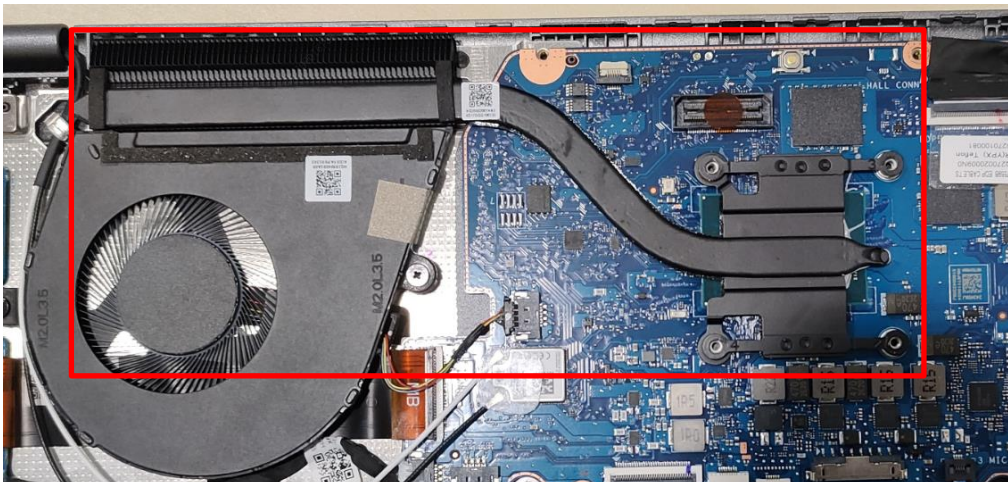


Figure 3-23. THERMAL Removal

Removing FAN

Prerequisite:

Battery Pack Removal

1. Unscrew the screws on the MB and disconnect FAN connect. (Figure 3-24).

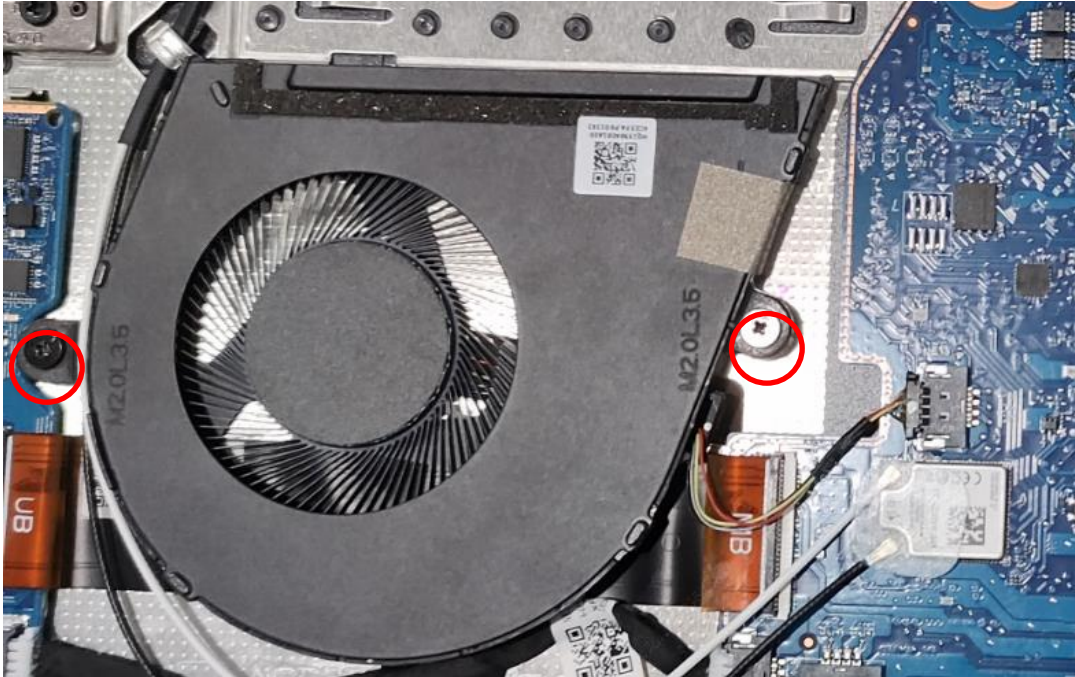



Figure 3-24. SSD Removal

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L3.5	2.0±15%kgf-cm	2	

2. Remove the FAN from C cover (Figure 3-25).

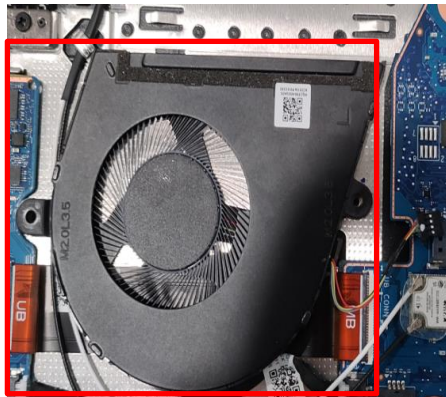


Figure 3-25. SSD Removal

3. Remove the FAN tape from FAN (Figure 3-26).



Figure 3-26. FAN Removal

Removing uppercase

Prerequisite:

Battery Pack Removal

1. Disconnect LCD connect on the MB, remove tape and disconnect WLAN connect. (Figure 3-26).

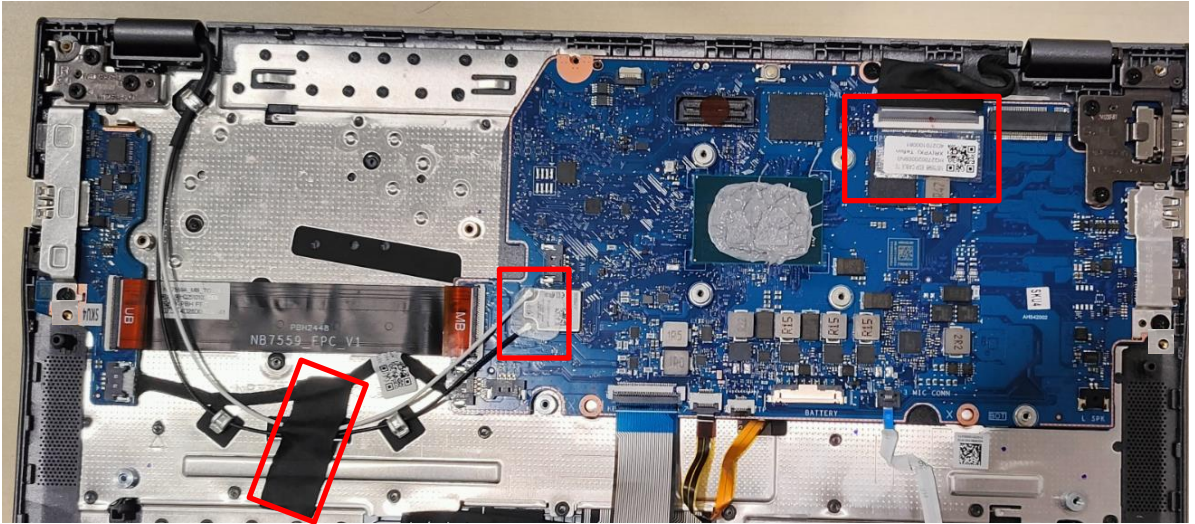


Figure 3-24. uppercase Removal

2. Unscrew the screws on the uppercase (Figure 3-25).

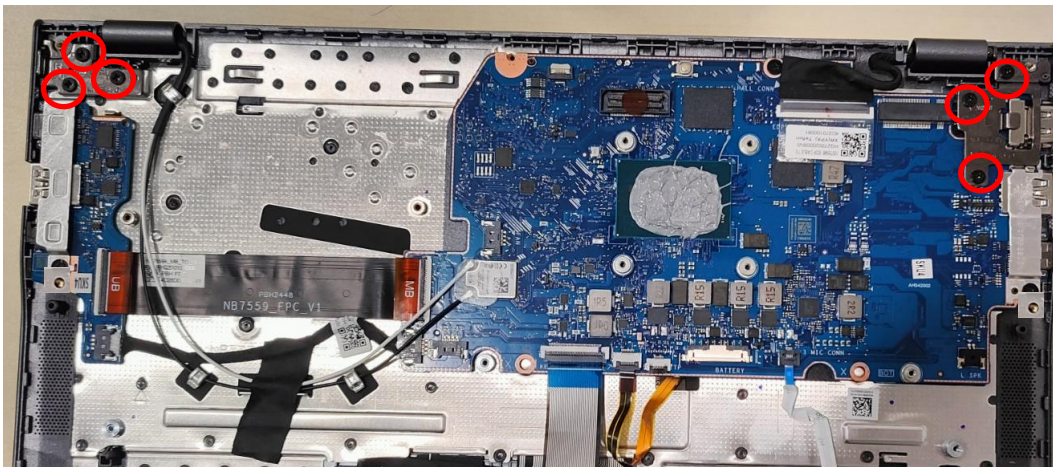



Figure 3-25. uppercase Removal

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L6.0	2.0±15%kgf-cm	6	

USB Board Removal

Prerequisite:

Battery Pack Removal

1. Disconnect the USB board L CABLE (A) from the USB board (Figure 3-22). remove UB cable (B) and from the top assembly.

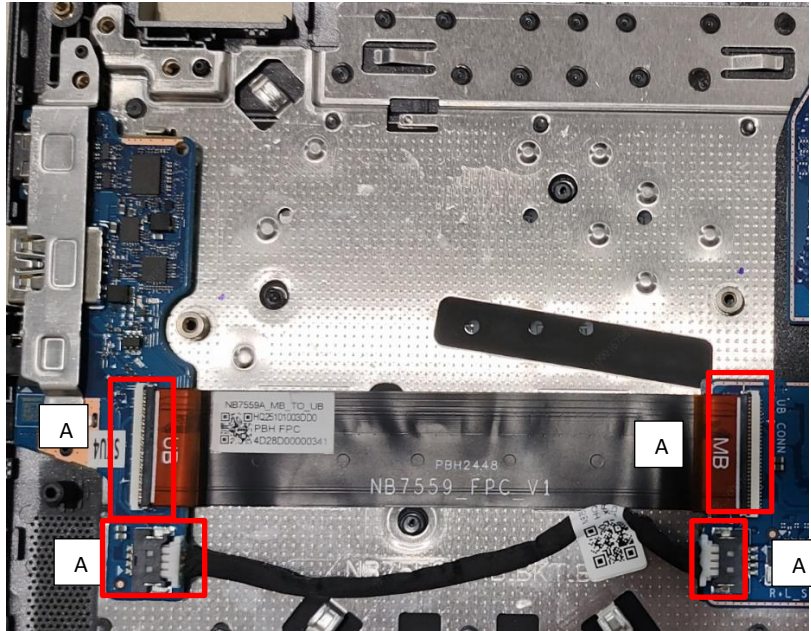


Figure 3-22. USB Board Removal

⚠ CAUTION:

USB board L FFC (Flexible Flat Circuit) can be damaged if removed while the USB board and mainboard connectors are locked.

2. Release the I/O bracket (F) from the I/O port slot and guide pins on the top assembly (Figure 3-24). Then remove the I/O bracket.

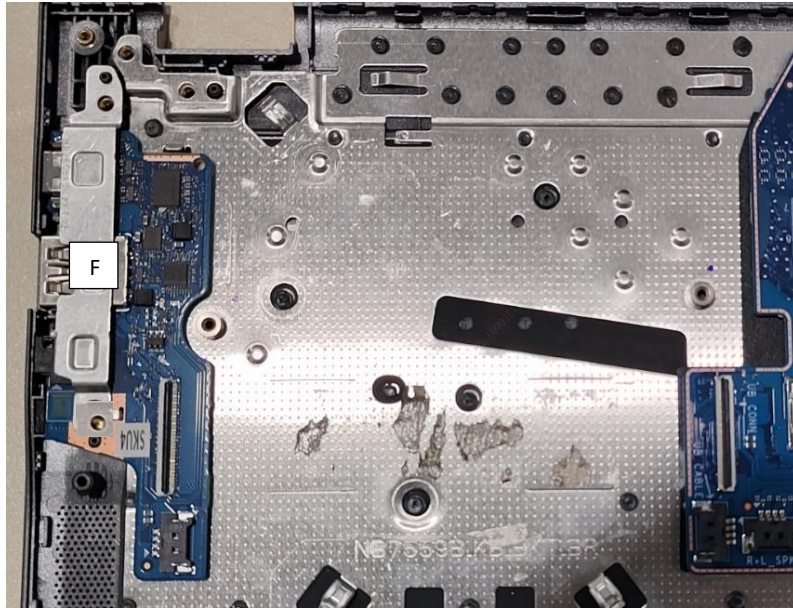


Figure 3-24. USB Board Removal

3. Release the USB board (G) from the I/O port slots and guide pins (H) on the top assembly (Figure 3-25). Then remove the USB board.

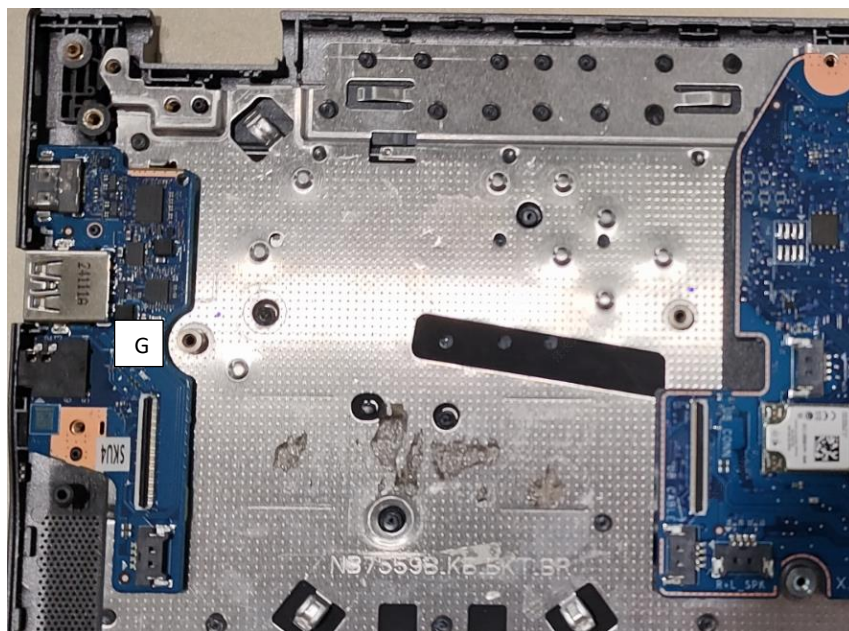


Figure 3-25. USB Board Removal

Mainboard Removal

Prerequisite:

Keyboard Removal

1. Remove two (2) screws A and one (1) screws B (Figure 3-32).

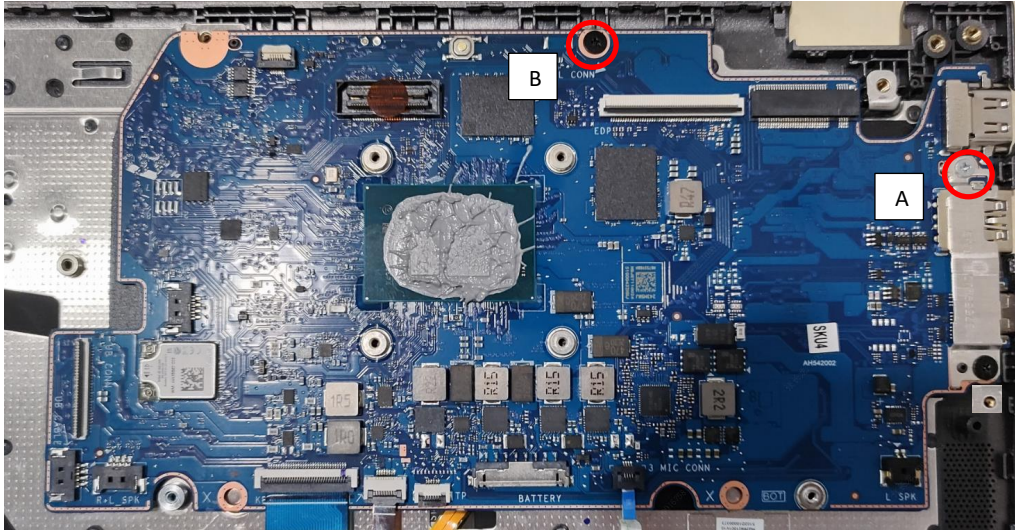




Figure 3-32. Mainboard Removal

ID	Size	Torque	Quantity	Screw Type
A	M2.0*L3.5	3.0±15%kgf-cm	1	
B	M2.0*L3.5	2.0+20%kgf-cm	1	

2. Remove MB IO BKT (Figure 3-33).

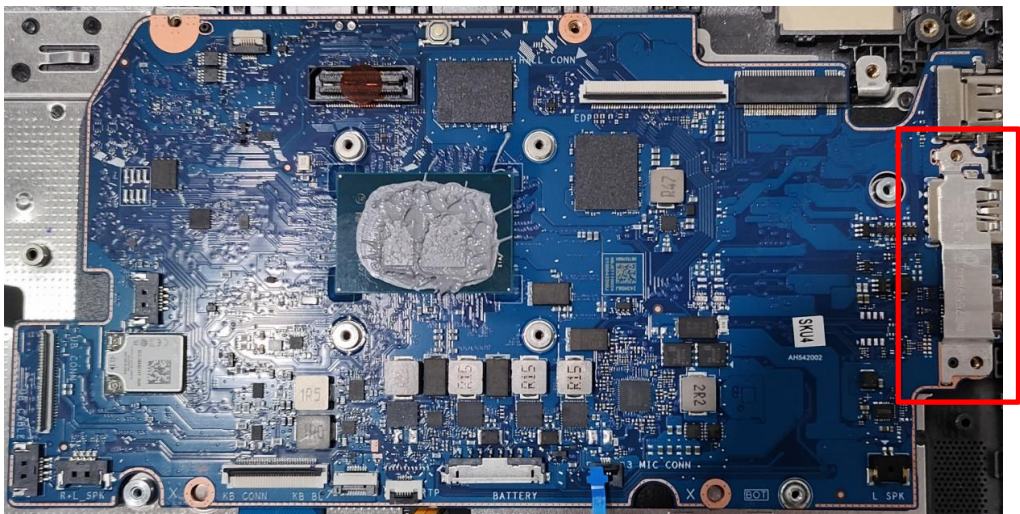


Figure 3-33. Mainboard Removal

⚠ CAUTION:

Touchpad FFC (Flexible Flat Circuit) and USB board L FFC, can be damaged if removed while the mainboard connectors are locked.

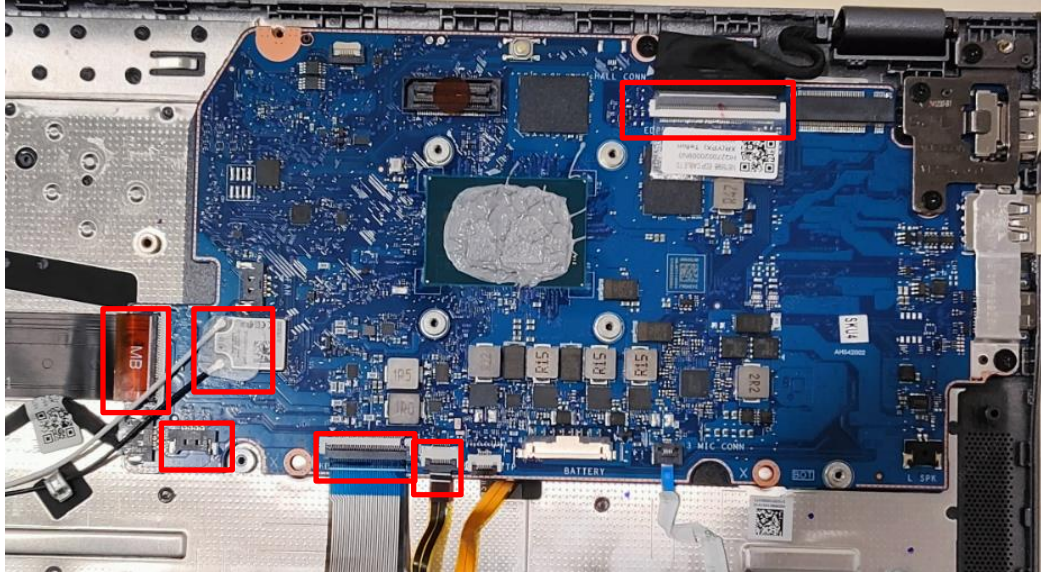


Figure 3-34. Mainboard Removal

3. Release the mainboard from the I/O ports slots and guide pins on the top assembly (Figure 3-37). Remove UB FFC, Then remove the mainboard.

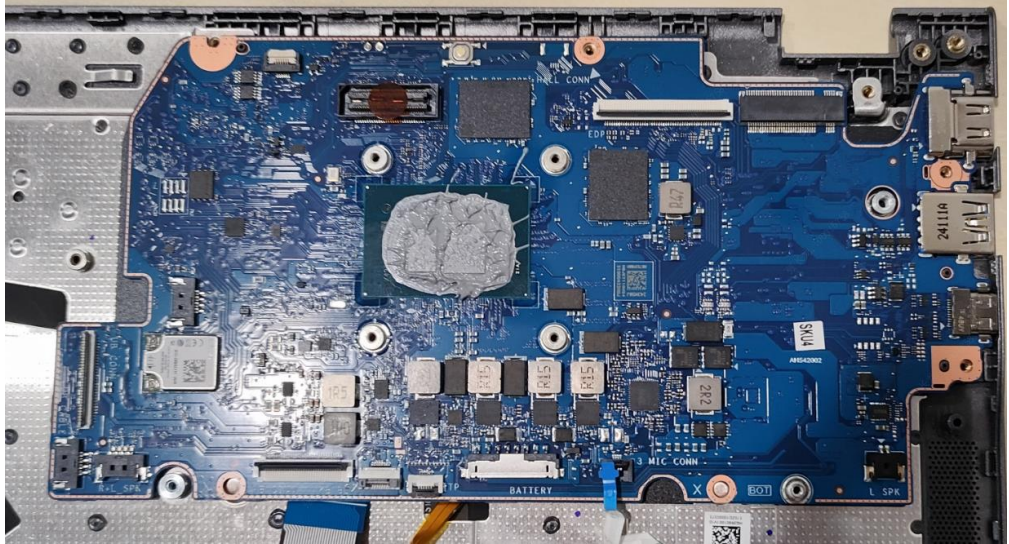


Figure 3-37. Mainboard Removal

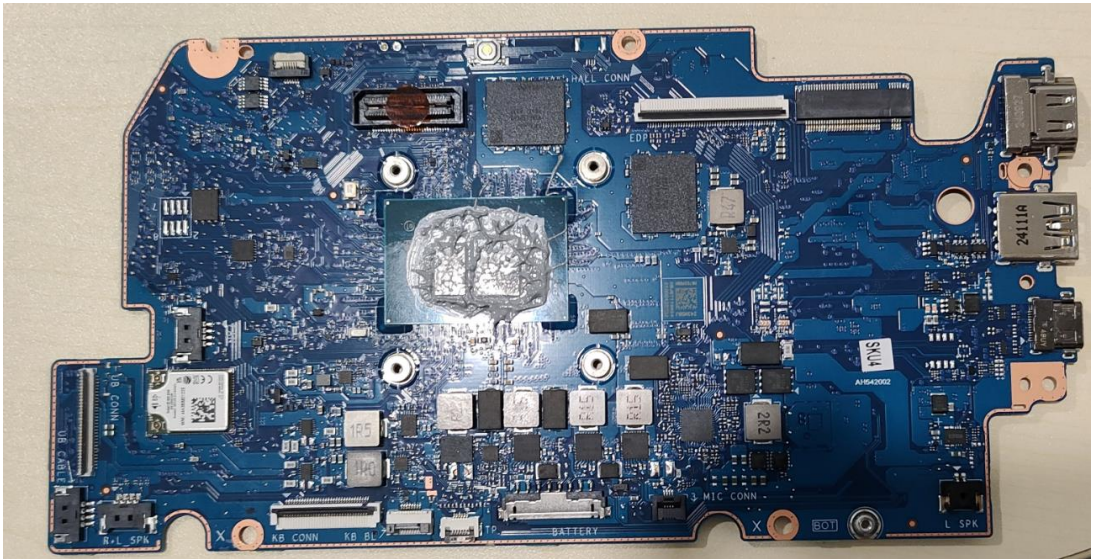


Figure 3-38. Mainboard

+ **IMPORTANT:**

Circuit boards >10 cm² have been highlighted with a yellow rectangle as shown in Figure 3-40. Remove the circuit board and follow local regulations for disposal.

Removing 3RD MIC

Prerequisite:

Battery Pack Removal

1. Disconnect 3RD connect and remove 3RD FFC. (Figure 3-29).

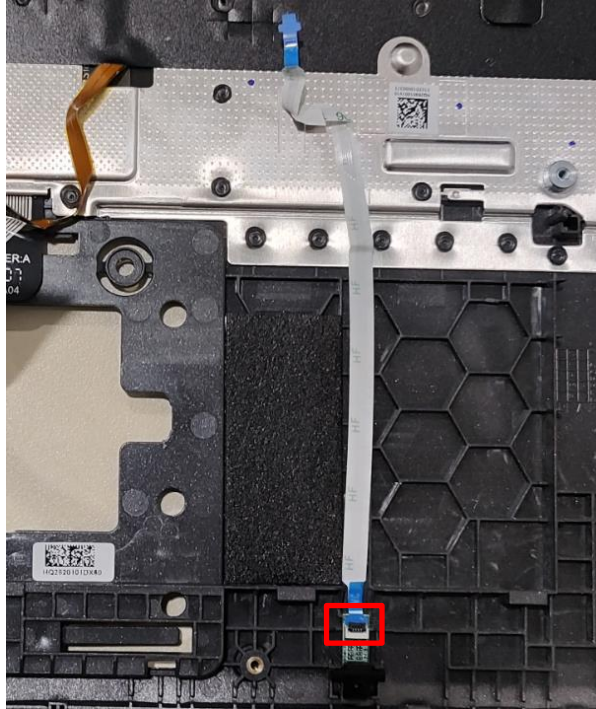


Figure 3-29. 3RD MIC Removal

2. Remove the 3RD MIC rubber and 3RD MIC from C cover (Figure 3-30).

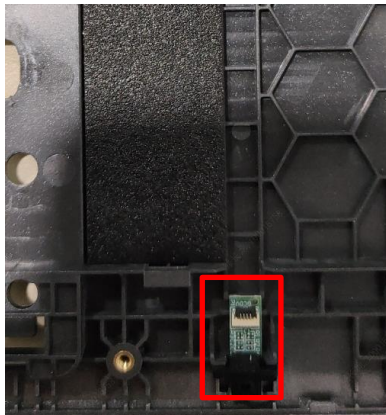


Figure 3-30. 3RD MIC Removal

Top Assembly Removal

Prerequisite:

Touchpad Module Removal, Speaker Module Removal, USB Board Removal, LCD Module Removal, Mainboard Removal, and Top Camera Module Removal



Figure 3-39. Top Assembly

LCD Module Disassembly Process

LCD Module Disassembly Flowchart

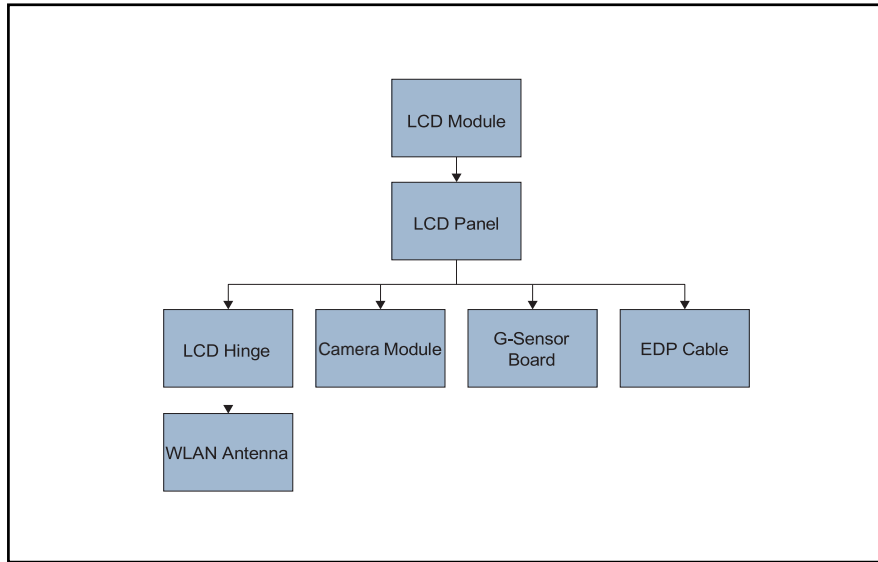


Table 3-3. LCD Module Screw List

Step	Size	Quantity	Acer Part No.
LCD Hinges Removal	M2*2.3	8	86.KT8N8.002
LCD Hinges Removal	M2*2.5	2	86.J02N8.001

LCD Panel Removal

Prerequisite:

LCD Module Removal

1. Remove the bezel from LCD module (Figure 3-40).



Figure 3-40. LCD Panel Removal

2. Remove the LCD ADHESIVE from LCD cover.



Figure 3-41. LCD Panel Removal

3. Remove the EDP cable from LCD.

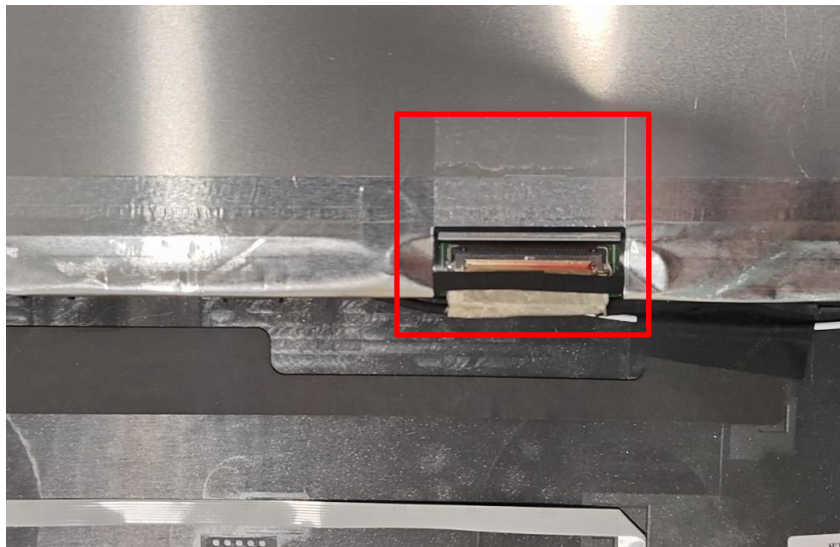


Figure 3-41. LCD Panel Removal

LCD Hinges Removal


Prerequisite:

LCD Panel Removal

1. Remove two (2) screws and remove hinge CAP.



Figure 3-45. LCD Hinges Removal

ID	Size	Torque	Quantity	Screw Type
LCD Cover	M2.0*L2.3	2.0+20%kgf-cm	2	

2. Remove eight (6) screws securing the LCD hinges to the LCD cover (Figure 3-49).

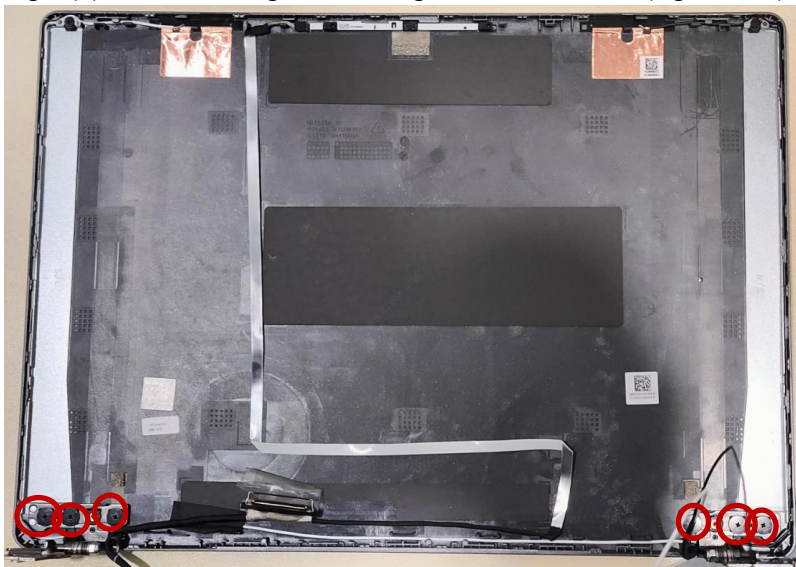



Figure 3-46. LCD Hinges Removal

ID	Size	Torque	Quantity	Screw Type
LCD Cover	M2.0*L2.3	2.0+20%kgf-cm	6	

3. Remove 2 screws securing the LCD hinge to the LCD cover (Figure 3-47).

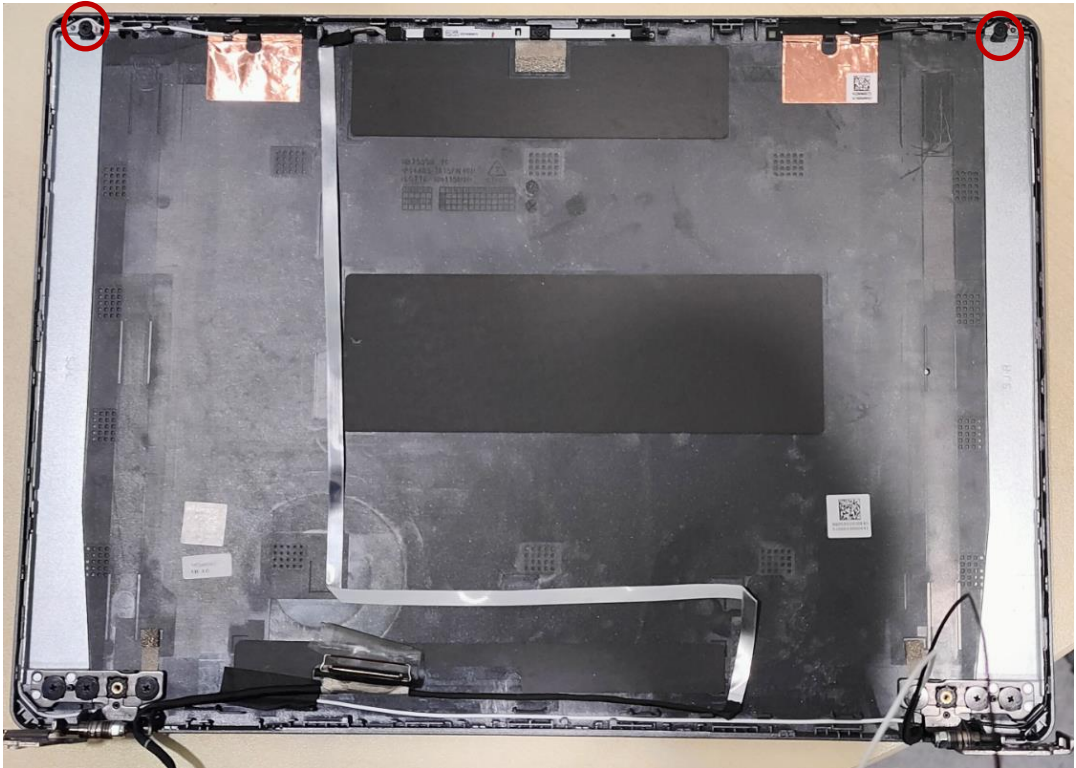



Figure 3-47. LCD Hinges Removal

ID	Size	Torque	Quantity	Screw Type
LCD Cover	M2.0*L2.5	2.0+20%kgf-cm	2	

4. Remove the hinge from LCD cover ([Figure 3-48](#)).

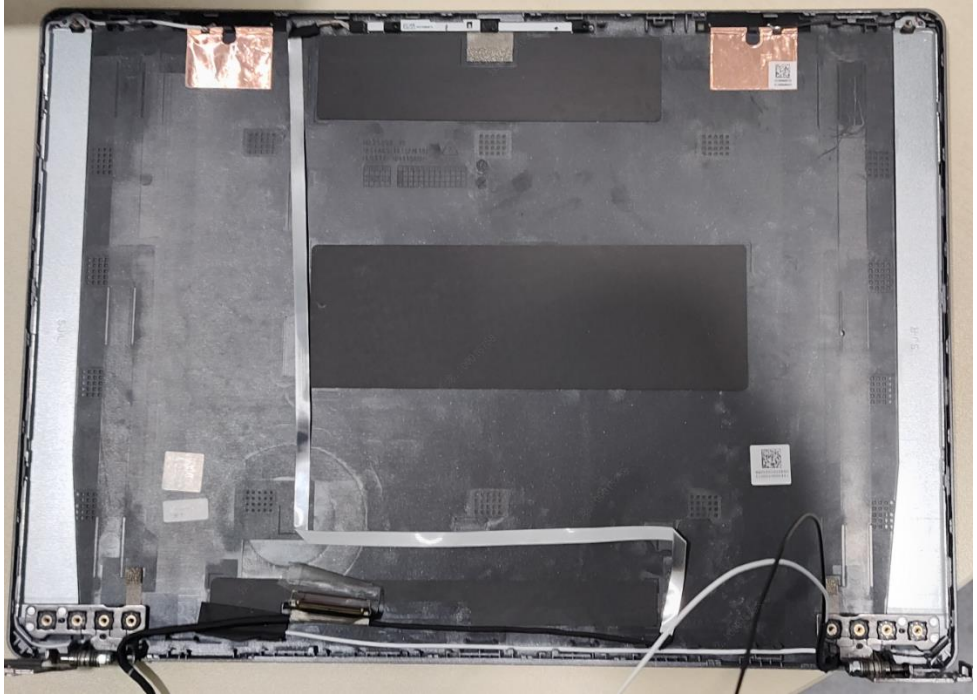


Figure 3-48. LCD Hinges Removal

WLAN Antenna Removal

Prerequisite:

LCD Hinges Removal

1. Remove the WLAN antennas cables from the cable guides on the LCD cover as shown in Figure 3-49.

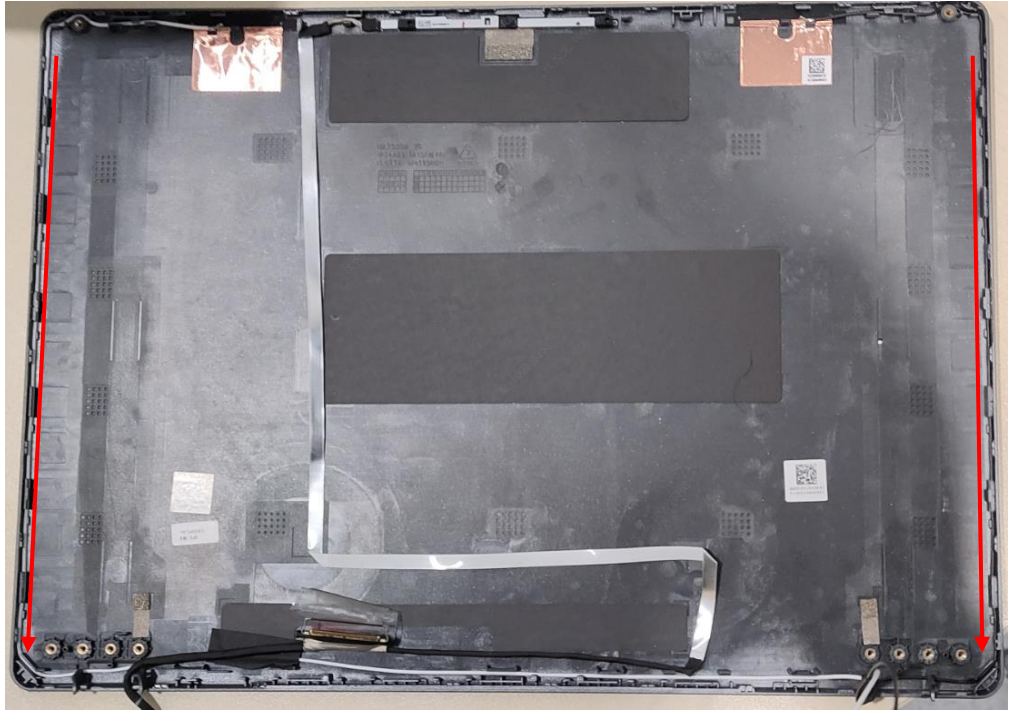


Figure 3-49. WLAN Antenna Removal

2. Gently peel off the MAIN antenna and its grounding foil (Figure 3-50). Then remove the MAIN antenna from the LCD cover.

⚠ CAUTION:

Use care not to damage the antenna PCB circuit area when the grounding foil is removed.

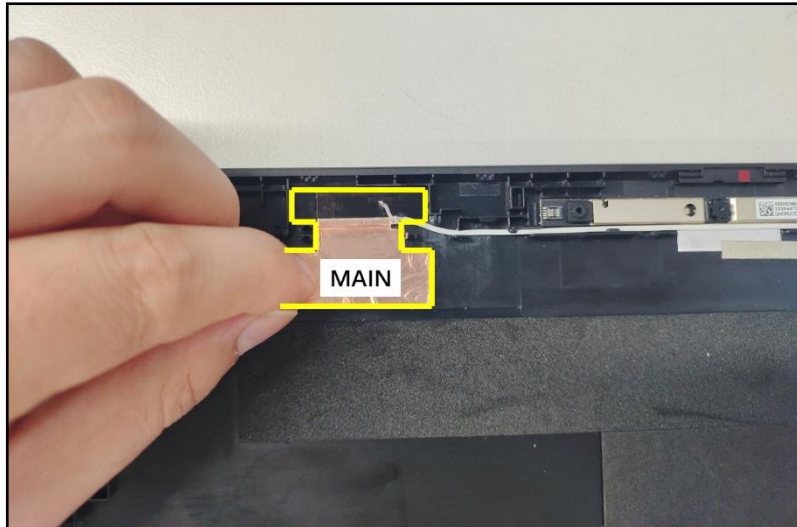


Figure 3-50. WLAN Antenna Removal

3. Gently peel off the AUX antenna and its grounding foil (Figure 3-51). Then remove the AUX antenna from the LCD cover.

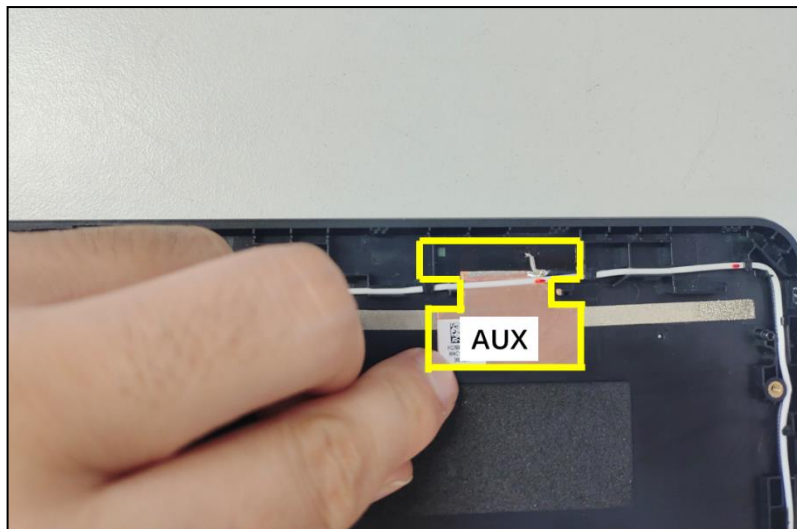


Figure 3-51. WLAN Antenna Removal

⚠ CAUTION:

Use care not to damage the antenna PCB circuit area when the grounding foil is removed.

Removal CAMERA

Prerequisite:

LCD Hinges Removal

1. Disconnect camera connect and remove EDP cable in Figure 3-52.

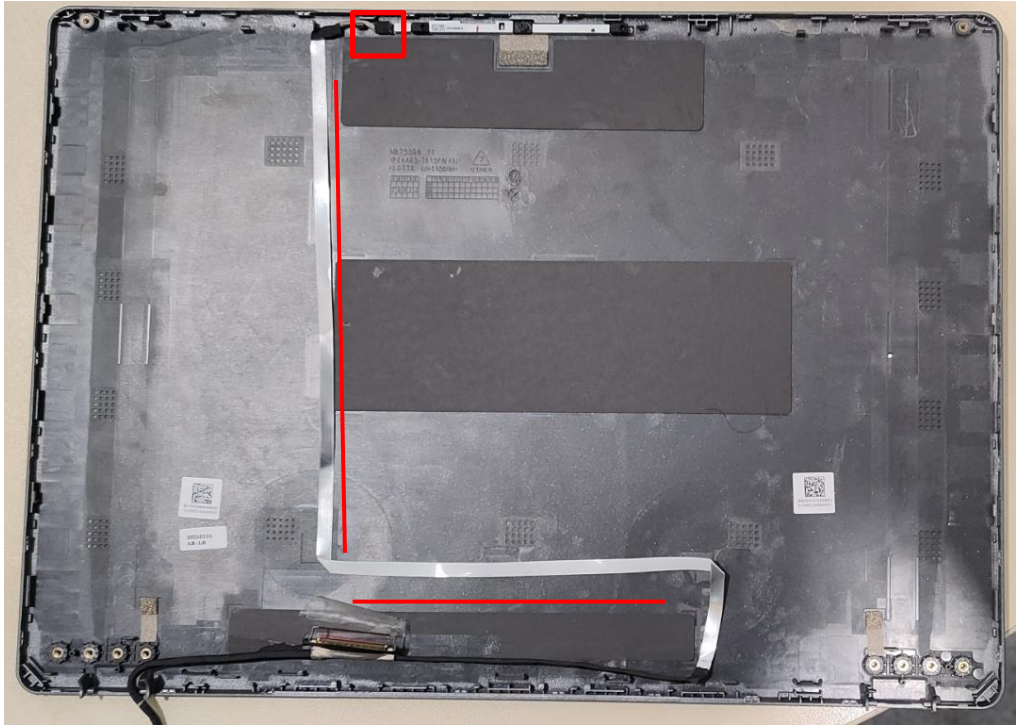


Figure 3-52. camera

2. Remove camera mic rubber and remove camera

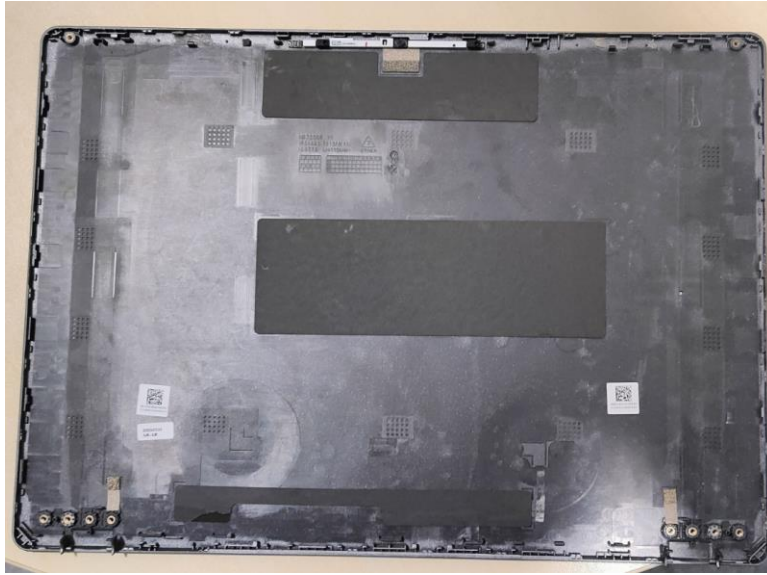


Figure 3-53. camera

LCD Module Reassembly Process

Replacing CAMERA

1. Install camera mic rubber and Install camera

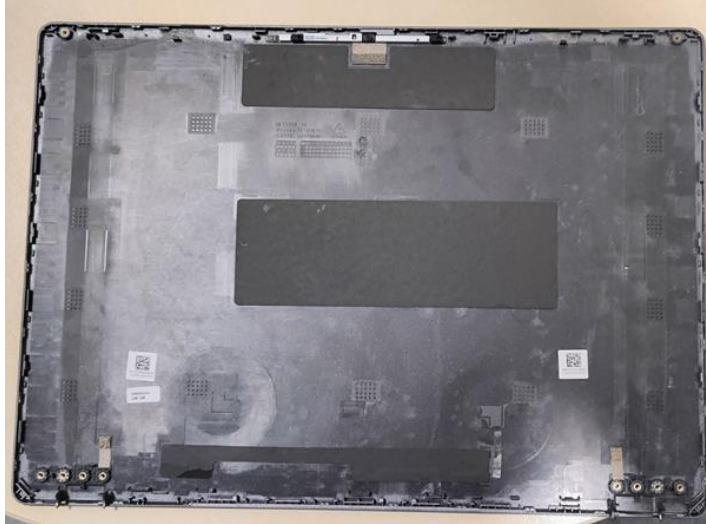


Figure 3-53. camera

2. Install camera connect and Install EDP cable in Figure 3-53.



Figure 3-53. camera

Replacing the WLAN Antenna

1. Place the AUX antenna to the left side of the LCD cover. Make sure the antenna PCB circuit area is properly seated and placed onto its compartment highlighted by a green rectangle as shown in Figure 3-52.
2. Adhere the grounding foil of the AUX antenna as marked in yellow (Figure 3-52).

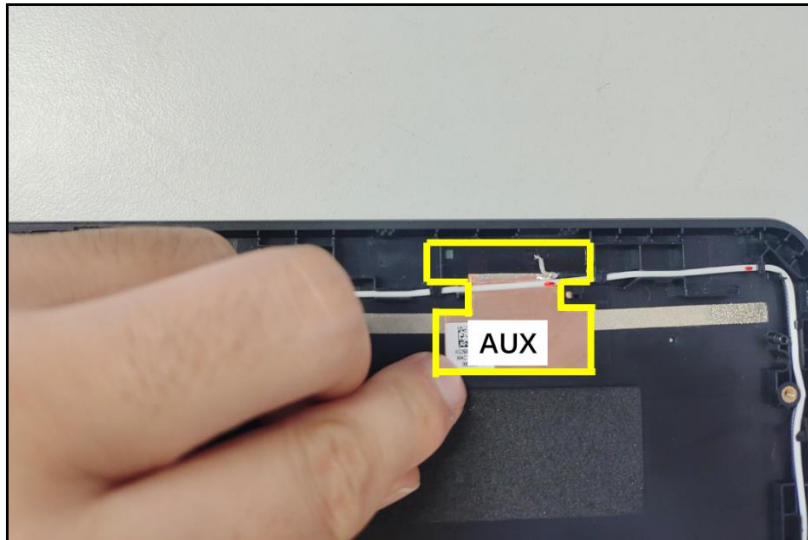


Figure 3-52. Replacing the AUX Antenna

3. Place the MAIN antenna to the right side of the LCD cover. Make sure the antenna PCB circuit area is properly seated and placed onto its compartment highlighted by a green rectangle as shown in Figure 3-53.
4. Adhere the grounding foil of the MAIN antenna as marked in yellow (Figure 3-53).

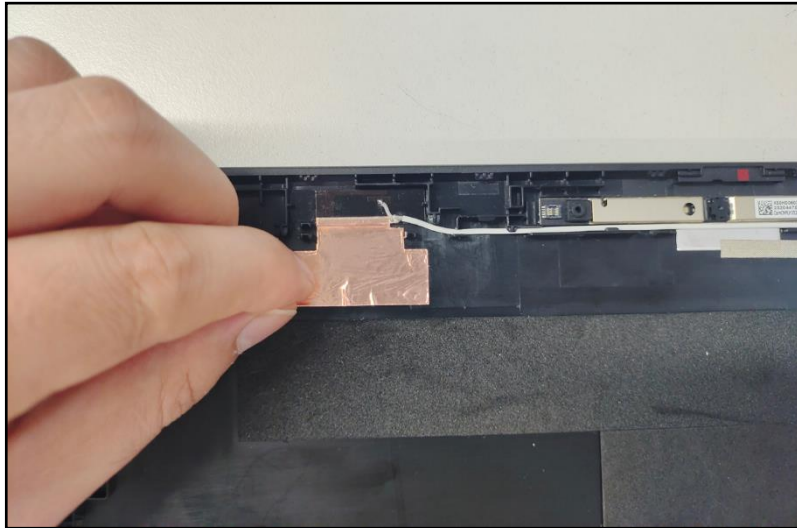


Figure 3-53. Replacing the MAIN Antenna

5. Route the WLAN antennas cables through the cable guides on the LCD cover as shown in Figure 3-54.



Figure 3-54. Replacing the WLAN Antenna

Replacing the LCD Hinges

1. Place the LCD hinges (A) on the LCD cover (Figure 3-55).

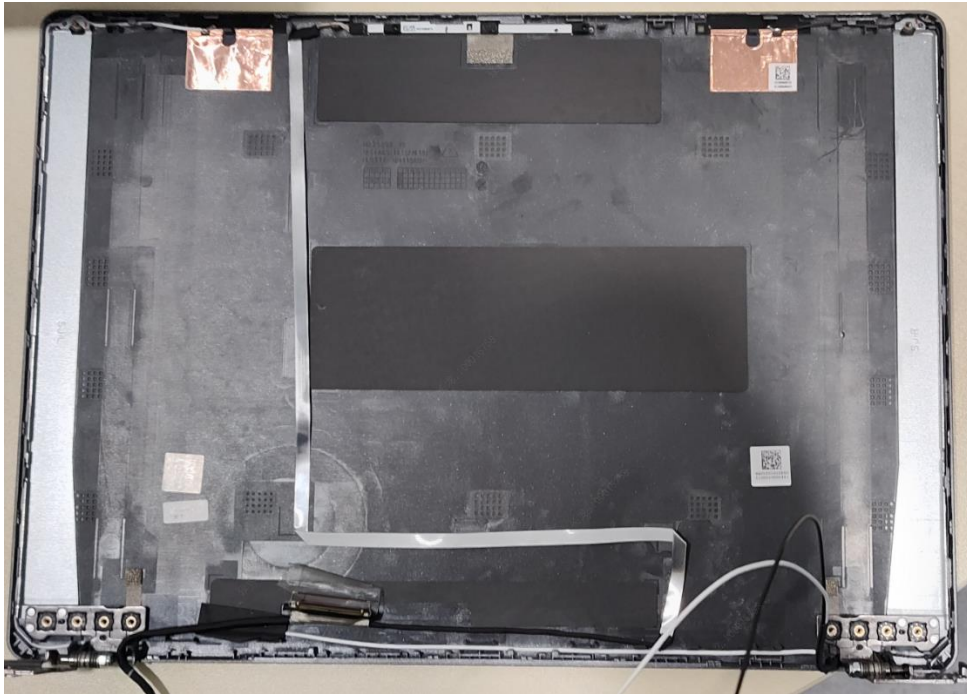


Figure 3-55. Replacing the LCD Hinges

2. Insert two (2) screws to secure the hinge BKT in place as shown in Figure 3-56.

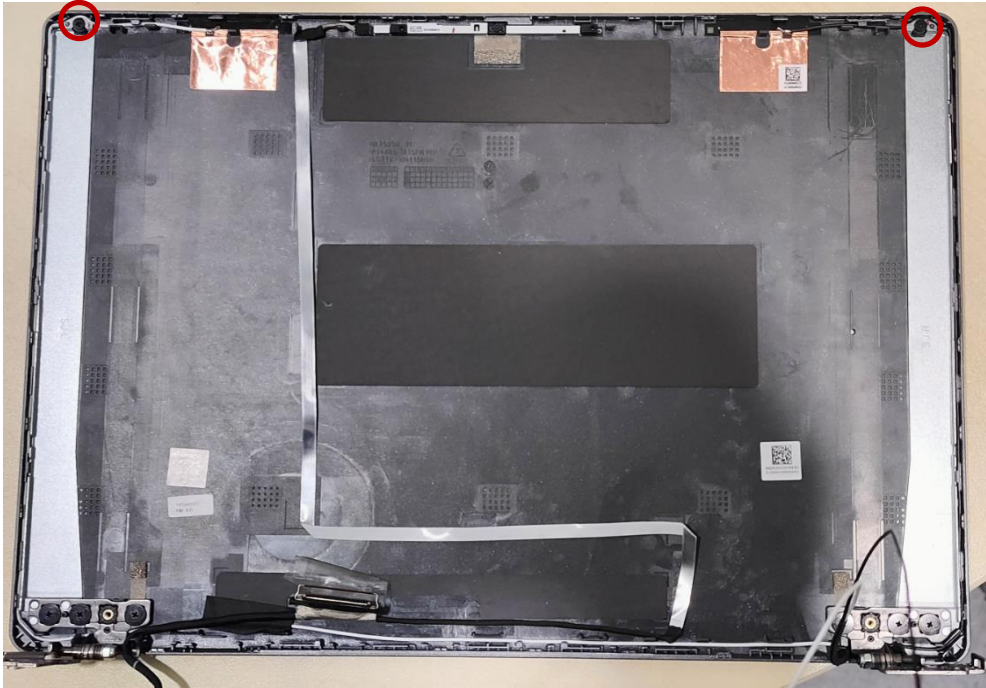



Figure 3-56 Replacing the LCD Hinges

ID	Size	Torque	Quantity	Screw Type
LCD Cover	M2.0*L2.5	2.0+20%kgf-cm	2	

3. Install six (6) screws to secure the LCD hinges in place (Figure 3-57).

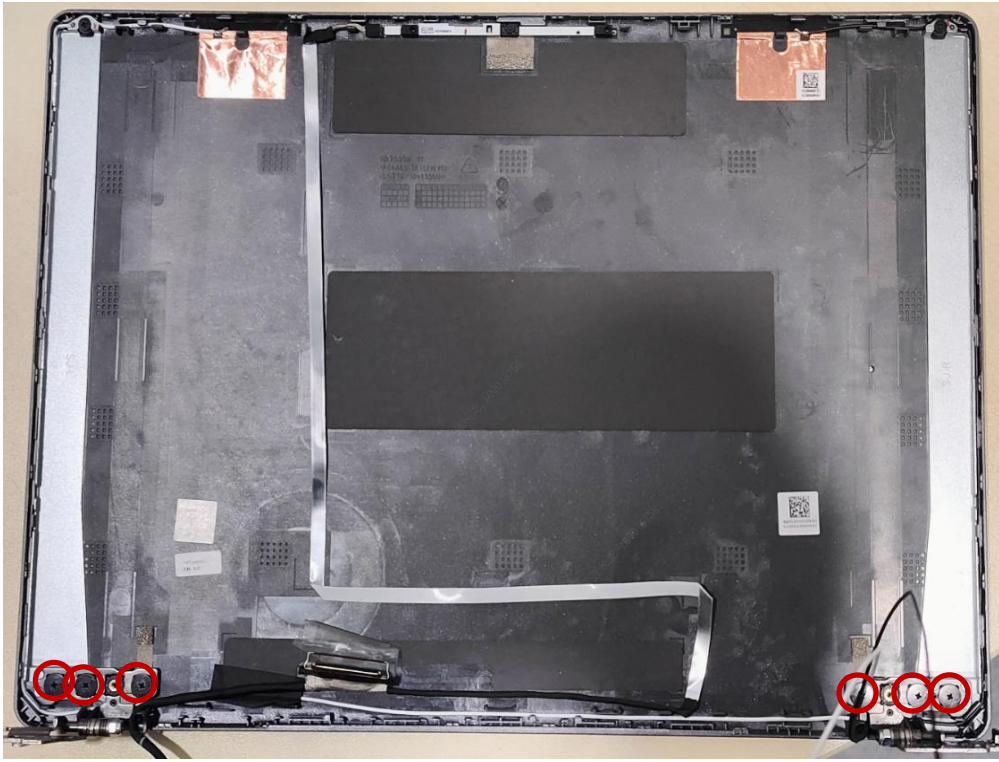




Figure 3-57. Replacing the LCD Hinges

ID	Size	Torque	Quantity	Screw Type
Hinge	M2.0*L2.3	2.0+20%kgf-cm	6	

4. Install two (2) screws to secure the LCD hinges CAP in place (Figure 3-57).



Figure 3-45. LCD Hinges Removal

ID	Size	Torque	Quantity	Screw Type
LCD Cover	M2.0*L2.3	2.0+20%kgf-cm	2	

Replacing the LCD

1. Install the LCD ADHESIVE to LCD cover



Figure 3-41. LCD Panel

2. Install the EDP cable to LCD.

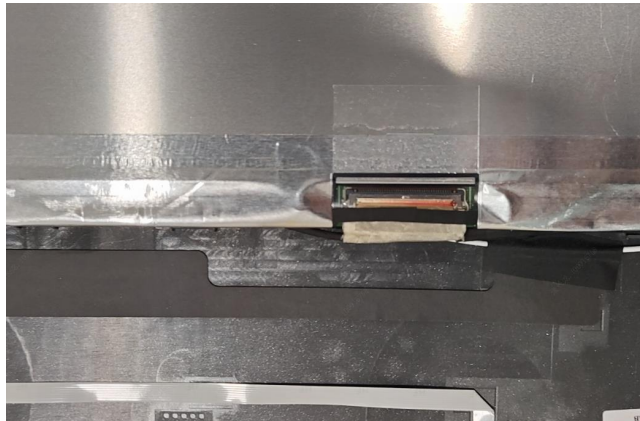


Figure 3-41. LCD Panel

3. Install the LCD panel to LCD cover(LCD ALIGNMENT MYLAR 0.3 MM: 47.KX3N8.001).



Figure 3-41. LCD Panel

4. Install the bezel to LCD cover.



Figure 3-40. LCD Panel Removal

Replacing 3RD MIC

1. Install the 3RD MIC rubber and 3RD MIC from C cover

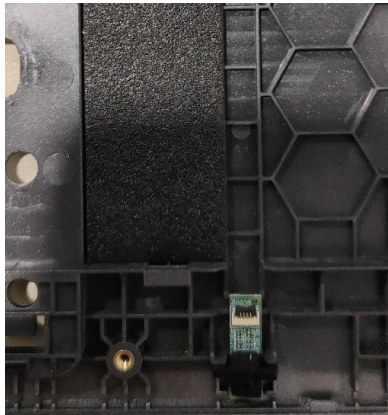


Figure 3-63. 3RD MIC

2. Install 3RD connect and 3RD FFC

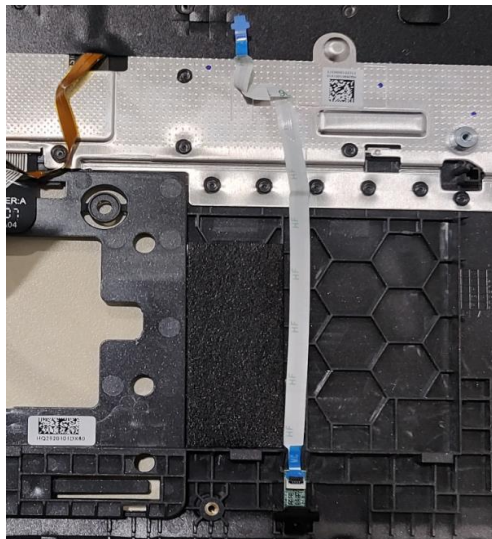


Figure 3-63. 3RD MIC

Replacing the Main board

1. Install MB and IO bracket to MB(A) (Figure 3-65).



Figure 3-65. Replacing the Mainboard

2. Remove one (1) screws A and one (1) screws B

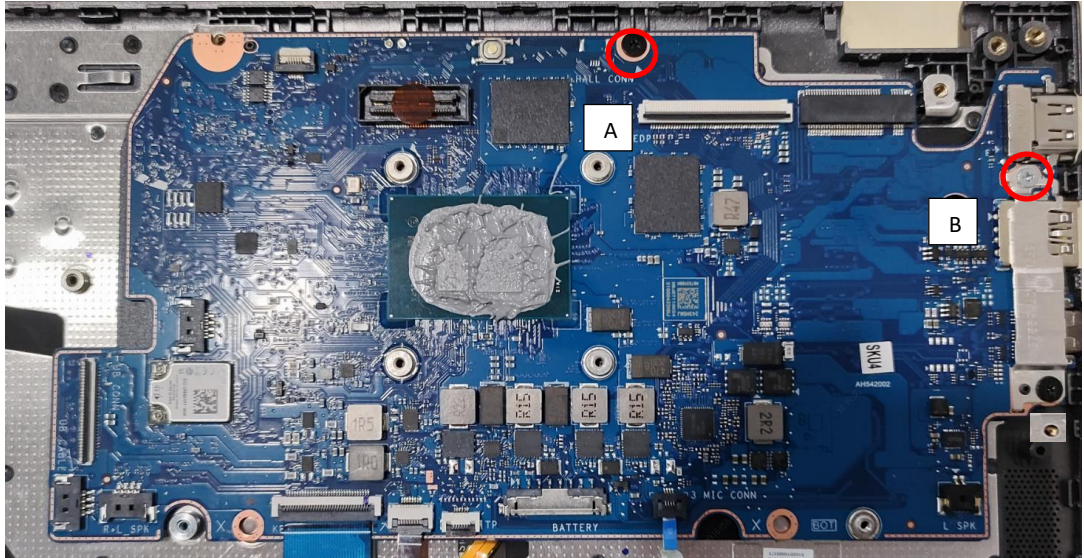


Figure 3-66. Replacing the Mainboard

ID	Size	Torque	Quantity	Screw Type
A	M2.0*L3.5	2.0+20%kgf-cm	1	
B	M2.0*L3.5	2.0+20%kgf-cm	1	

Replacing the LCD Module

1. Install six (6) screws to secure the LCD hinges in place (Figure 3-70).

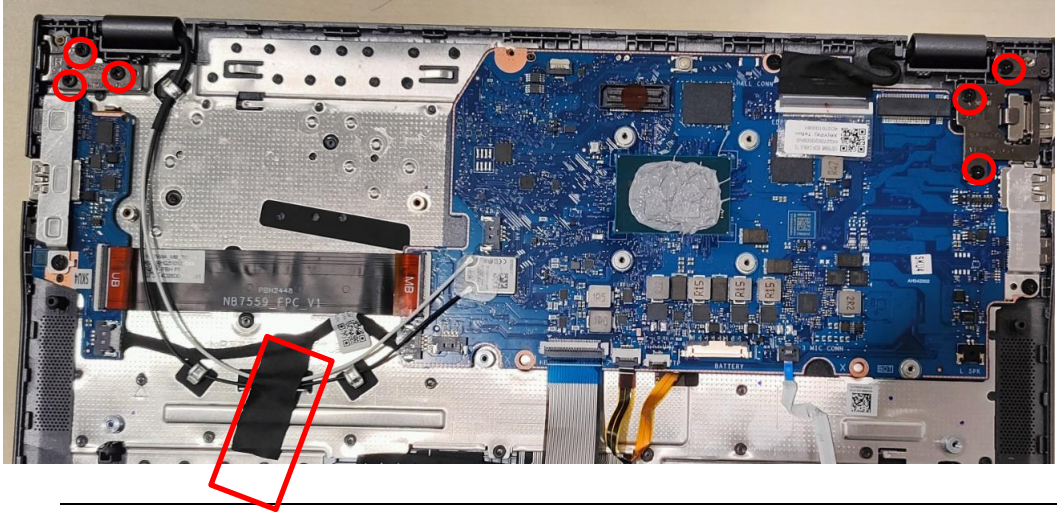



Figure 3-70. Replacing the LCD Module

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.5*L4.0	3.0±15%kgf-cm	6	

2. Install LCD cable connect on the MB, install tape and WLAN connect

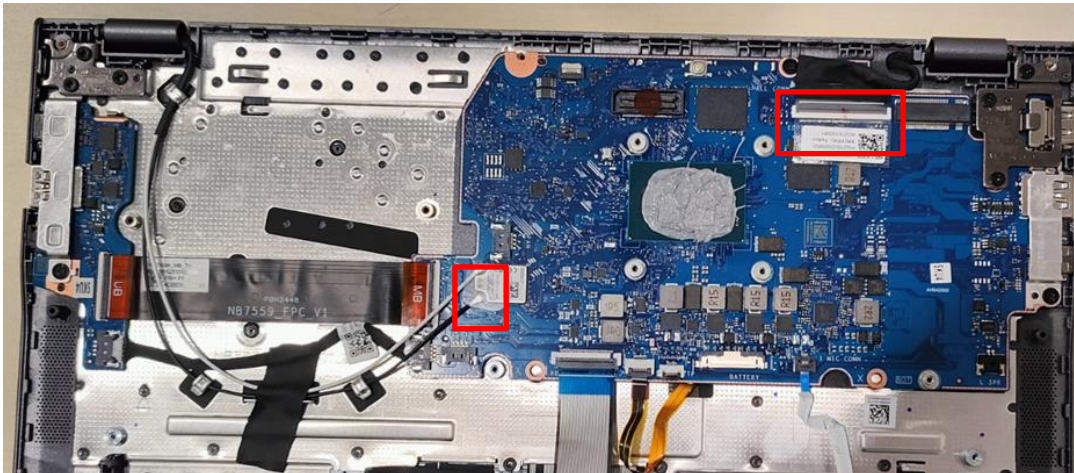


Figure 3-70. Replacing the LCD Module

Replacing the USB Board

1. Align and slide the I/O ports on the USB board (A) into their slots on the top assembly (Figure 3-71).
2. Place the USB board onto its compartment until it is fully seated and secured to the guide pins (B) (Figure 3-71).

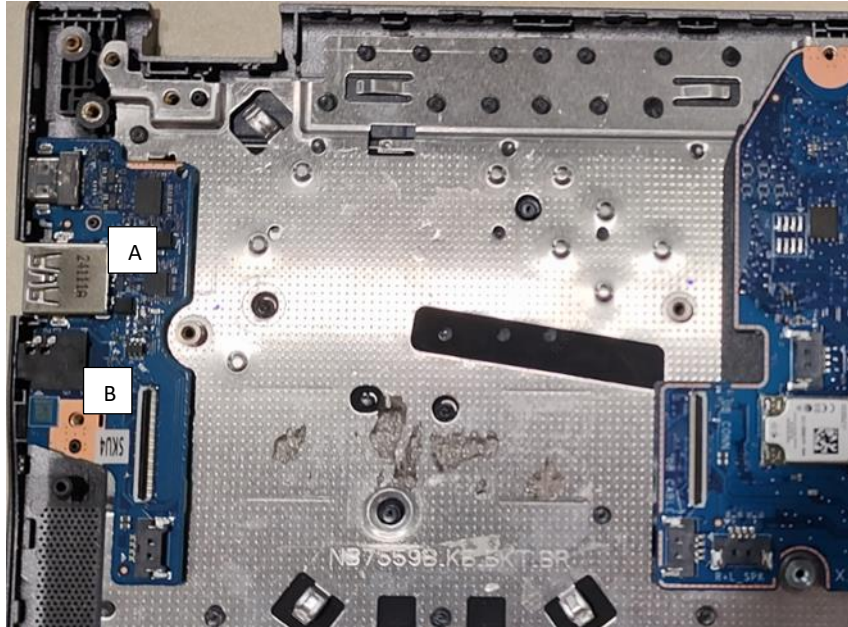


Figure 3-71. Replacing the USB Board

3. By aligning with the I/O port slot, slide and install the I/O bracket (C) onto the USB board. Ensure that the bracket is fully seated and secured to the guide pins (D) (Figure 3-72).

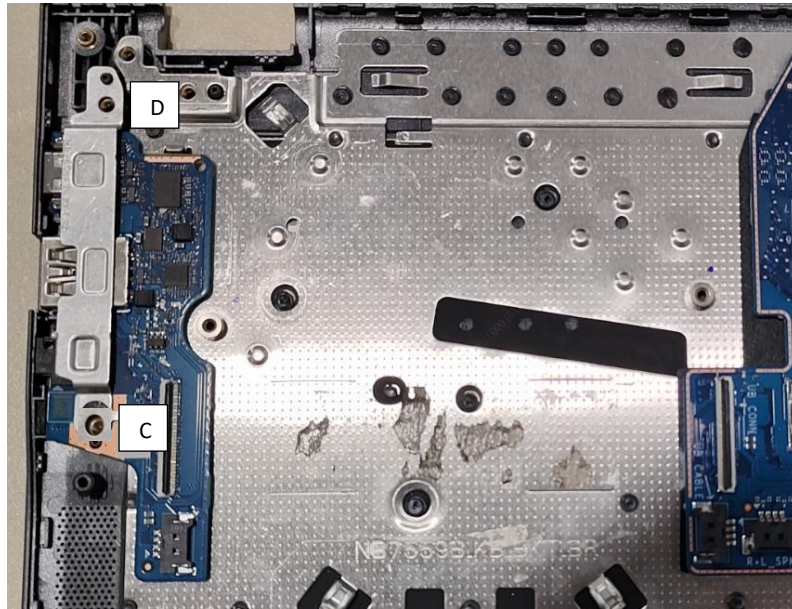


Figure 3-72. Replacing the USB Board

Replacing FAN

1. Install the FAN tape to FAN



Figure 3-24. FAN

2. Install the FAN to C cover (Figure 3-25).

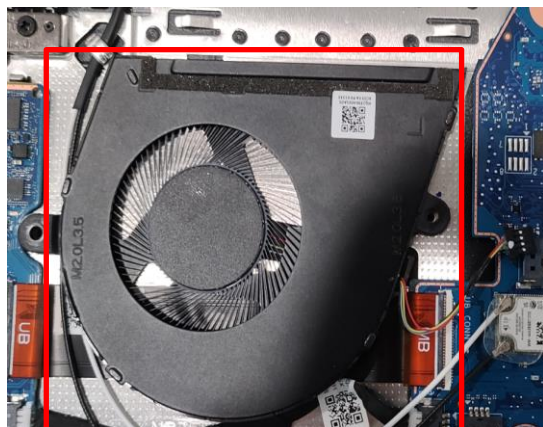


Figure 3-25. FAN

3. Install the screws on C cover and install fan connect

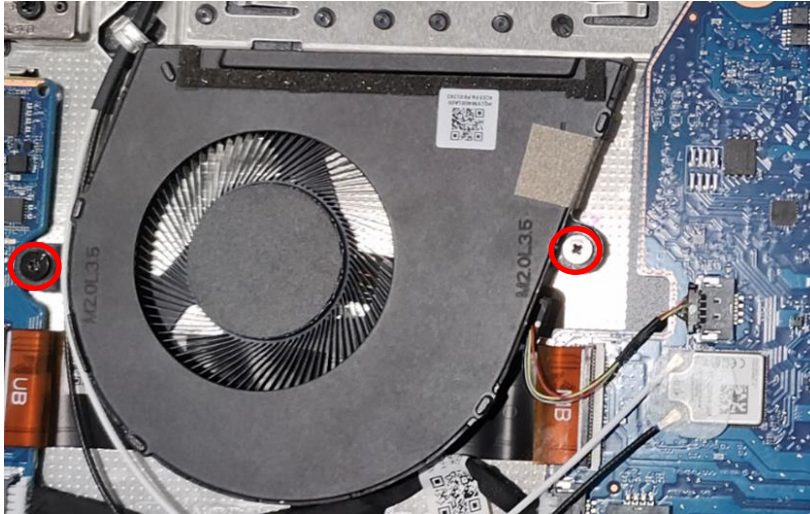



Figure 3-26. FAN Removal

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L3.5	2.0±15%kgf-cm	2	

Replacing THERMAL

1. Install the THERMAL to MB.

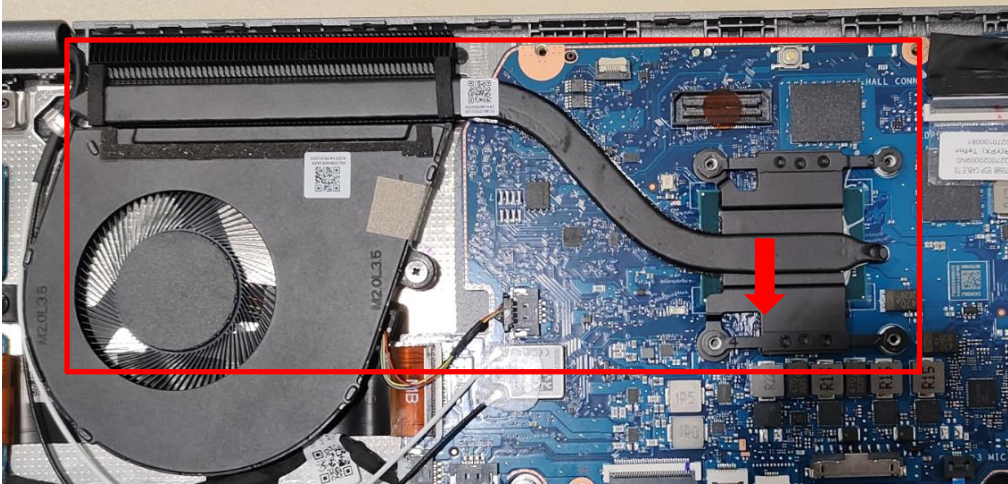


Figure 3-22. THERMAL

2. Install the screws on the MB

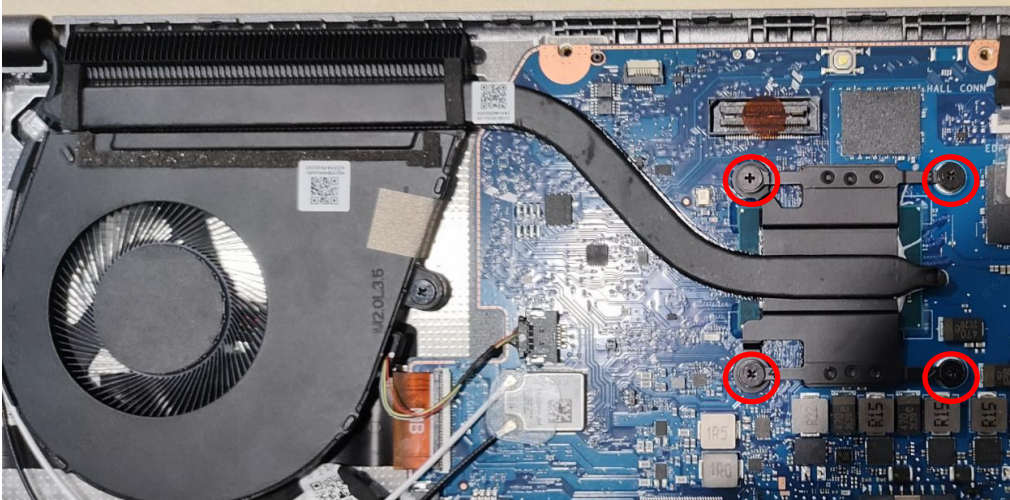



Figure 3-23. THERMAL

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L2.5	2.0±15%kgf-cm	4	

Replacing the Speaker Module

1. Place the speakers to their respective compartments on the top assembly (Figure 3-75).

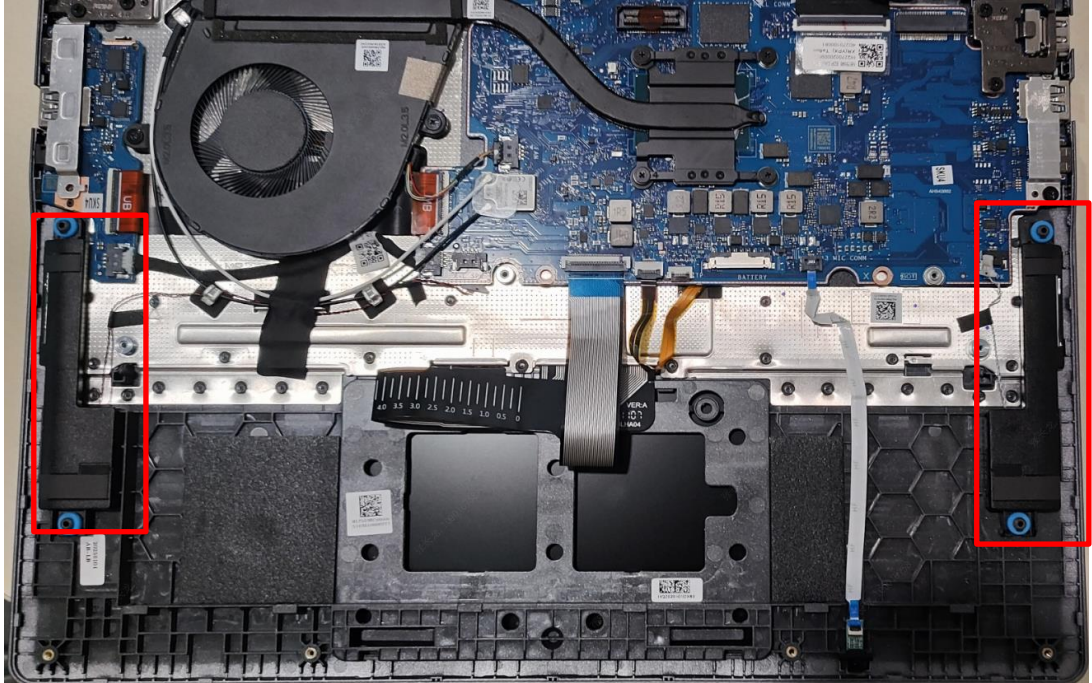


Figure 3-75. Replacing the Speaker Module

+ **IMPORTANT:**

When installing the speakers, make sure there are properly aligned with the guide pins (B) and placed onto their designated locations as shown

2. Connect the speaker R cable to the USB board connector (Figure 3-76).
3. Connect the speaker L cable to the mainboard connector (Figure 3-76).

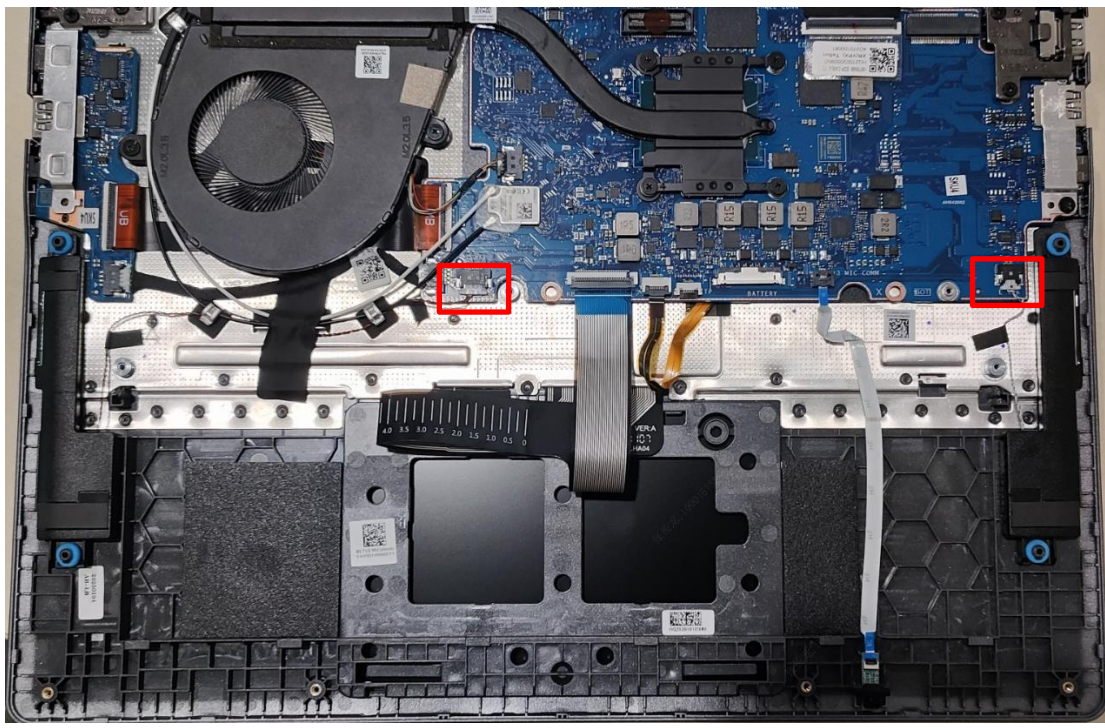


Figure 3-76. Replacing the Speaker Module

Replacing SSD

1. Install the SSD to MB



Figure 3-16. SSD

2. Install the screws to the MB

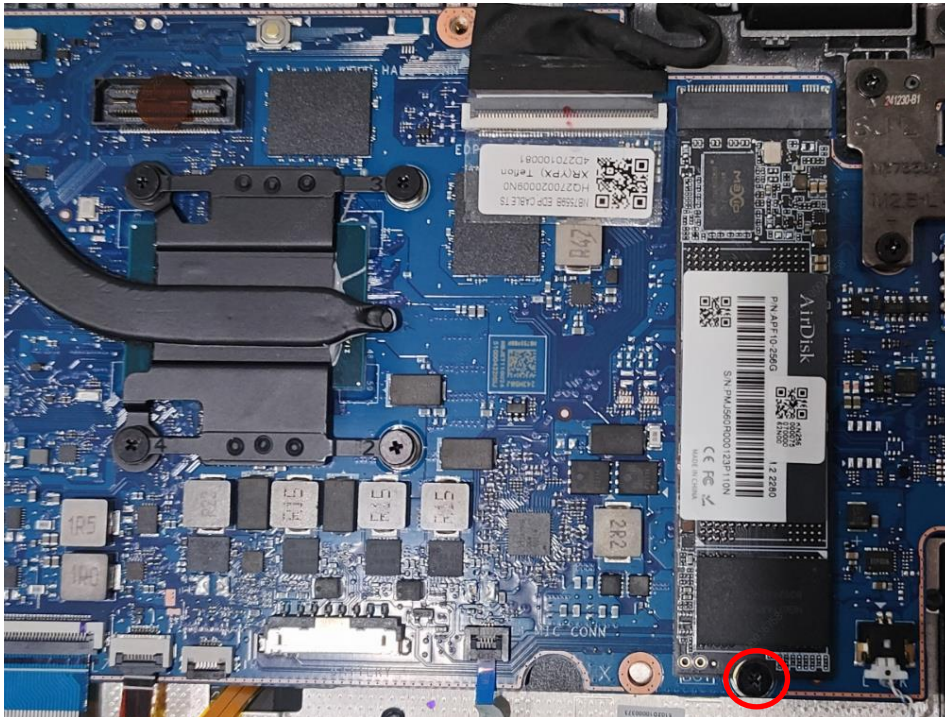



Figure 3-16. SSD

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L2.5	2.0±15%kgf-cm	1 (base cover)	

Replacing the Touchpad Module

1. Slide the touchpad module into the bottom latches until those are fully engaged (Figure 3-81).
2. Ensure that the touchpad module is properly aligned with the guide pins, push the touchpad module firmly onto its slot until it is fully seated in place (Figure 3-81).

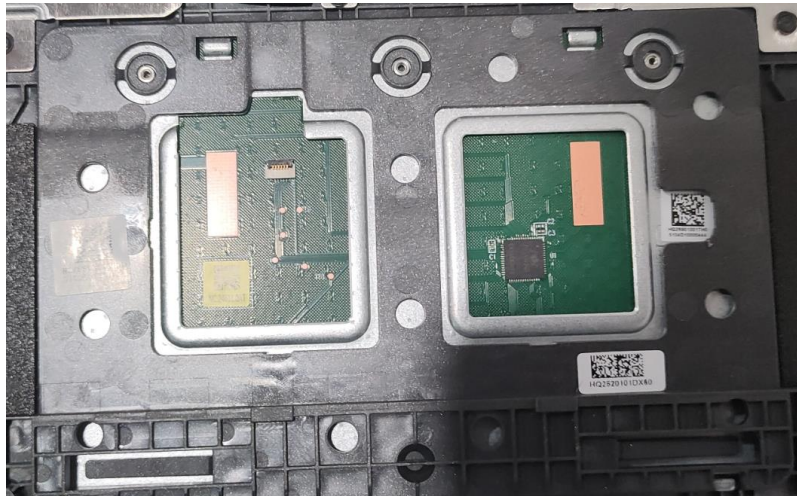


Figure 3-81. Replacing the Touchpad Module

3. Install three (3) screws to secure the touchpad module in place.

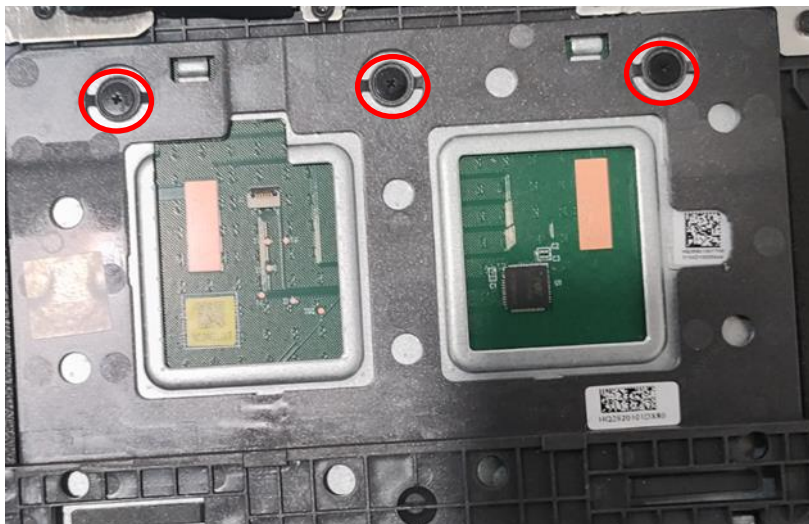


Figure 3-82. Replacing the Touchpad Module

4. Attach the conductive tape onto the touchpad module. Make sure the conductive tape is properly aligned and placed onto its slot highlighted by the yellow and green lines as shown in Figure 3-83.

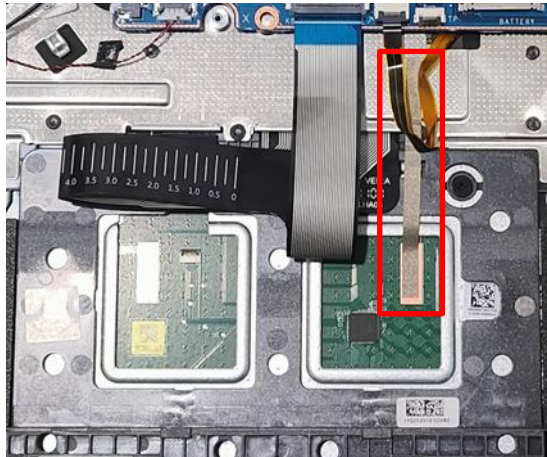


Figure 3-83. Replacing the Touchpad Module

5. Connect the touchpad FFC to the touchpad module and mainboard connectors. Then press the middle portion of the FFC to ensure its underneath adhesive is properly attached to the top assembly (Figure 3-84).

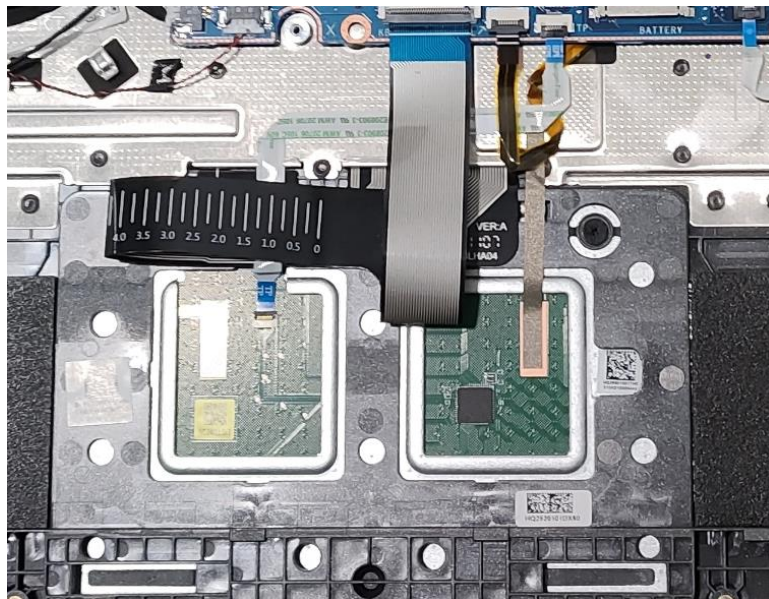


Figure 3-84. Replacing the Touchpad Module

⇒ NOTE:

Make sure that the touchpad FFC is firmly secured to the mainboard and touchpad module connectors.

6. Attach the adhesive tape to secure the touchpad FFC connection (Figure 3-85).

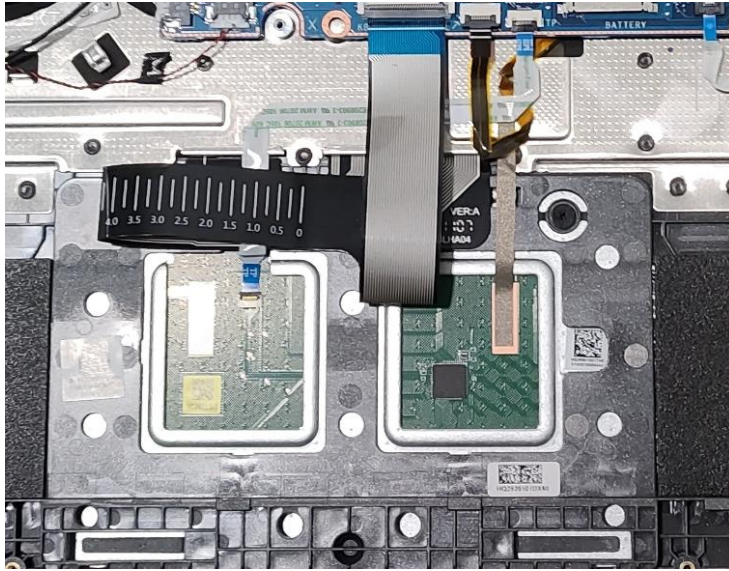



Figure 3-85. Replacing the Touchpad Module

ID	Size	Torque	Quantity	Screw Type
Red Call out	M1.6*L1.7	2.0+20%kgf-cm	3	

Replacing the Battery Pack

1. By aligning with the guide pins, place the battery pack to its compartment on the system (Figure 3-86).



Figure 3-86. Replacing the Battery Pack

2. Install two (2) screws to secure the Battery in place (Figure 3-87).

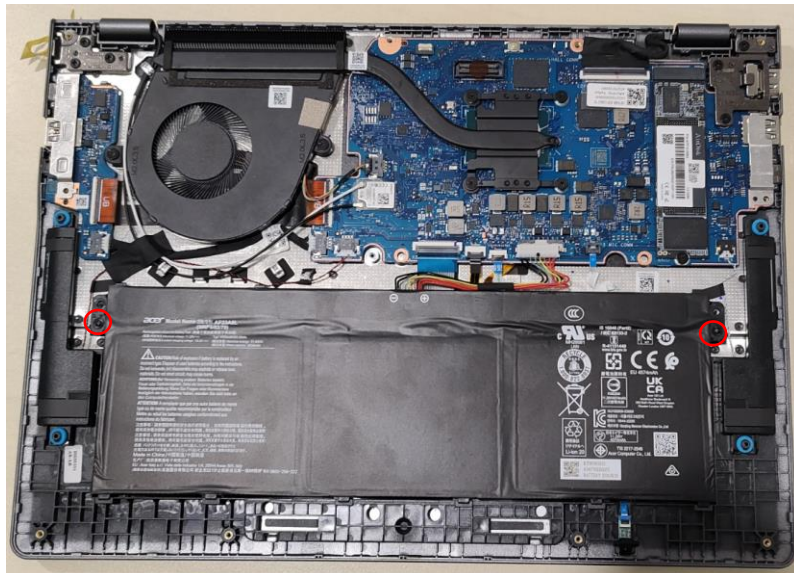



Figure 3-87. Replacing the Battery Pack

ID	Size	Torque	Quantity	Screw Type
Orange Call out	M2.0*L3.5	2.0+20%kgf-cm	2	

3. Connection battery connector and install mylar (Figure 3-88).

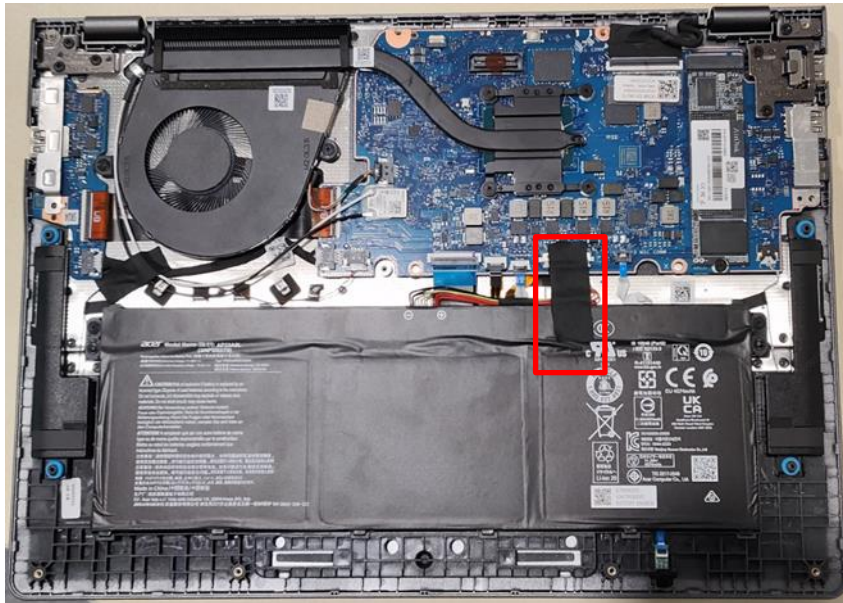


Figure 3-88. Replacing the Battery Pack

Replacing the Base Cover

1. Carefully place the base cover onto the top assembly. Make sure that the edges of the base cover are aligned properly to those of the top assembly (Figure 3-89).

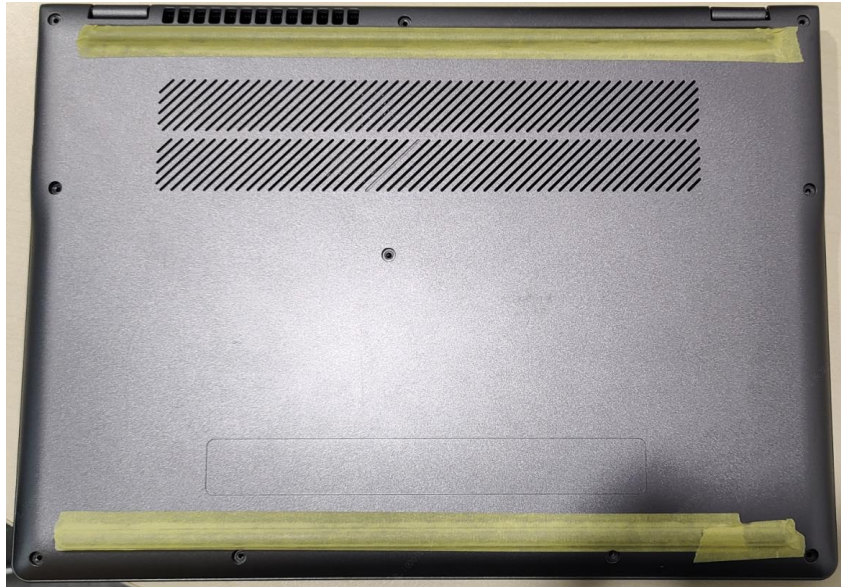


Figure 3-89. Replacing the Base Cover

2. Press downward on the system to engage the tabs. Make sure all the tabs are fully engaged (Figure 3-90).

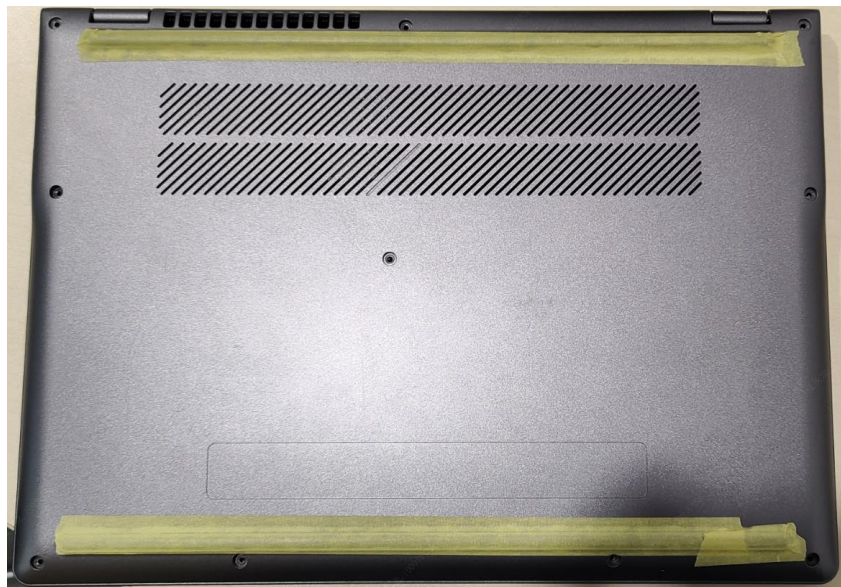


Figure 3-90. Replacing the Base Cover

3. Install twelve (10) screws to secure the base cover in place. ([Figure 3-91](#)).

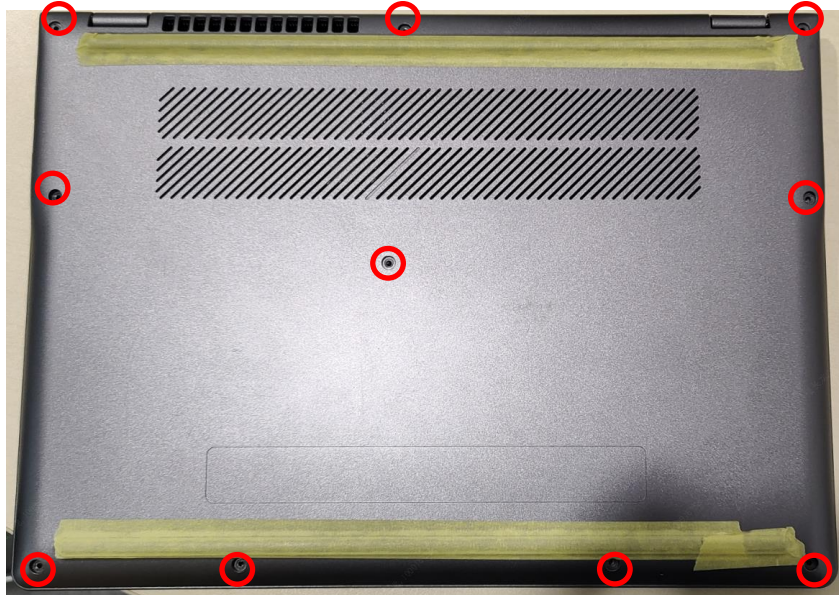

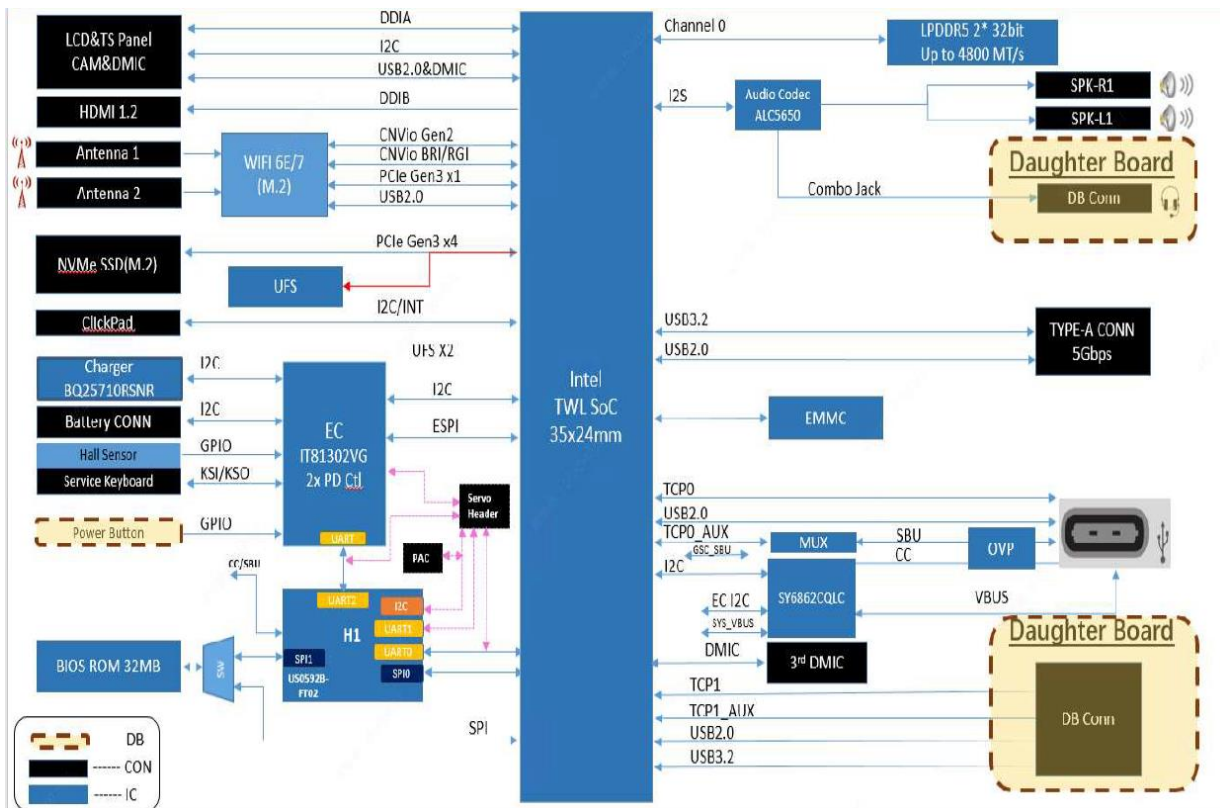


Figure 3-91. Replacing the Base Cover

ID	Size	Torque	Quantity	Screw Type
Red Call out	M2.0*L6.0	2.0+20%kgf-cm	10	

Electronic boards diagrams



Troubleshooting

Introduction

This chapter shows you how to deal with common system problems. Read it before calling a technician if a problem occurs. Solutions to more serious problems require opening up the computer. Do not attempt to open the computer yourself; contact your dealer or authorized service center for assistance..

Introduction tips

This computer incorporates an advanced design that delivers on-screen error message reports to help you solve problems.

If the system reports an error message or an error symptom occurs, see "Error messages" below. If the problem cannot be resolved, contact your dealer

Error messages

If you receive an error message, note the message and take the corrective action. The following table lists the error messages in the alphabetical order together with the recommended course of action.

Table 1-1. Error Messages Error Messages

Error Messages	Corrective Action
Disk boot failure	Insert a system (bootable) disk, then press Enter to reboot.
Hard disk 0 error	Contact your dealer or an authorized service center
Hard disk 0 extended type error	Contact your dealer or an authorized service center
I/O parity error	Contact your dealer or an authorized service center
Keyboard error or no keyboard connected	Contact your dealer or an authorized service center.
Keyboard interface error	Contact your dealer or an authorized service center

If you still encounter problems after going through the corrective measures, please contact your dealer or an authorized service center for assistance.

FRU (Field Replaceable Unit) List

This chapter provides users with a FRU (Field Replaceable Unit) listing in global configurations for the Snow. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

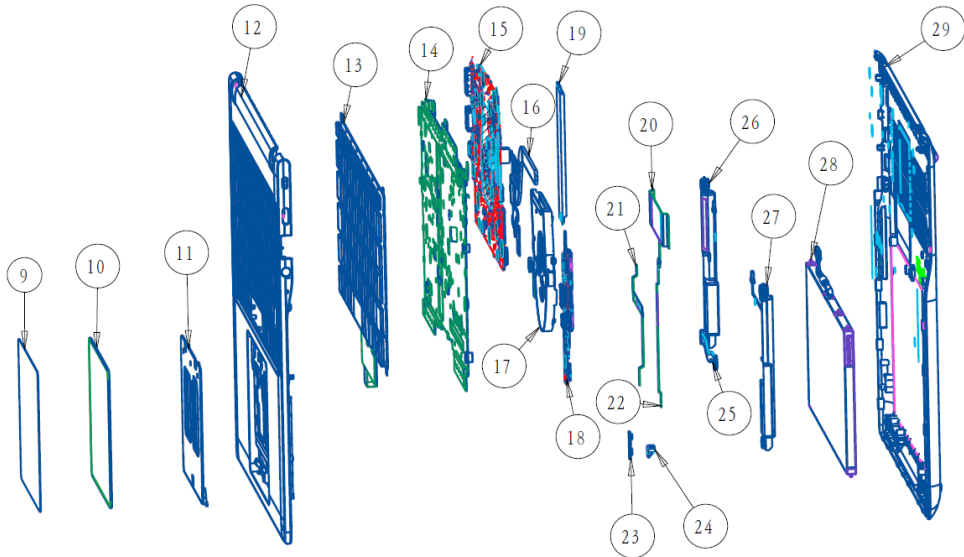
⇒ NOTE:

WHEN ORDERING FRU PARTS, check the most up-to-date information available on the regional web or channel. Part number changes will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, the Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. Users MUST use the local FRU list provided by the regional Acer office to order FRU parts for repair and service of customer machines.

⇒ NOTE:

To scrap or to return the defective parts, users should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by the regional Acer office on how to return it.

Exploded Diagrams

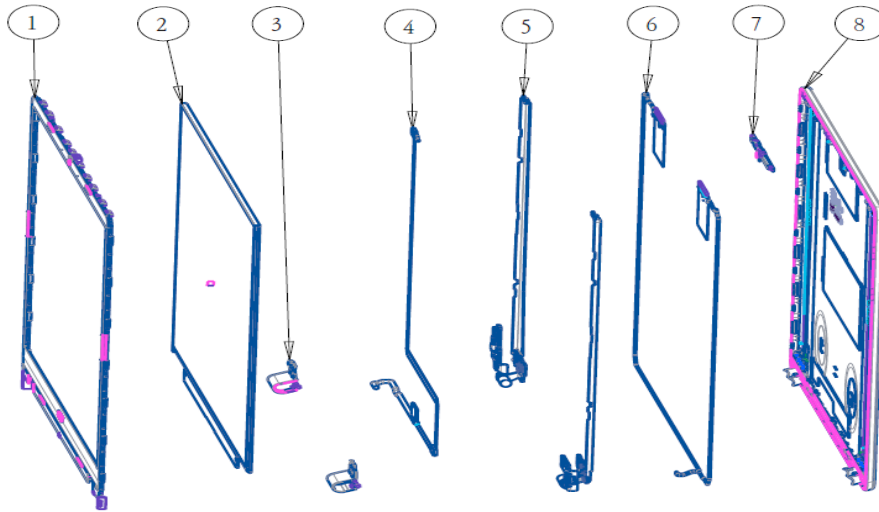


9	TP Mylar	14	KB BKT	19	SSD	24	3RD MIC RUBBER
10	PCB	15	MB	20	MB UB FFC	25	IO CABLE
11	TP BKT	16	THERMAL Module	21	TP FFC	26	Speaker L
12	C Cover	17	FAN	22	3RD MIC FFC	27	Speaker R
13	KB	18	UB PCB	23	MIC PCB	28	Battery
						29	D Cover

Figure 6-1. System Exploded Diagram

No.	Description	Acer Part No.
9,10,11	TOUCHPAD MODULE NC.24611.093	56.JFCN8.001
	TOUCHPAD MODULE NC.24611.0AT	56.JFCN8.002
12,13,14	KEYBOARD ASSY NBL COPILOT WIFI 6 SKU W/ UPPER CASE 80KS VP03P_C30E US	6B.JGBN8.001
	KEYBOARD ASSY BL COPILOT WIFI 6 SKU W/ UPPER CASE 80KS VP03P_C30EWL US	6B.JFCN8.001
	KEYBOARD ASSY NBL COPILOT WIFI 7 SKU W/ UPPER CASE 80KS VP03P_C30E US	6B.JJ7N8.001
	KEYBOARD ASSY BL COPILOT WIFI 7 SKU W/ UPPER CASE 80KS VP03P_C30EWL US	6B.JFGN8.001
15	C3N355_LPDDR5X_8GB(4GBx2)_NA_WIFI 6_LED Touch Panel_NC	NB.JFC11.001
	C3N355_LPDDR5X_8GB(4GBx2)_NA_WIFI 6_LED LCD Panel_NC	NB.JES11.002
	C3N355_LPDDR5X_16GB(8GBx2)_NA_WIFI 6_LED Touch Panel_NC	NB.JFC11.002
	C3N355_LPDDR5X_16GB(8GBx2)_NA_WIFI 6_LED LCD Panel_NC	NB.JES11.003
16	HEATSINK	24.JFCN8.001
17	FAN	23.JFCN8.001
18	BOARD USB VN	55.JKBN8.001
	BOARD USB CHINA	55.JFCN8.001
19	Flash Disk APACER SSD NAND 128GB 3D TLC AP2HPB4480E-O301 LF+HF	KN.12801.004
	Flash Disk KINGSTON SSD NAND 128GB OM8PGP4128Q-AA LF+HF	KN.12807.040
	Flash Disk APACER SSD NAND 256GB 3D TLC AP2JPB4480E-O301 LF+HF	KN.25601.002
	Flash Disk KINGSTON SSD NAND 256GB OM8PGP4256Q-AA LF+HF	KN.25607.031
	Flash Disk KINGSTON SSD NAND 512GB OM8PGP4512Q-AA LF+HF	KN.51207.014
20	CABLE FFC USB BOARD	50.JFCN8.001
21	CABLE FFC TOUCHPAD	50.JFCN8.003
22	CABLE 3RD MICROPHONE_129.15 mm_4 pin	50.JFCN8.005
23	3rd Privacy Digital Mic (64dB)_Con_Side_Kingstate	NC.26711.006
24	RUBBER 3RD PRIVACY MICROPHONE_5.6 mm_3.2 mm_3.35 mm	47.JFCN8.001
25	CABLE USB 4 mm_98.4 mm_4 PIN	50.JFCN8.002
26	SPEAKER L	23.JFCN8.002
27	SPEAKER R	23.JFCN8.003
28	Battery PANASONIC Typ.53Wh 4590mAh 3S1P AP23A5L	KT.00305.015

	248x84.4x5.5(mm) AP23A 11.55V 70W Polymer (production by PECSZ)	
29	LOWER CASE	64.JFCN8.001



1	B Cover	5	Hinge
2	Panel	6	Antena
3	Hinge Cap	7	Camera
4	EDP Cable	8	A Cover

Figure 6-2. LCD Assembly Exploded Diagram

Table 6-2. LCD Assembly Exploded Diagram

No.	Description	Acer Part No.
1	LCD BEZEL	62.JFCN8.001
2	LED LCD Panel CSOT 14" WUXGA IPS None Glare MNE007QS3-7 V1.0 300nit NTSC 45% 60Hz 20ms 1000:1 (Narrow border, 3.0t)	KL.1400C.006
	LED LCD Panel BOE 14" WUXGA IPS None Glare NV140WUM-N45 V8.0 300nit NTSC 45% 60Hz 20ms 1000:1 (Narrow border, 3.0t)	KL.1400E.027
	LED Touch Panel AUO 14" WUXGA IPS None Glare B140UAK02.5 H/W 2A 300nit NTSC 45% 60Hz 25ms 1000:1 (Narrow border, 3.0t, oTP lite)	KL.14005.089
	LED Touch Panel INNOLUX 14" WUXGA IPS None Glare N140JCN-ELK C1 300nit NTSC 45% 60Hz 30ms 1000:1 (Narrow border, 3.0t, oTP lite)	KL.1400D.048
3	CAP HINGE L	42.JFCN8.001
	CAP HINGE R	42.JFCN8.002
4	CABLE LCD EDP 30PIN N14WUSUPILB	50.JFCN8.006
	CABLE LCD EDP 40PIN N14WUSUPILB/TP3L	50.JFCN8.007
5	HINGE L	33.JFCN8.003
	HINGE R	33.JFCN8.004

6	CABLE ANTENNA WIFI6	50.JFCN8.004
7	Camera CHICONY FHD FF C7FOF10-1 OV02E (CSP) SPCV6200A 1L4C170A1(w/BG) ZTS6534SAC USB , sHDR,4.2T Chrome V1.1(ROI)	KS.FHD06.015
	Camera Tech-Front FHD FF YHIA-1 OV02E (CSP) RTS5859 DS41131C (BG) SPG01R8HT4H-1 USB , sHDR,4.2T Chrome V1.1(ROI)	KS.FHD0Q.015
8	LCD COVER GRAY	61.JFCN8.001

FRU list

Table 6-3. FRU List

Category	Description	Acer Part No.
ADAPTER		
	Adapter LITE-ON PA-1650-58AA 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black TCO9.0, PCR 50%, with LOGO	KP.06503.028
	Adapter Chicony Power A065RP99P 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black TCO9.0, PCR 50%, with LOGO	KP.0650H.034
	Adapter LITE-ON PA-1650-58A8 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black TCO10, PCR50%,with LOGO and paper sleeve	KP.06503.031
	Adapter Chicony Power A065RPB5P 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black TCO10, PCR50%,with LOGO and paper sleeve	KP.0650H.041
	Adapter LITE-ON PA-1650-58AL 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black PCR50%, TCO9.0, with LOGO and paper sleeve	KP.06503.029
	Adapter Chicony Power A065RPB3P 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black , TCO9.0, PCR50%,with LOGO and paper sleeve	KP.0650H.038
BATTERY		
	Battery PANASONIC Typ.53Wh 4590mAh 3S1P AP23A5L 248x84.4x5.5(mm) AP23A 11.55V 70W Polymer (production by PECSZ)	KT.00305.015
	Battery LGES Typ.53Wh 4700mAh 3S1P AP23A8L 248x84.4x5.5(mm) AP23A 11.28V 70W Li-Ion	KT.0030G.025
	Battery CosMx Typ.53Wh 4661mAh 3S1P AP23ABL 248x84.4x5.5(mm) AP23A 11.37V 65W Li-Ion TI BQ40Z555 FW5.12	KT.0030B.005
	Battery SIMPLO Typ.53Wh 4700mAh 3S1P AP23A7L 248x84.4x5.5(mm) AP23A 11.25V 70W Li-Ion FW5.09	KT.00307.014
BOARD		



BOARD USB VN

55.JKBN8.001

BOARD USB CHINA



55.JFCN8.001



Category	Description	Acer Part No.
CABLE		
	CABLE FFC USB BOARD	50.JFCN8.001
	CABLE USB 4 mm_98.4 mm_4 PIN	50.JFCN8.002
	CABLE FFC TOUCHPAD	50.JFCN8.003
	CABLE ANTENNA WIFI6	50.JFCN8.004
	BRACKET MB IO	33.JFCN8.001
	BRACKET USB IO	33.JFCN8.002
	CABLE 3RD MICROPHONE_129.15 mm_4 pin	50.JFCN8.005
	RUBBER 3RD PRIVACY MICROPHONE_5.6 mm_3.2 mm_3.35 mm	47.JFCN8.001






3rd Privacy Digital Mic
(64dB)_Con_Side_Kingstate



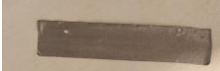



NC.26711.006

Category	Description	Acer Part No.
CAMERA		
	Camera CHICONY FHD FF C7FOF10-1 OV02E (CSP) SPCV6200A 1L4C170A1(w/BG) ZTS6534SAC USB , sHDR,4.2T Chrome V1.1(ROI)	KS.FHD06.015
	Camera Tech-Front FHD FF YHIA-1 OV02E (CSP) RTS5859 DS41131C (BG) SPG01R8HT4H-1 USB , sHDR,4.2T Chrome V1.1(ROI)	KS.FHD0Q.015
KEYBOARD		
	KEYBOARD ASSY NBL COPILOT WIFI 6 SKU W/ UPPER CASE 80KS VP03P_C30E US	6B.JGBN8.001
	KEYBOARD ASSY BL COPILOT WIFI 6 SKU W/ UPPER CASE 80KS VP03P_C30EWL US	6B.JFCN8.001
	KEYBOARD ASSY NBL COPILOT WIFI 7 SKU W/ UPPER CASE 80KS VP03P_C30E US	6B.JJ7N8.001
	KEYBOARD ASSY BL COPILOT WIFI 7 SKU W/ UPPER CASE 80KS VP03P_C30EWL US	6B.JFGN8.001

Category	Description	Acer Part No.
LCD COVER		
	LCD COVER GRAY	61.JFCN8.001
Bezel		
	LCD BEZEL	62.JFCN8.001
LCD panel		
	LED LCD Panel CSOT 14" WUXGA IPS None Glare MNE007QS3-7 V1.0 300nit NTSC 45% 60Hz 20ms 1000:1 (Narrow border, 3.0t)	KL.1400C.006
	LED LCD Panel BOE 14" WUXGA IPS None Glare NV140WUM-N45 V8.0 300nit NTSC 45% 60Hz 20ms 1000:1 (Narrow border, 3.0t)	KL.1400E.027
	LED Touch Panel AUO 14" WUXGA IPS None Glare B140UAK02.5 H/W 2A 300nit NTSC 45% 60Hz 25ms 1000:1 (Narrow border, 3.0t, oTP lite)	KL.14005.089
	LED Touch Panel INNOLUX 14" WUXGA IPS None Glare N140JCN-ELK C1 300nit NTSC 45% 60Hz 30ms 1000:1 (Narrow border, 3.0t, oTP lite)	KL.1400D.048


Category	Description	Acer Part No.
LOWER CASE		
	LOWER CASE	64.JFCN8.001
MAINBOARD		
	C3N355_LPDDR5X_8GB(4GBx2)_NA_WIFI 6_LED Touch Panel_NC	NB.JFC11.001
	C3N355_LPDDR5X_8GB(4GBx2)_NA_WIFI 6_LED LCD Panel_NC	NB.JES11.002
	C3N355_LPDDR5X_16GB(8GBx2)_NA_WIFI 6_LED Touch Panel_NC	NB.JFC11.002
	C3N355_LPDDR5X_16GB(8GBx2)_NA_WIFI 6_LED LCD Panel_NC	NB.JES11.003
METAL		
	HINGE L	33.JFCN8.003
	HINGE R	33.JFCN8.004
Hinge cap		
	CAP HINGE L	42.JFCN8.001
	CAP HINGE R	42.JFCN8.002

Category	Description	Acer Part No.
POWER CORD		
	POWER CORD 1M BLACK 250 V_Argentina	27.K0JN8.009
	POWER CORD 1M BLACK 250 V_Australian	27.K0JN8.005
	POWER CORD 1M BLACK 250 V_Brazil	27.K0JN8.010
	POWER CORD 1M BLACK 250 V_Korea	27.K0JN8.012
	POWER CORD 1M BLACK 250 V_ISRAEL	27.K0JN8.004
	POWER CORD 1M BLACK 250 V_ITALIAN	27.K0JN8.002
	POWER CORD 1M BLACK 250 V_Japan	27.K0JN8.007
	POWER CORD 1M BLACK 250 V_CN	27.K0JN8.001
	POWER CORD 1M BLACK 250 V_South Africa	27.K0JN8.008
	POWER CORD 1M BLACK 250 V_SWISS	27.K0JN8.003
	POWER CORD 1M BLACK 250 V_UK	27.K0JN8.006
	POWER CORD 1M BLACK 250 V_US	27.K0JN8.013
	POWER CORD 1M BLACK 250 V_Taiwan	27.K0JN8.011
SPEAKER/MICROPHONE		
	SPEAKER L	23.JFCN8.002
	SPEAKER R	23.JFCN8.003

Category	Description	Acer Part No.
TOUCHPAD		
	TOUCHPAD MODULE NC.24611.093	56.JFCN8.001
	TOUCHPAD MODULE NC.24611.0AT	56.JFCN8.002
MISCELLANEOUS		
	CONDUTIVE FABRIC TOUCHPAD 60*5*0.1 MM	47.J1YN8.002
	CONDUCTIVE FABRIC	47.J1YN8.001
	ACETATE TAPE 30*12*0.1 MM	47.J1YN8.003
	TAPE BATTERY CABLE	47.KKAN8.004
	MYLAR KB	47.KKAN8.005

Screw List

Table 6-4. Screw List

Category	Description	Acer Part No.
	SCREW_M2.0MM*L4MM_D4.0MM_T0.7MM_SILVER	86.KKAN8.005
	SCREW_M2.0MM_L6.0MM_D4.5MM_T0.8MM_BLACK	86.KKAN8.006
	SCREW_M2.0MM*L3.0MM_D5.0MM_T0.5MM_SILVER	86.KKAN8.004
	SCREW_M2.5MM*L4MM_D4.5MM_T0.8MM_BLACK	86.KKAN8.003
	SCREW_M2.0MM*L3.5MM_D5.0MM_T0.5MM_BLACK	86.KKAN8.002
	SCREW_M2.0_L2.5_D4.5_T0.5_FLAT END_SWRCH18A_BLACK	86.J02N8.001
	SCREW_M2.0MM*L2.3MM_D7.5MM_T0.6MM_BLACK	86.KT8N8.002

Software Update

Please visit <http://go.acer.com/?id=17883>

System BIOS & Driver Updates

Visit <http://www.acer.com/support> to discover the available system BIOS and Drivers for this product. After selecting the desired country/language, either enter the model name or product serial number, or select the product from the list of suggested models in order to get access to product-specific software and documentation.

To update the system BIOS

- Download the desired system BIOS version from the website
- Unzip the downloaded file to your computer
- Double-click the extracted file in order to initiate the update process
- The update process itself is fully automated and its progress is visualized by means of a progress indicator
- A visual notification is shown when the update is complete

⇒ NOTE





Upgrading the system BIOS incorrectly, or intermittence of the system BIOS update process could harm the product.

⇒ NOTE

System BIOS upgrades or downgrades, if not performed by an Acer Service Center or authorized Service Partner, are at own risk.

To update Drivers

Run Windows Update in order to get the latest drivers from Acer

- Select the Start  button
- Go to Settings  > Update & Security  > Windows Update 
- Drivers will automatically be listed on the screen. Press Download to start the download of the respective driver
- Installation of the driver will start automatically once the download is completed

Software Recovery

This product has embedded software recovery tools which can be used to either perform a partial or full software recovery, but also to create a Factory Default recovery media. For more information about the software recovery options, how to perform a software recovery or creating a Factory Default recovery media, please refer to the chapter "Recovery" which is available in the User Manual of the product.

⇒ NOTE







In the event of not being able to create a Factory Default recovery media, it is possible to obtain a copy of the recovery media through Acer Customer Service (<http://www.acer.com/support>)

This is not a free of charge service.

Personal Data Removal

Personal Data Removal

Removing your personal data There are three options to choose from:

- Option 1: Select Start  > Settings  > Update&Security  > Recovery. Under Reset this PC, select Get started. Open Recovery settings.
- Option 2: Restart your PC to get to the sign-in screen, then press and hold down the Shift key while you select the Power  icon > Restart in the lower-right corner of the screen. After your computer restarts, select Troubleshoot > Reset this PC
- >Option 3: Select Start  ., then press and hold down the Shift key while you select the Power  icon > Restart to restart your computer into Recovery Mode. After your computer restarts, select Troubleshoot > Reset this PC.