

Aspire 5 A515-57/A515-57G/A515-57T/A515-57GT

Lifecycle Extension Guide

Table of Contents

Self-Repair	1
Disassembly Procedures	3
Troubleshooting	38
FRU (Field Replaceable Unit) List	39
Exploded Diagrams	40
Software Update	44
Personal Data Removal	45

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
- DIMM module(s)
- WLAN module
- LTE 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 warranty.

Disassembly Procedures

Please refer to the chapter "[Disassembly Procedures](#)" for step by step disassembly instructions.

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** 
- Available 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.

Disassembly Procedures

Safety Guidelines

This chapter contains step by step procedures on how to remove and de-install components from the computer. Use the following safety guidelines to ensure your personal safety. Each procedure included in this chapter assumes that you are preparing your computer for recycling and disposal.

By performing any of these procedures you acknowledge that any remaining warranty applicable to your computer will be voided. Before you start any of the procedures in this chapter, make sure to read the following safety guidelines and the respective instructions within the chapter.

CAUTION!

- Turn off your computer and disconnect all power sources before opening the computer cover or panels.
- To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface at the same time as touching a connector on the back of the computer.
- Take off any metal objects on your arms or fingers such as bracelets, rings or watches and make sure your hands are completely dry. Even if your unit is unplugged, there may still be some remaining electric charge.
- If a component does not come out easily, do not forcefully remove it. Instead, check that you are removing it correctly and that no wires or other parts are in the way.
- When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable.

Recommended Equipment

The following tools are required to perform maintenance on the notebook:

- Wrist grounding strap and conductive mat
- Flat screwdriver
- Philips screwdriver
- Pointed plastic pry or similar object
- Tweezers

WEEE Annex VII Component

These components are classified as requiring selective treatment:

- Battery Pack
- SSD Module
- WLAN Module
- DIMM Modules
- USB Board
- Touchpad
- RTC Battery
- Mainboard
- LCD Panel and eDP Cable

Getting Started

Perform the following prior to performing any maintenance procedures:

1. Place the system on a flat work surface.
2. Make sure the system is completely powered down.
 - a. If the device is in powered up mode, shut down the system normally.
 - b. If the device is in sleep mode, wait for the Home Screen to clear. Then, shut down normally.
3. Disconnect the AC Adapter and remove all cables from the system and its peripherals.



Figure 1-1. Disconnecting the Power Adapter

Lower Case Removal

1. Remove the ten (10) screws securing the lower case to the upper case.



Figure 1-2. Removing the Screws

2. Pry the lower case from the bottom side to release the latches.

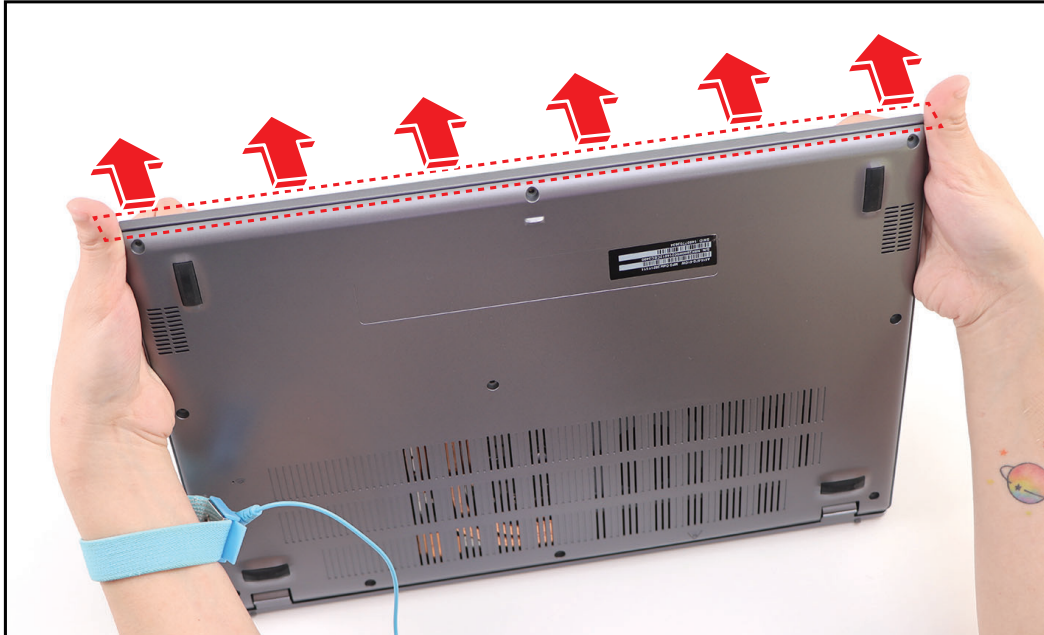


Figure 1-3. Releasing the Lower Case

3. Continue releasing the remaining latches. Then remove the lower case.

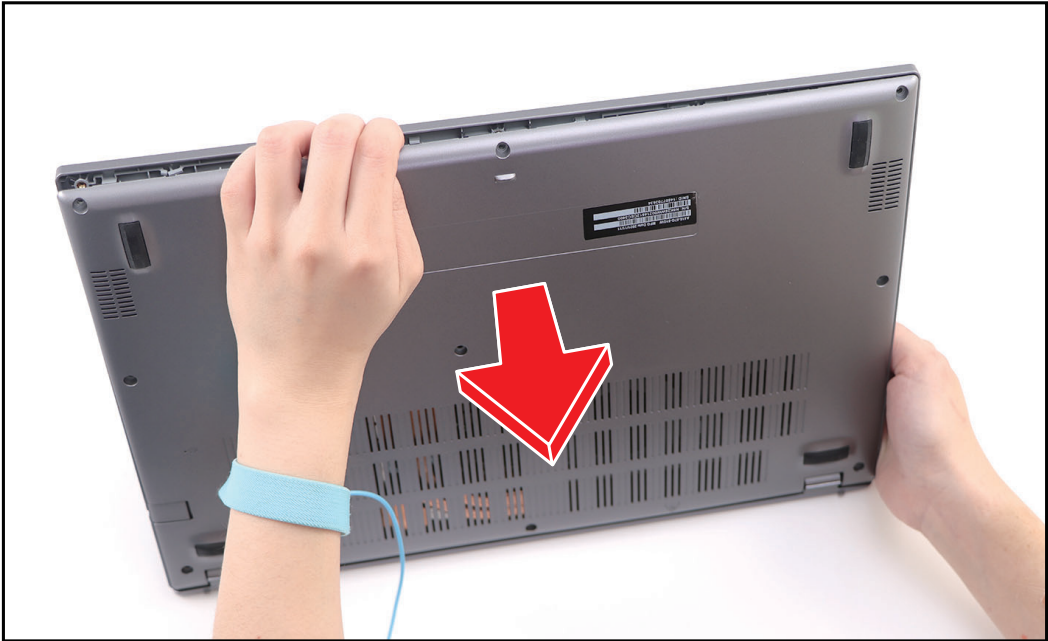


Figure 1-4. Removing the Lower Case

4. Disconnect the battery cable from the mainboard connector.

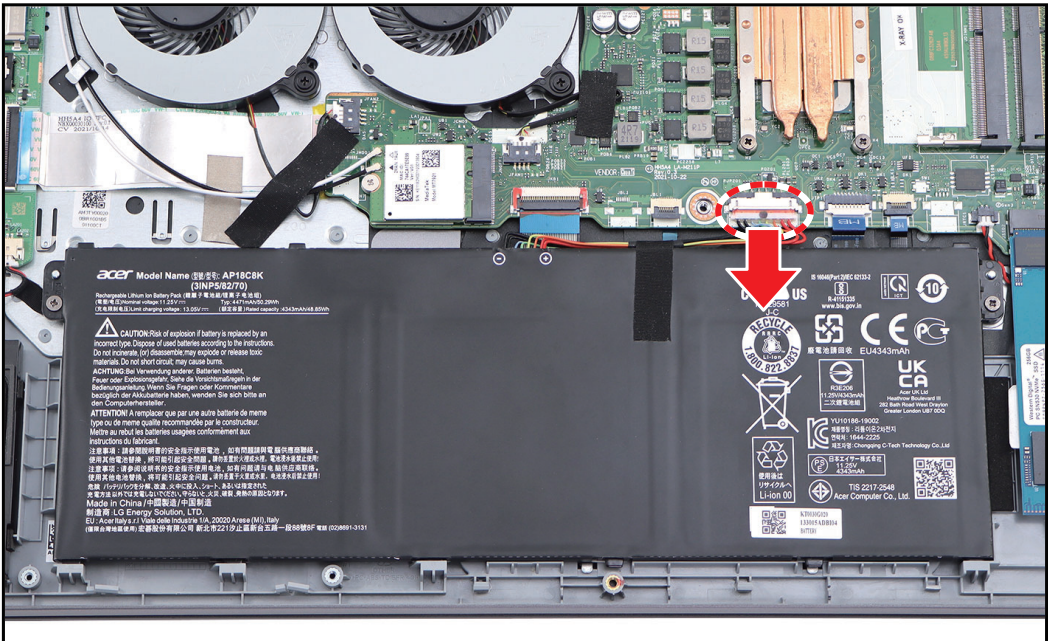



Figure 1-5. Disconnecting the Battery Cable

Table 1-1. Lower Case Screws

Screw Name	Screw Type	Torque	Quantity
M 2.5 x 6.0		2.65~3.0kgf.cm	10

Battery Removal

Prerequisite:

- * **Lower Case Removal** on page 1-6

1. Remove the two (2) screws securing the battery to the upper case.



Figure 1-6. Removing the Screws

2. Release the battery latches and then remove the battery from its slot on the upper case.

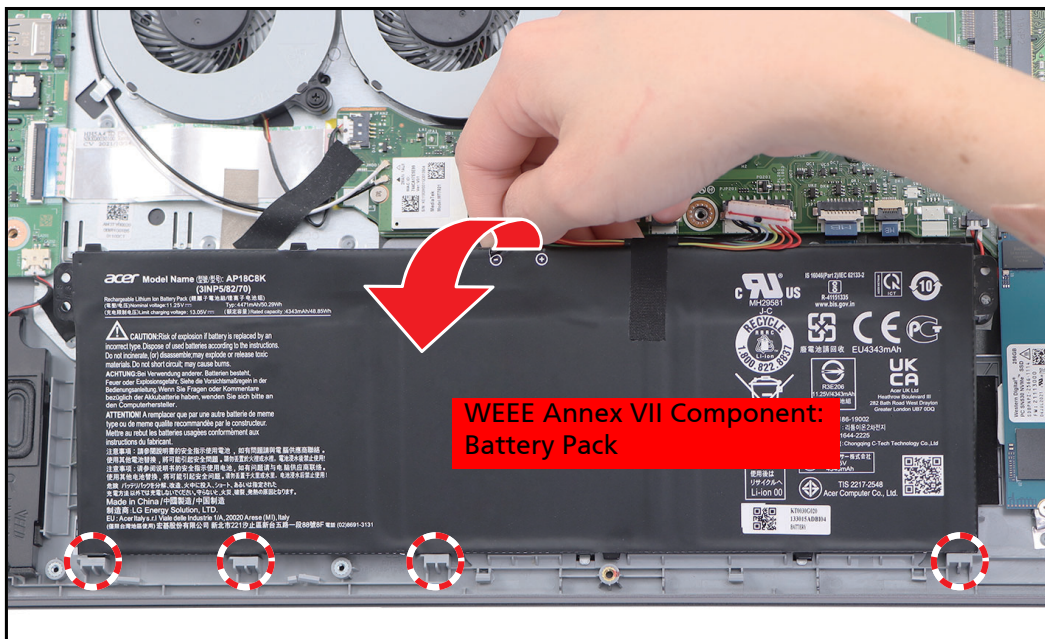



Figure 1-7. Removing the Battery

Table 1-2. Battery Screws

Screw Name	Screw Type	Torque	Quantity
M 2.0 x 4.0		1.8~2.2kgf.cm	2

SSD Module Removal

Prerequisite:

※ **Lower Case Removal** on page 1-6

1. Remove the screw securing the SSD module to the upper case.



Figure 1-8. Removing the Screw


2. Pull to disconnect the SSD module from the mainboard connector. Then remove the SSD module.



Figure 1-9. Removing the SSD Module

3. Repeat steps 1~2 to remove the second SSD module (if applicable).

Table 1-3. SSD Module Screw

Screw Name	Screw Type	Torque	Quantity
M 2.0 x 3.0		1.8~2.0kgf.cm	1

WLAN Module Removal

Prerequisite:

※ [Lower Case Removal](#) on page 1-6

1. Detach the acetate tape from the WLAN antenna cables and fan cable.

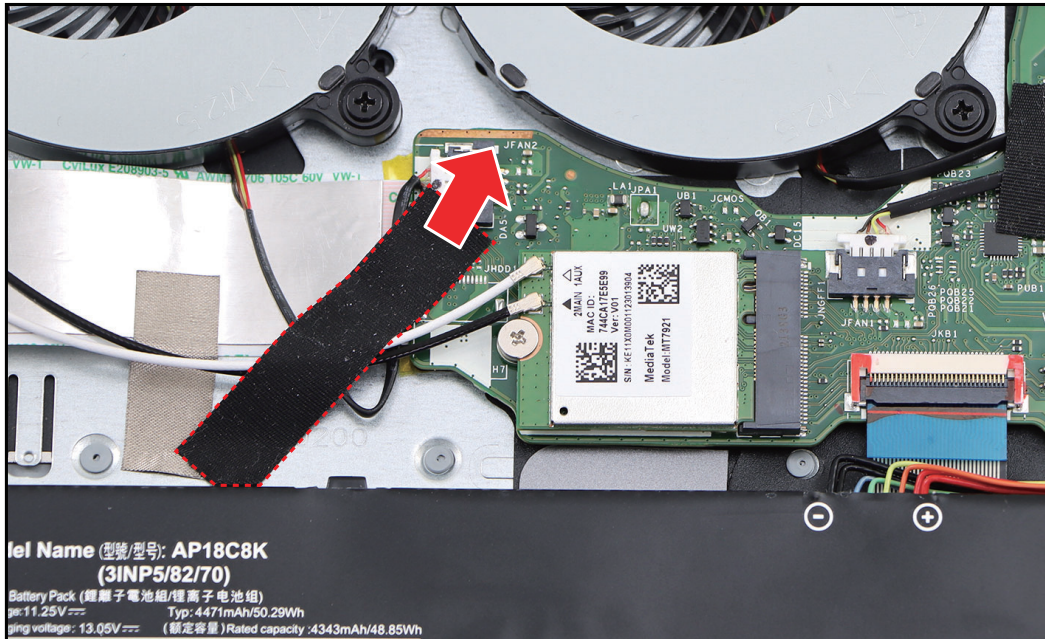


Figure 1-10. Detaching the Acetate Tape

2. Disconnect the WLAN antenna cables.

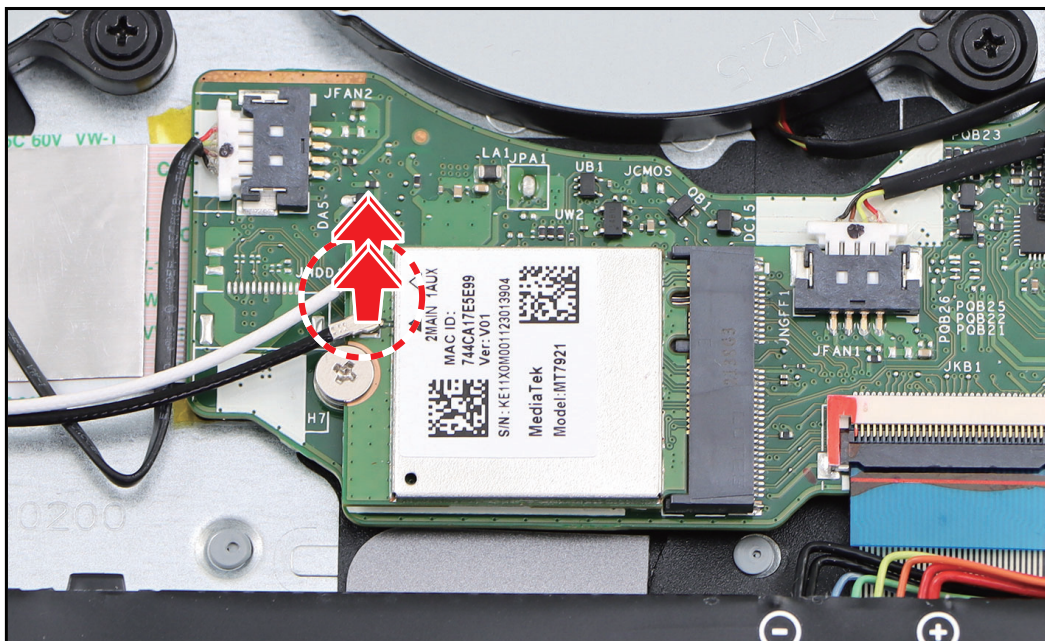


Figure 1-11. Disconnecting the WLAN Antenna Cables

3. Remove the screw securing the WLAN module to the mainboard.

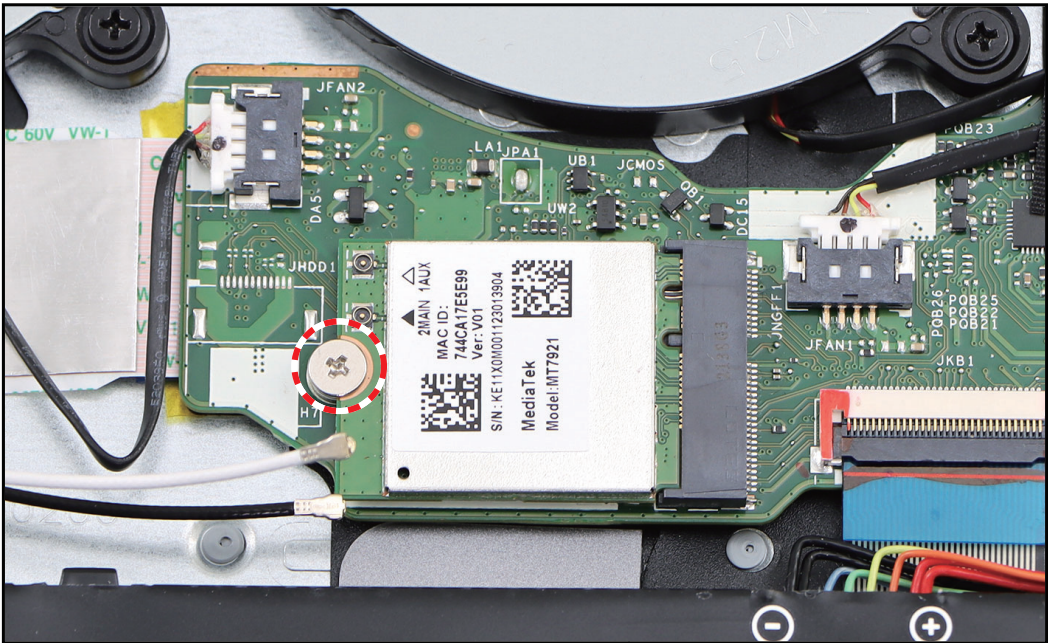



Figure 1-12. Removing the Screw

4. Pull to disconnect the WLAN module from the mainboard connector. Then remove the WLAN module.



Figure 1-13. Removing the WLAN Module

Table 1-4. WLAN Module Screw

Screw Name	Screw Type	Torque	Quantity
M 2.0 x 2.5		1.8~2.2kgf.cm	1

DIMM Module Removal

Prerequisite:

※ **Lower Case Removal** on page 1-6

1. Push the module clips outwards.

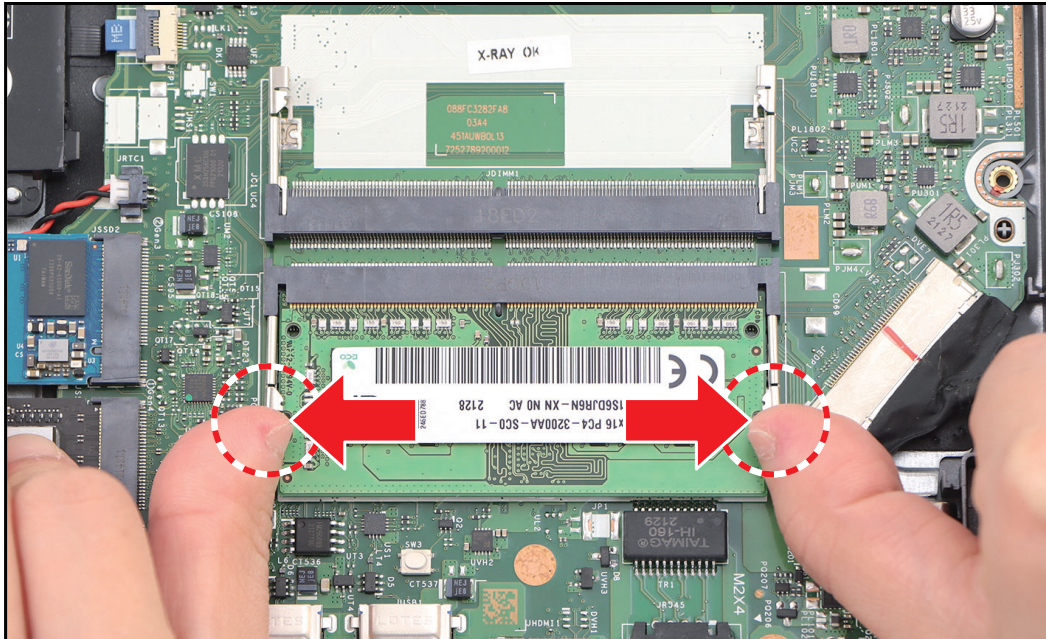


Figure 1-14. Unclipping the Module Clips

2. Pull to remove the memory module from the mainboard connector. Then remove the memory module.

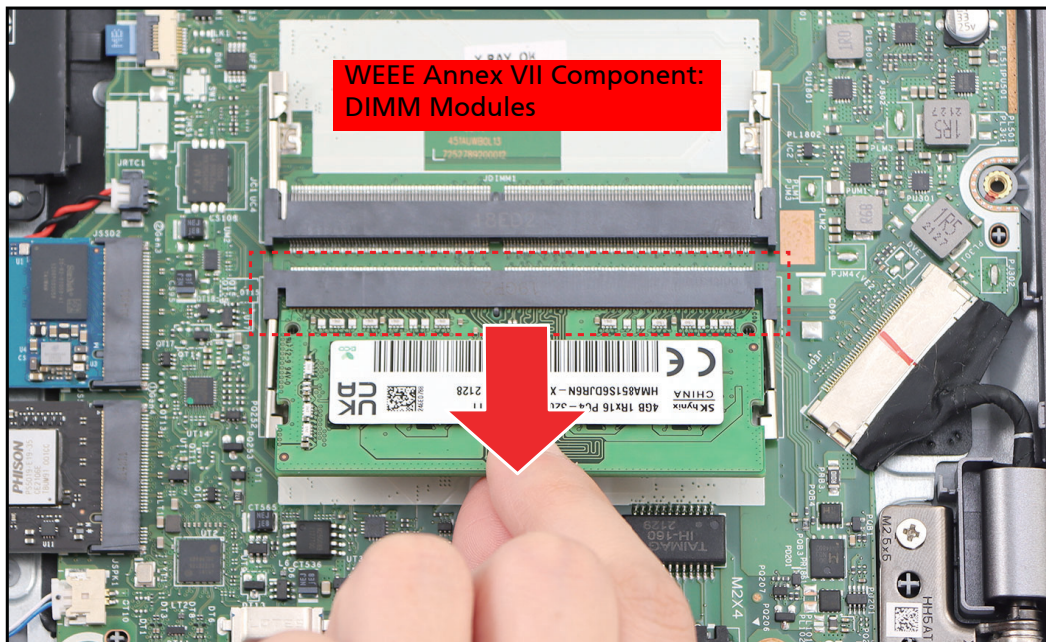


Figure 1-15. Removing the DIMM Module

USB Board Removal

Prerequisite:

※ **Lower Case Removal** on page 1-6

1. Release the latch and disconnect the USB board FFC from the USB board connector (A).
2. Detach the acetate tape from the speaker cable and disconnect the speaker cable from the USB board connector (B).

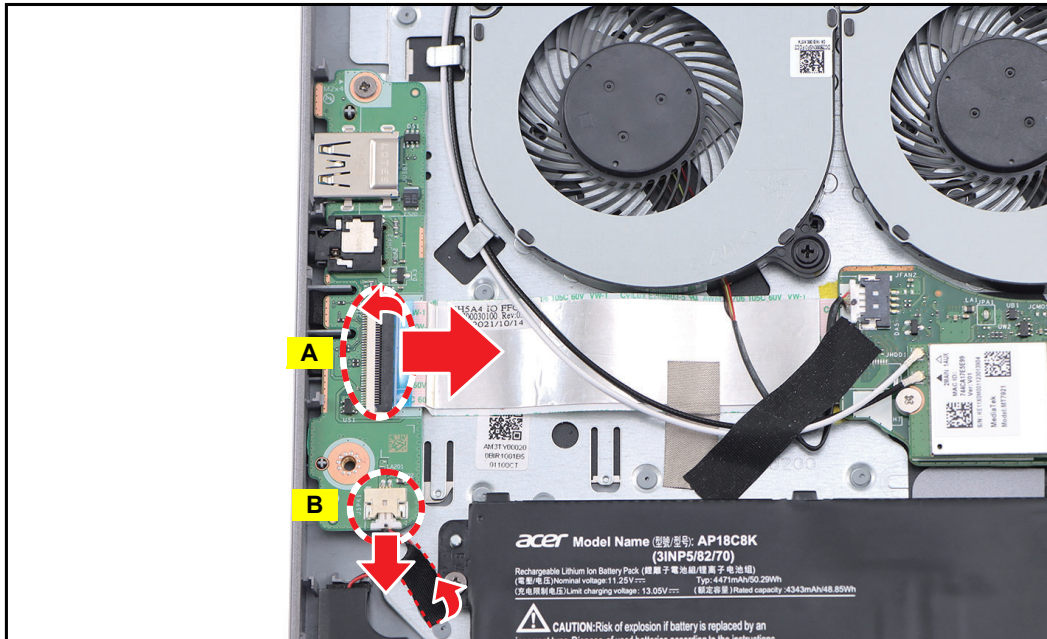


Figure 1-16. Disconnecting the Cables

3. Remove the screw securing the USB board to the upper case.

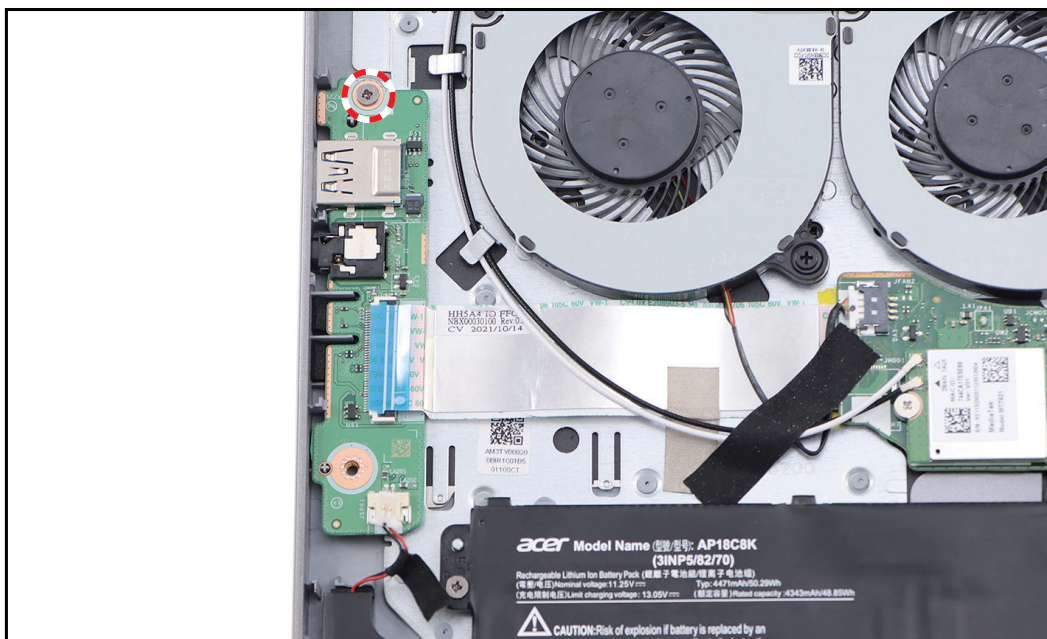


Figure 1-17. Removing the Screw

4. Remove the USB board from the upper case.

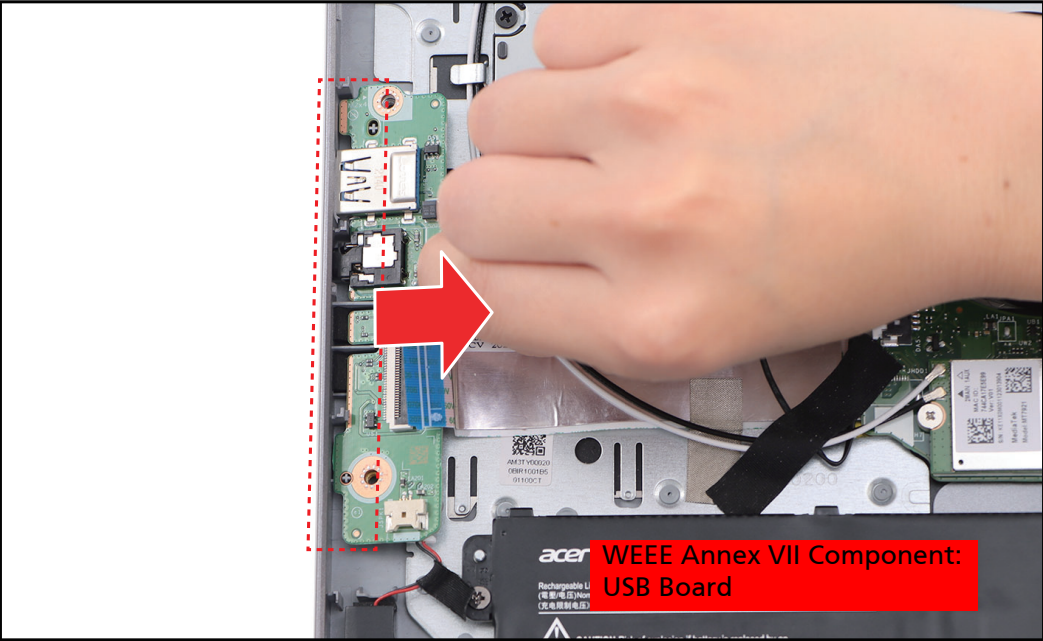



Figure 1-18. Removing the USB Board

Table 1-5. USB Board Screw

Screw Name	Screw Type	Torque	Quantity
M 2.0 x 4.0		1.8~2.2kgf.cm	1

LCD Module Removal

Prerequisite:

※ [Lower Case Removal](#) on page 1-6

1. Detach the acetate tape from the fan cable and WLAN antenna cables.

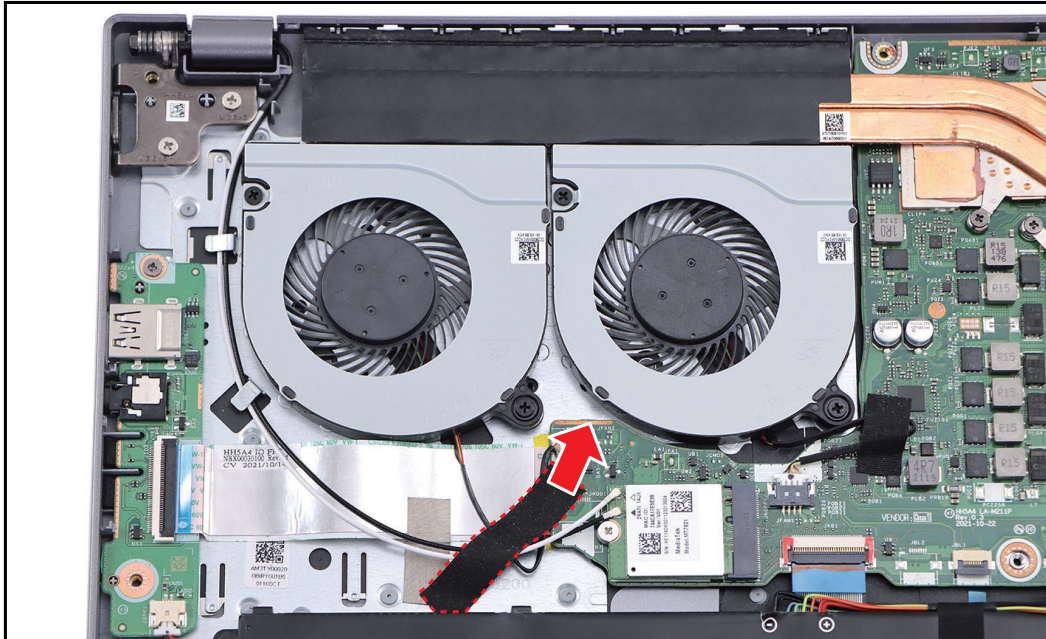


Figure 1-19. Detaching the Acetate Tape

2. Disconnect the WLAN antenna cables from the WLAN module connectors and unroute the cables from the cable guides on the upper case.

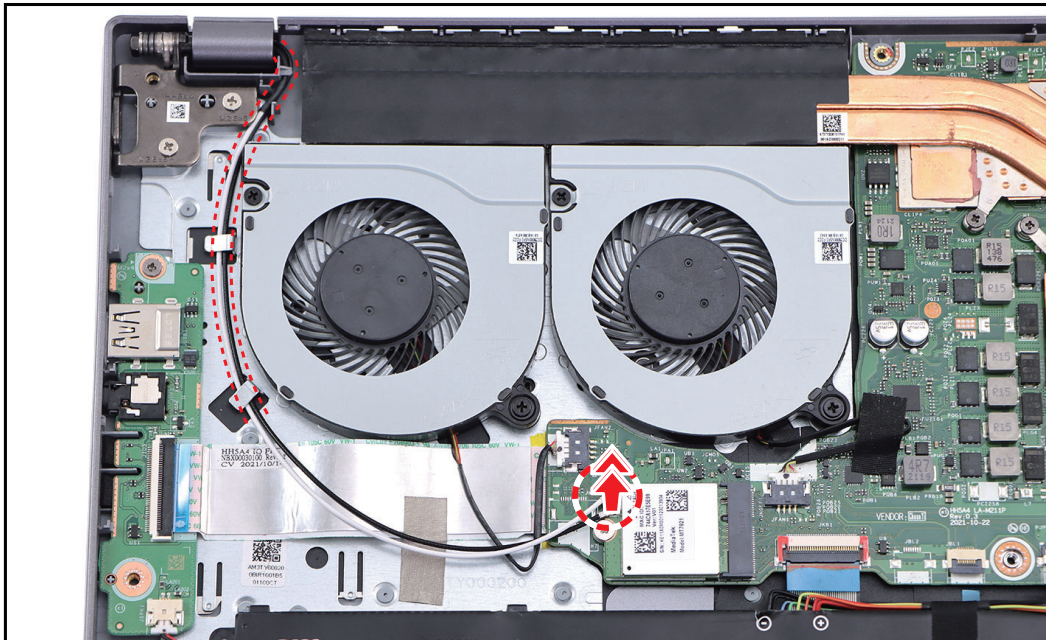


Figure 1-20. Disconnecting the WLAN Antenna Cables

3. Disconnect the eDP cable from the mainboard connector.

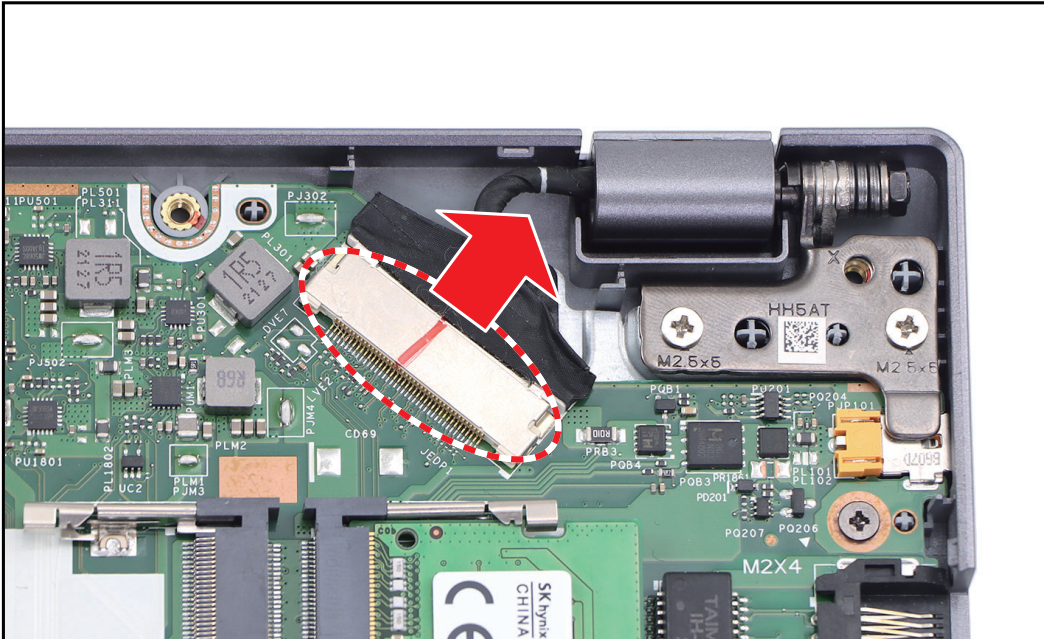


Figure 1-21. Disconnecting the eDP Cable

4. Remove the four (4) screws securing the LCD hinges and LCD module to the upper case.

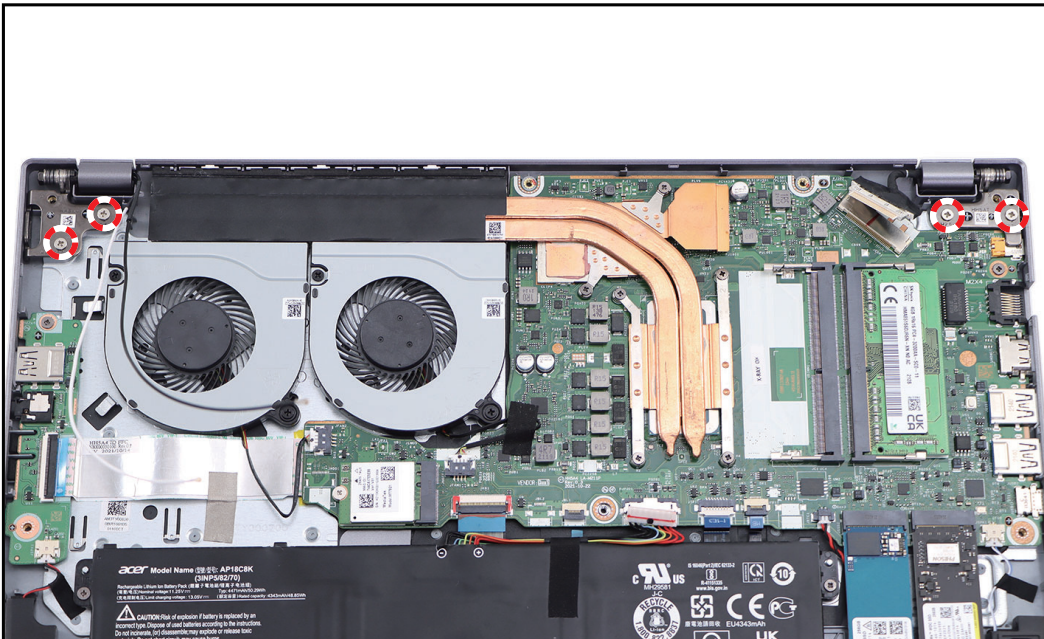


Figure 1-22. Removing the Screws

5. Lift the upper case until it is fully open.

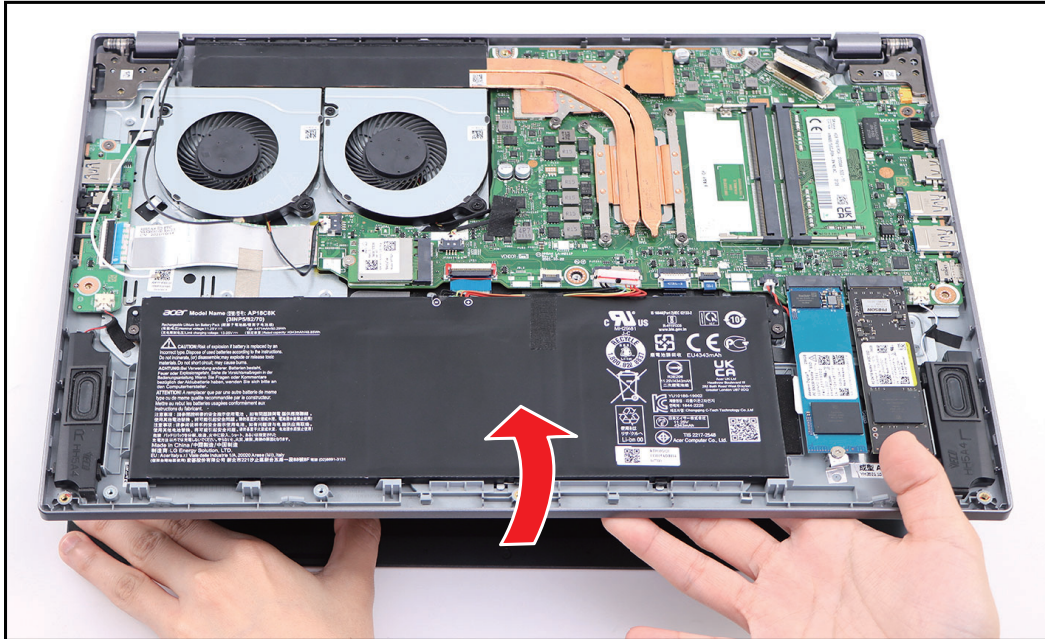


Figure 1-23. Lifting the Upper Case

6. Close the upper case and lift both LCD hinges until they are fully extended.

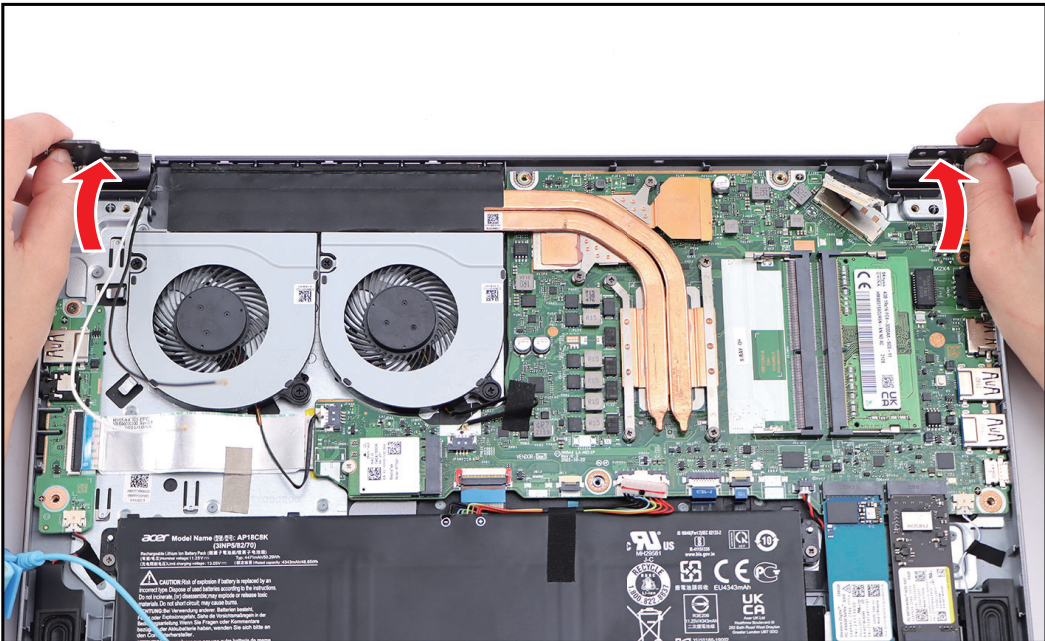


Figure 1-24. Extending the LCD Hinges

7. Open the upper case again. Then remove the LCD module away from the upper case.

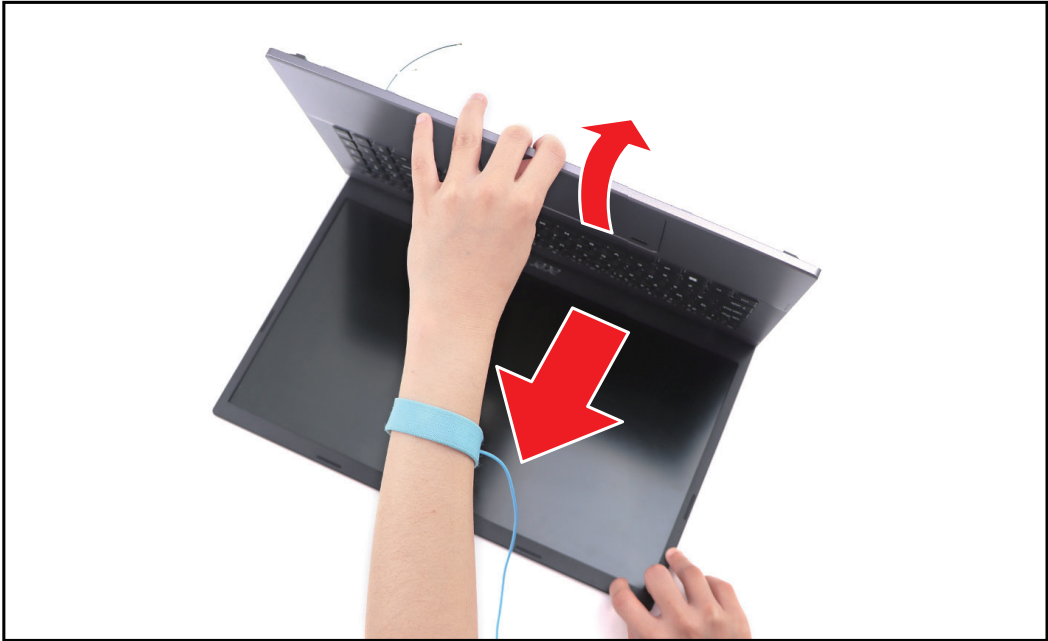



Figure 1-25. Removing the Upper Case

Table 1-6. LCD Module Screws

Screw Name	Screw Type	Torque	Quantity
M 2.5 x 5.0		2.65~3.45kgf.cm	4

Touchpad Removal

Prerequisite:

※ [Battery Removal](#) on page 1-8

1. Release the latches and disconnect the touchpad FFC from the mainboard and touchpad connectors. Then detach the middle portion (A) of the touchpad FFC from the touchpad bracket and remove the touchpad FFC.

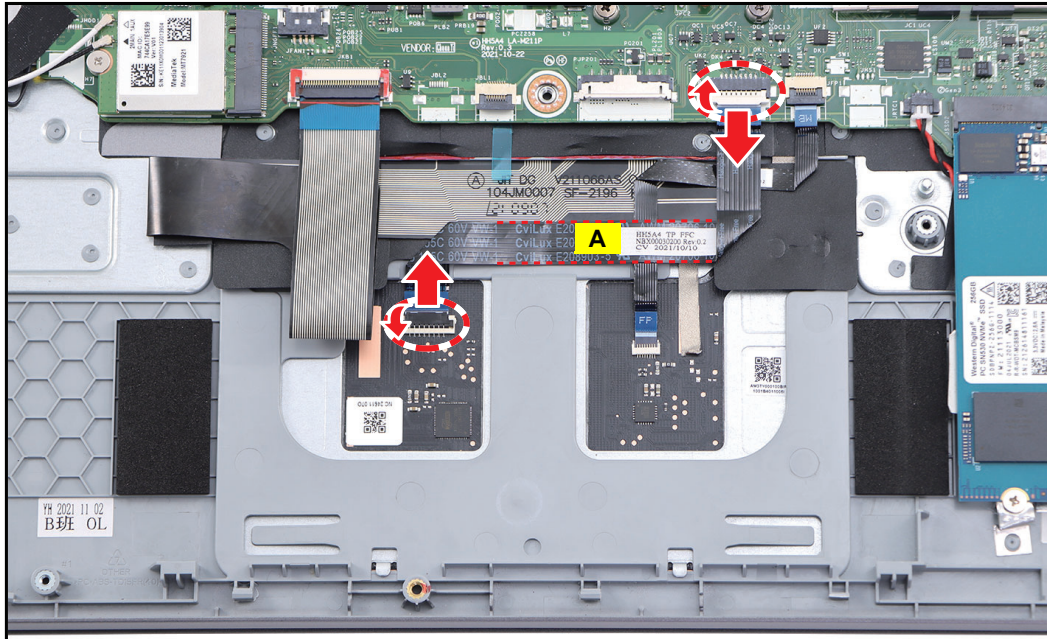


Figure 1-26. Removing the Touchpad FFC

2. Release the latches and disconnect the fingerprint FFC from the mainboard and touchpad connectors. Then detach the middle portion (B) of the fingerprint FFC from the upper case and remove the fingerprint FFC.

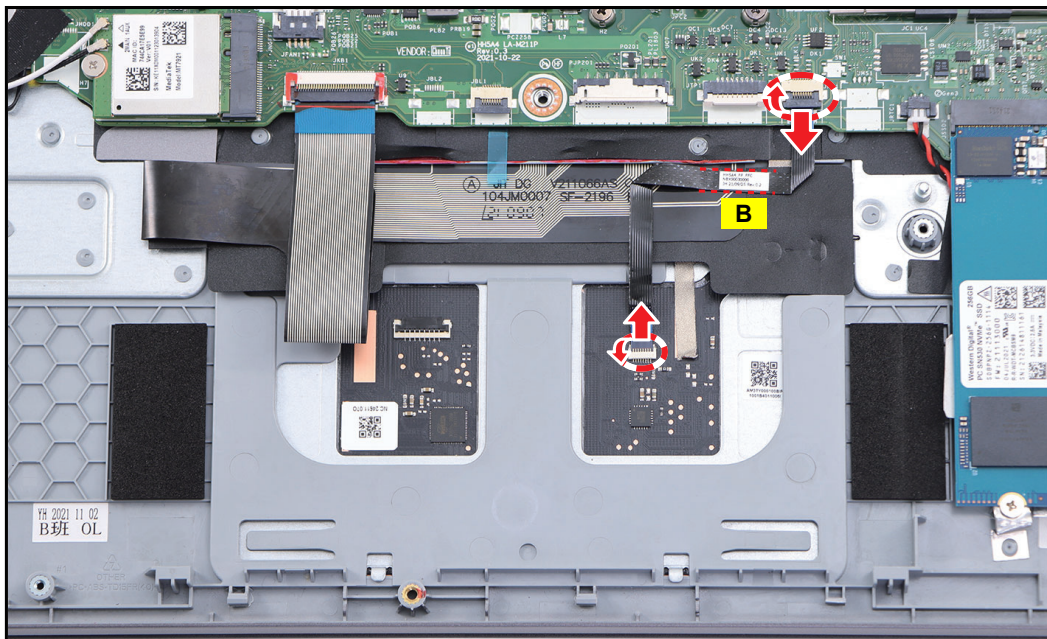


Figure 1-27. Removing Fingerprint FFC

3. Lift the mylar tab for better access of the conductive tape. Then detach the conductive tape from the touchpad and upper case.



Figure 1-28. Detaching the Conductive Tape

4. Remove the two (2) screws securing the touchpad to the upper case.

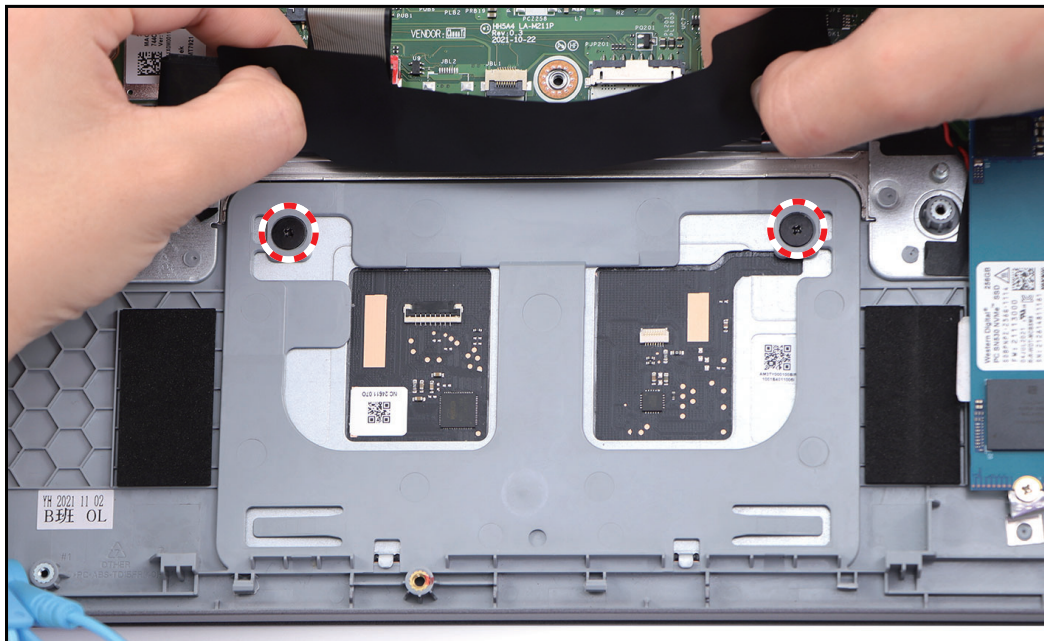


Figure 1-29. Removing the Screws

- 5. Place one of your hands underneath the touchpad. Use a pointed device to push on the screw holes and then slide the bottom part of the touchpad forward to disengage it from the latches.
- 6. Remove the touchpad from the upper case.

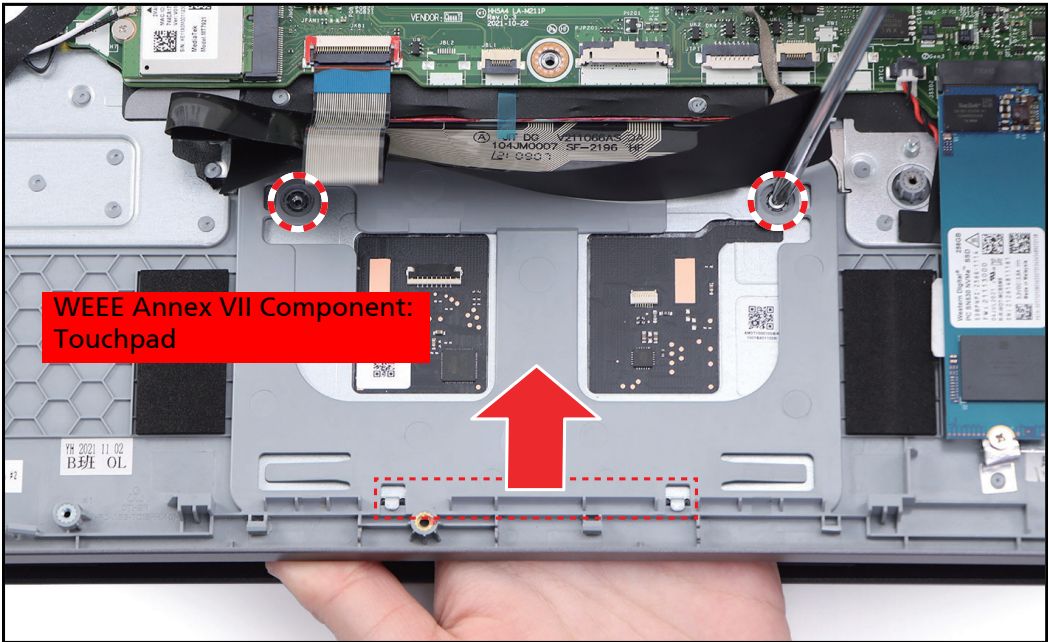



Figure 1-30. Removing the Touchpad

Table 1-7. Touchpad Screws

Screw Name	Screw Type	Torque	Quantity
M 2.0 x 2.3		1.8~2.2kgf.cm	2

RTC Battery Removal

Prerequisite:

※ [SSD Module Removal](#) on page 1-10

1. Disconnect the RTC battery cable from the mainboard connector and unrout from the cable guide.

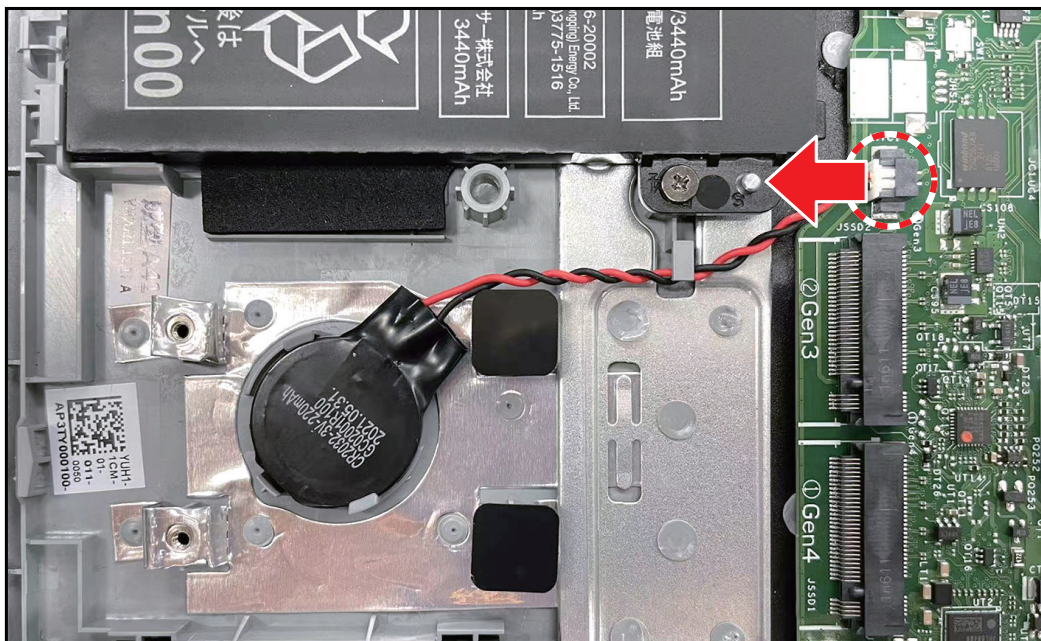


Figure 1-31. Disconnecting the RTC Battery Cable

2. Pry to detach the adhesive tape underneath the RTC battery. Then remove the RTC battery.

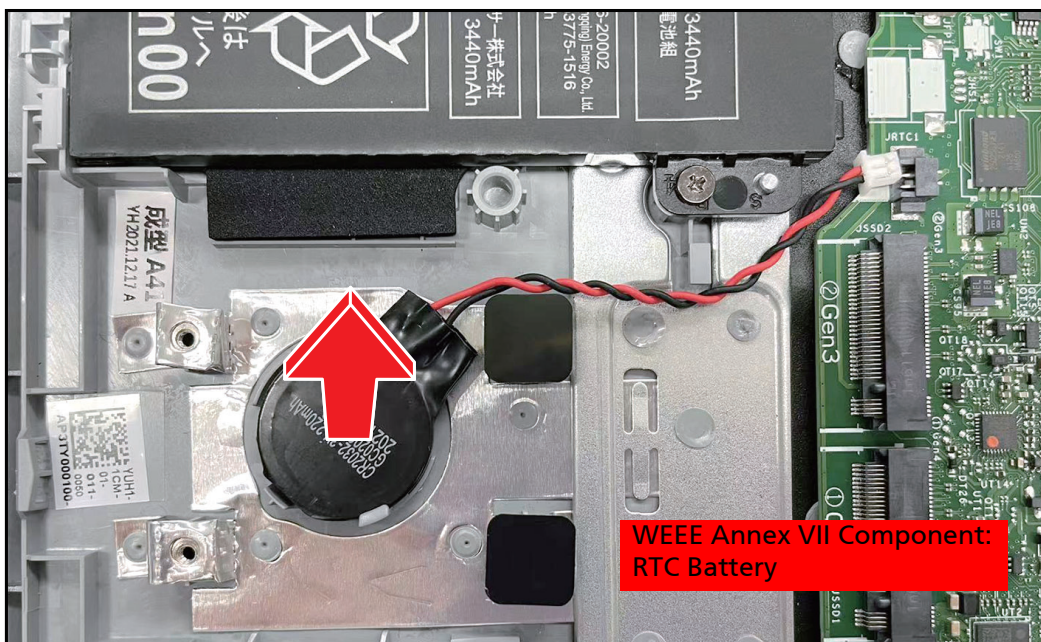


Figure 1-32. Removing the RTC Battery

Mainboard Removal

Prerequisite:

- ※ [SSD Module Removal](#) on page 1-10
- ※ [WLAN Module Removal](#) on page 1-12
- ※ [DIMM Module Removal](#) on page 1-14
- ※ Thermal Module Removal
- ※ Fan 1 & Fan 2 Module Removal

1. Remove the two (2) screws securing the right side of the LCD hinge.

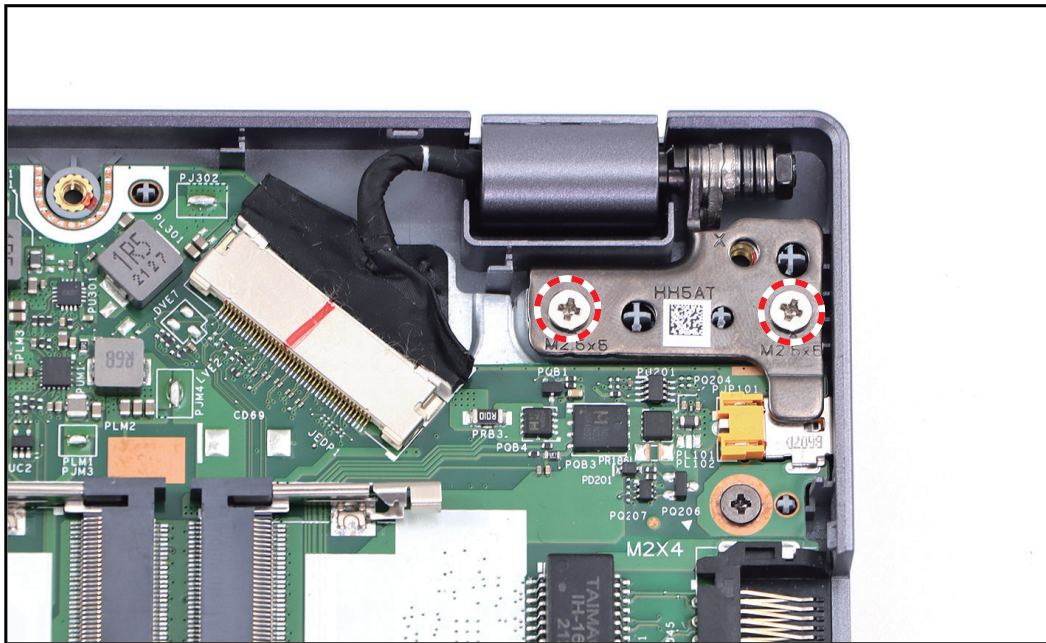


Figure 1-33. Removing the Screws

2. Lift the upper case until it is fully open.

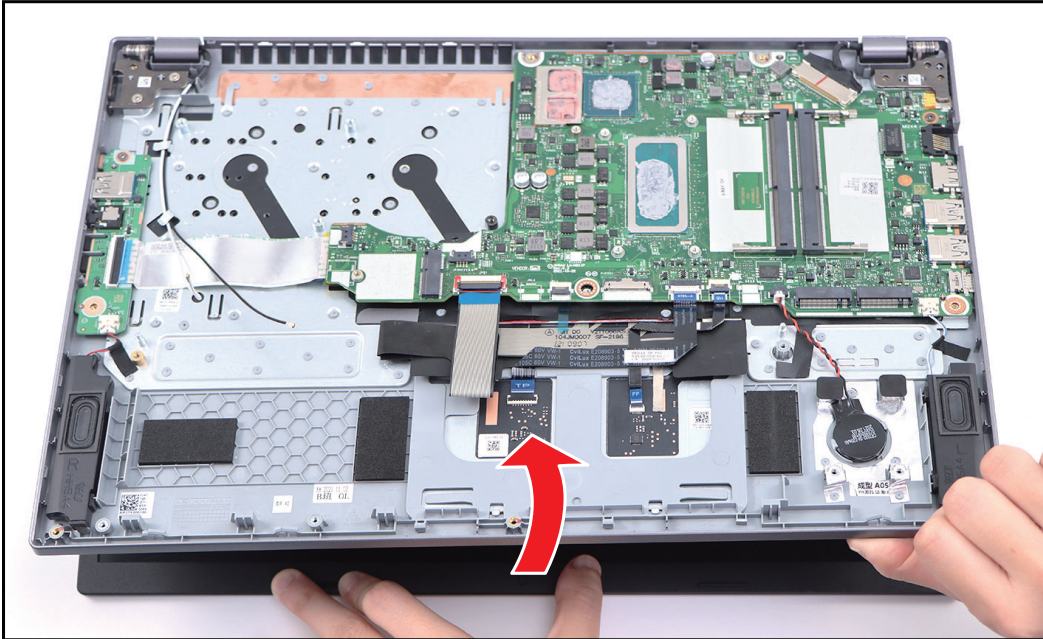


Figure 1-34. Opening the Upper Case

3. Close the upper case and lift the right side of LCD hinge until it is fully extended.

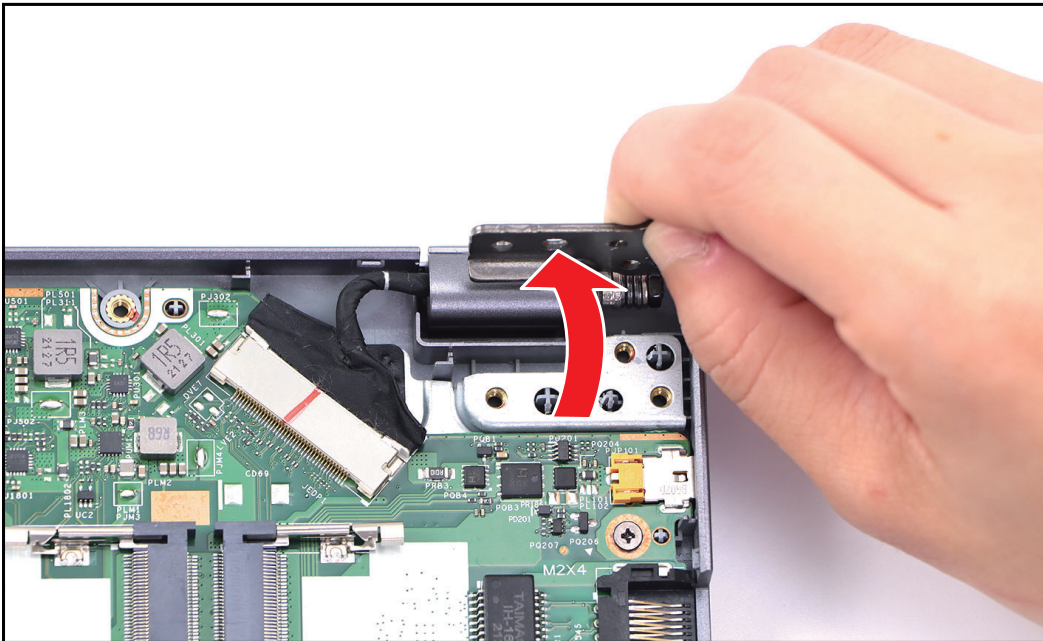


Figure 1-35. Extending the LCD Hinge

4. Release the latch and disconnect the USB board FFC (A) from the USB board connector.
5. Release the latch (if necessary) and disconnect the following cables from the mainboard connectors:
 - Keyboard FPC (B)
 - Touchpad FFC (C)
 - Fingerprint FFC (D)
 - RTC battery cable (E)
 - Speaker cable (F)
 - eDP cable (G)

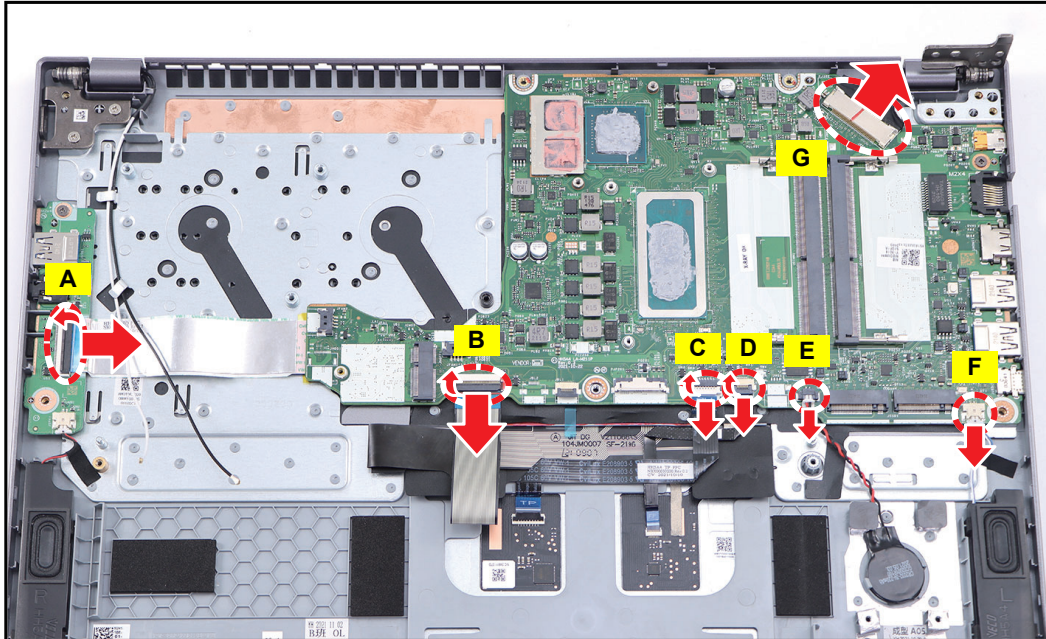


Figure 1-36. Disconnecting the Cables

6. Remove the screw securing the mainboard to the upper case.

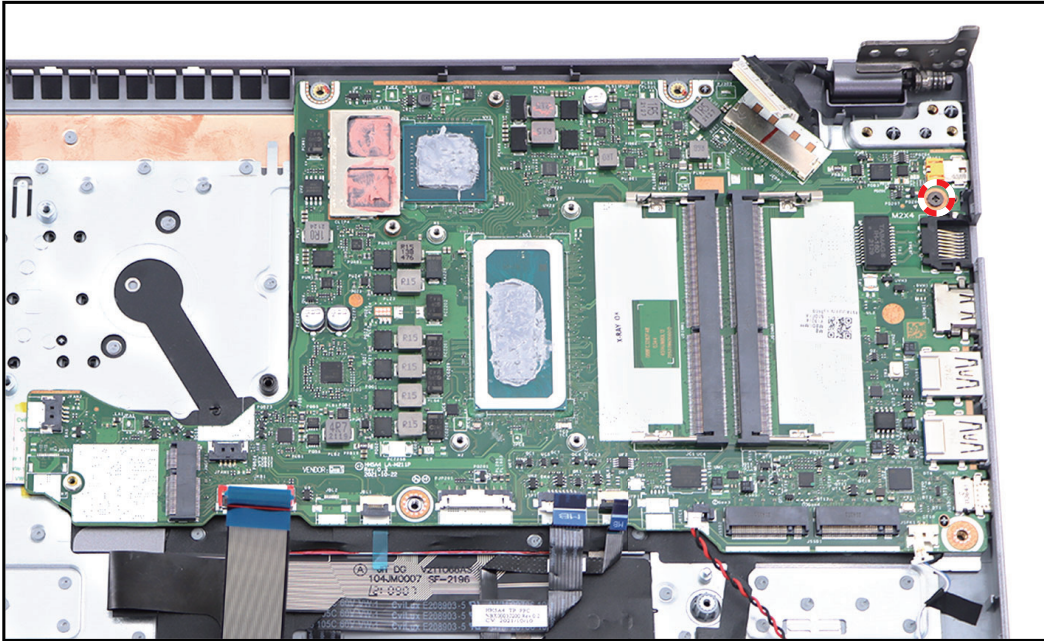


Figure 1-37. Removing the Screw

7. Slide the mainboard to release the I/O connectors from their slots, and then remove the mainboard from the upper case.

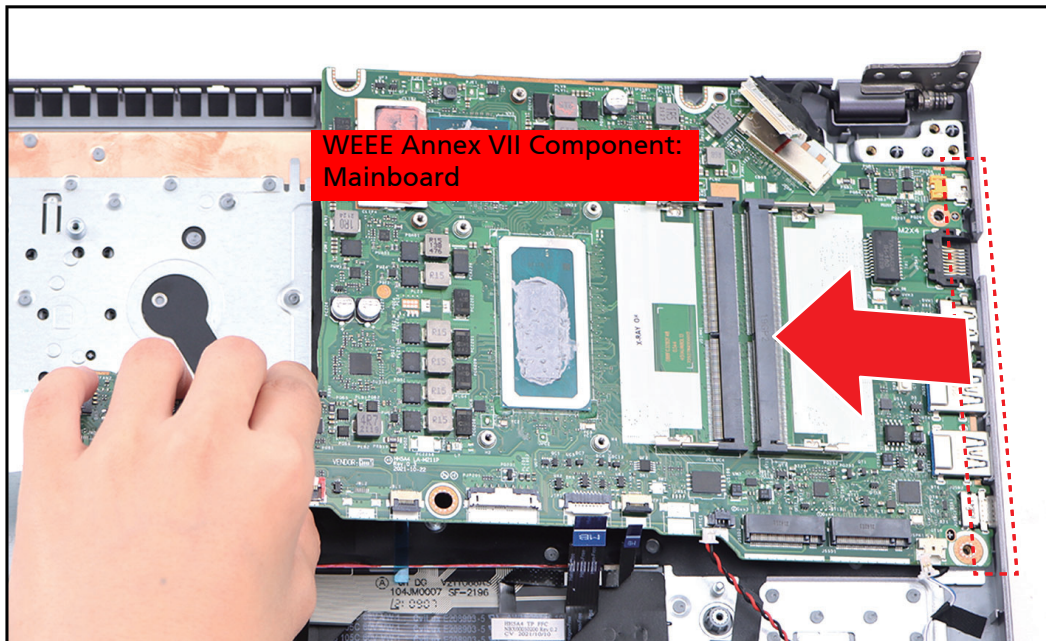


Figure 1-38. Removing the Mainboard

8. Detach the adhesive tape from the USB board FFC connector.

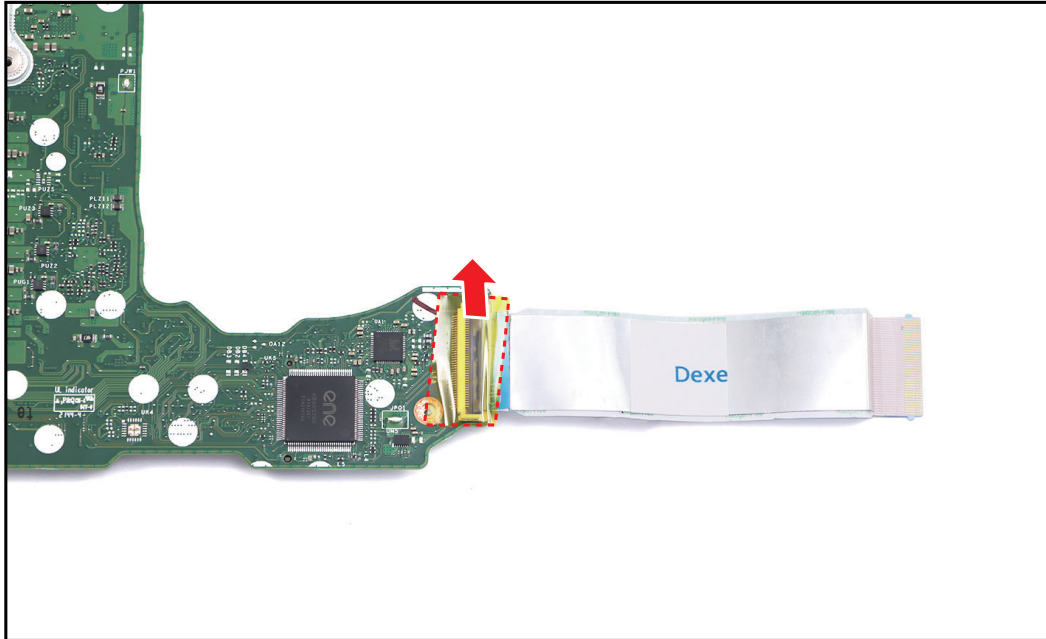


Figure 1-39. Detaching the Adhesive Tape

9. Release the latch and disconnect the USB board FFC from the mainboard connector. Then remove the USB board FFC.

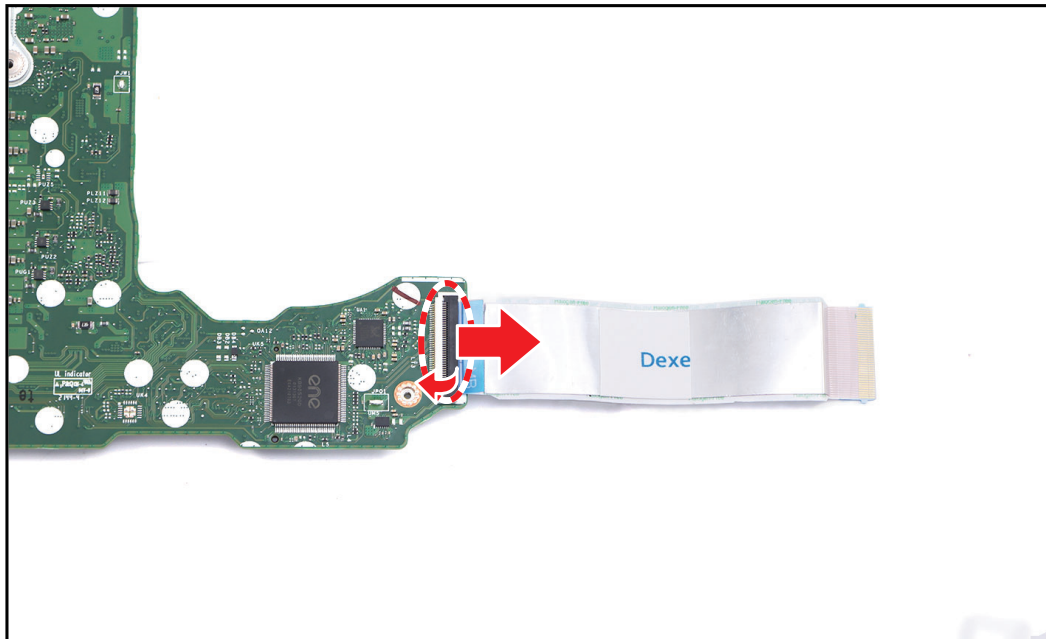




Figure 1-40. Removing the USB Board FFC

Table 1-8. Mainboard Screws

Screw Name	Screw Type	Torque	Quantity
M 2.0 x 4.0		1.8~2.2kgf.cm	1 (Mainboard)
M 2.5 x 5.0		2.65~3.45kgf.cm	2 (LCD Hinge)

LCD Bezel Removal

Prerequisite:

※ [LCD Module Removal](#) on page 1-17

1. Pry the LCD bezel from the upper side to release latches.

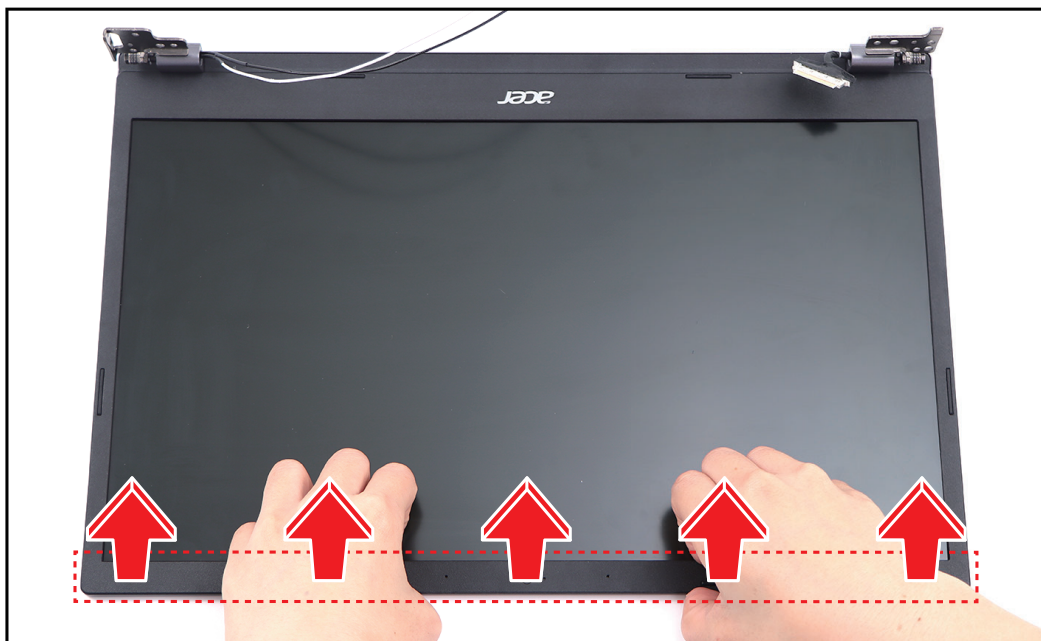


Figure 1-41. Removing the LCD Bezel (1 of 4)

2. Pry the LCD bezel from the right side to release the latches.

⚠ CAUTION: To avoid damaging the LCD bezel, while releasing the first upper right side latches, push the inner parts of the LCD bezel outwards to release the latches.

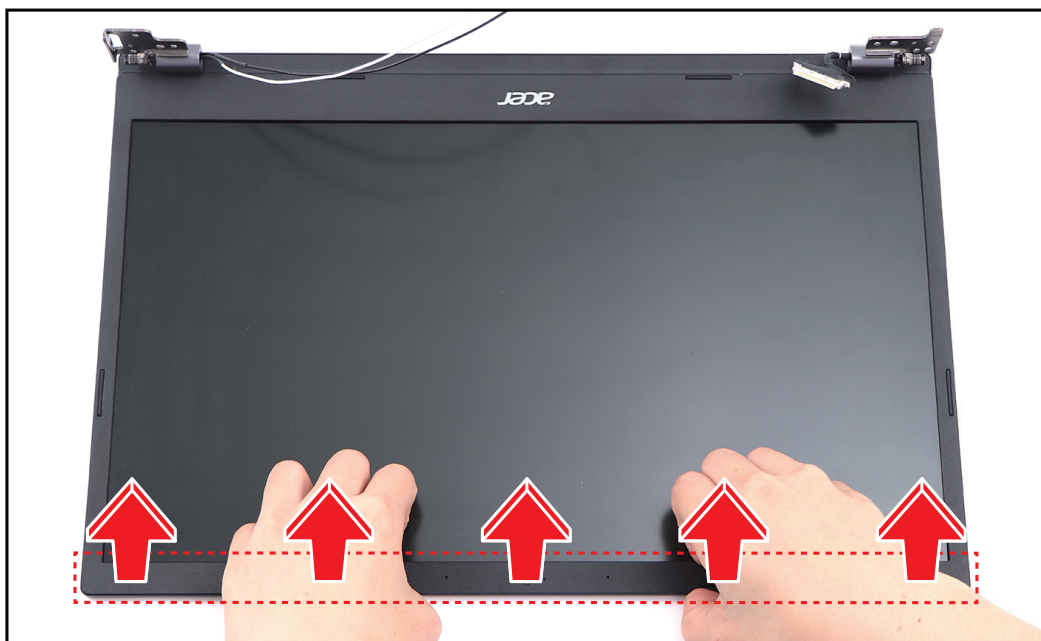


Figure 1-42. Removing the LCD Bezel (2 of 4)

3. Continue releasing the left side latches.

⚠ CAUTION: To avoid damaging the LCD bezel, while releasing the first upper left side latches, push the inner parts of the LCD bezel outwards to release the latches.

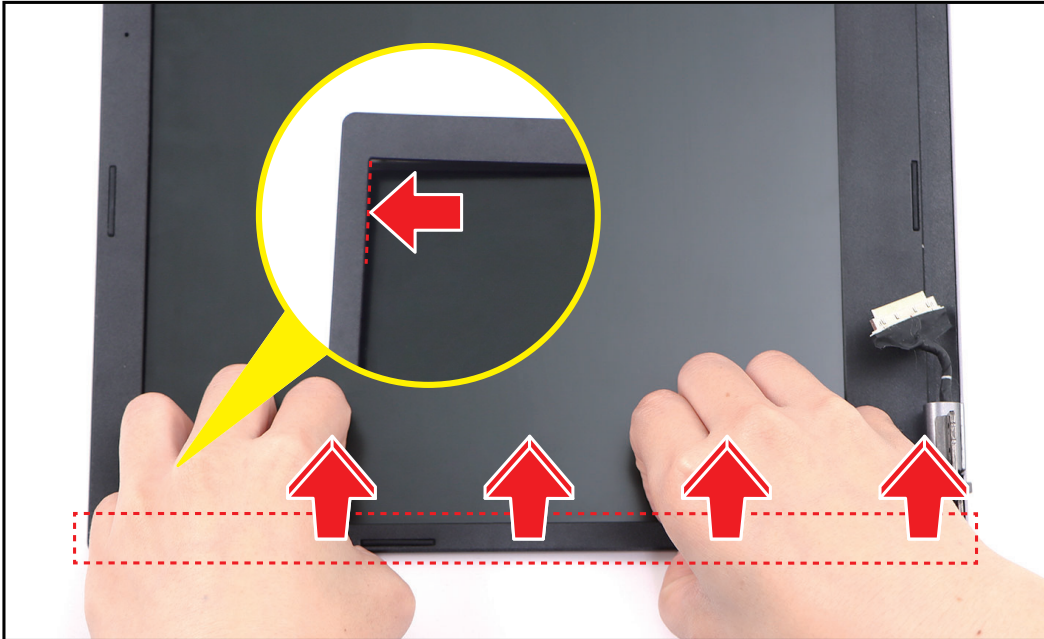


Figure 1-43. Removing the LCD Bezel (3 of 4)

4. Continue to pry the bottom side latches and remove the bezel.

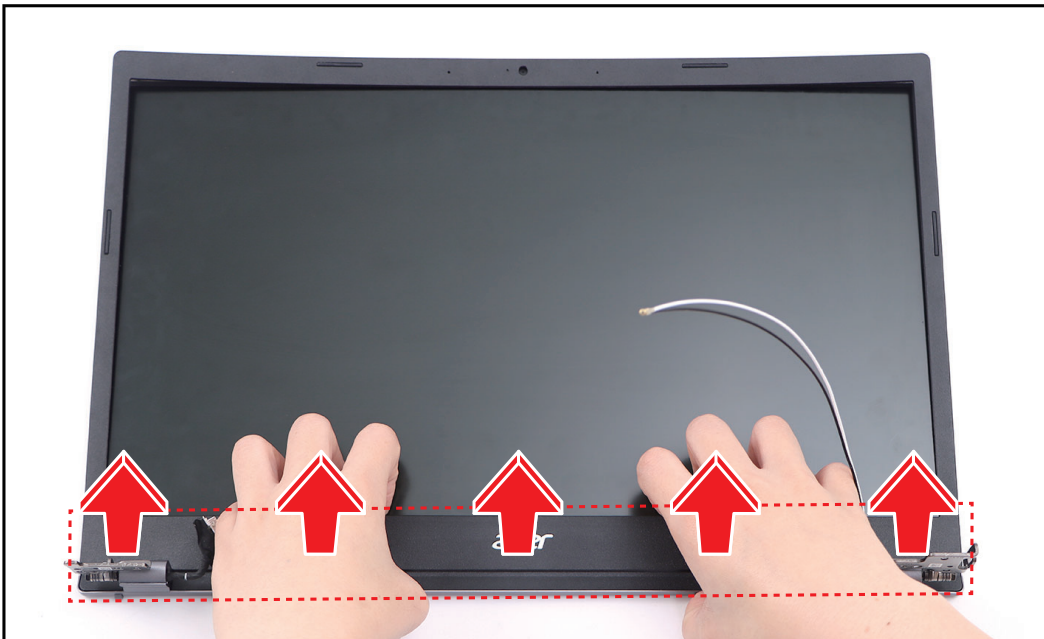


Figure 1-44. Removing the LCD Bezel (4 of 4)

LCD Panel and eDP Cable Removal

Prerequisite:

※ LCD Hinges Removal

1. Unroute the auxiliary antenna cable from the cable guides on the bottom and right sides of the LCD cover.



Figure 1-45. Unrouting the Auxiliary Antenna Cable

2. Unroute the main antenna cable from the cable guides on the bottom and right sides of the LCD cover.

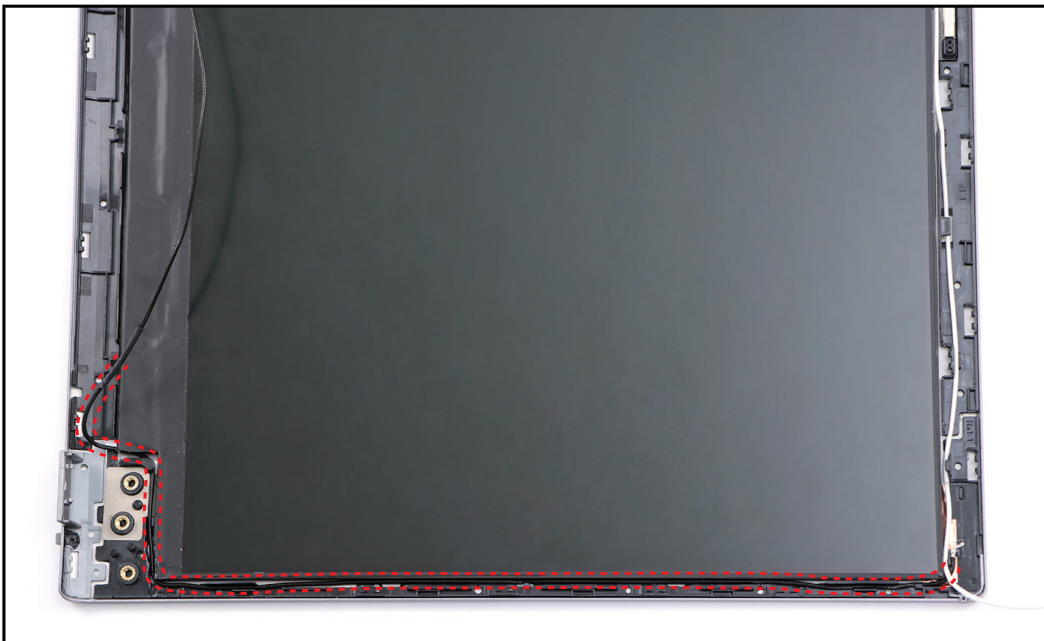


Figure 1-46. Unrouting the WLAN Main Antenna Cable

3. Unroute the antenna cables from the upper side cable guides on the LCD cover.

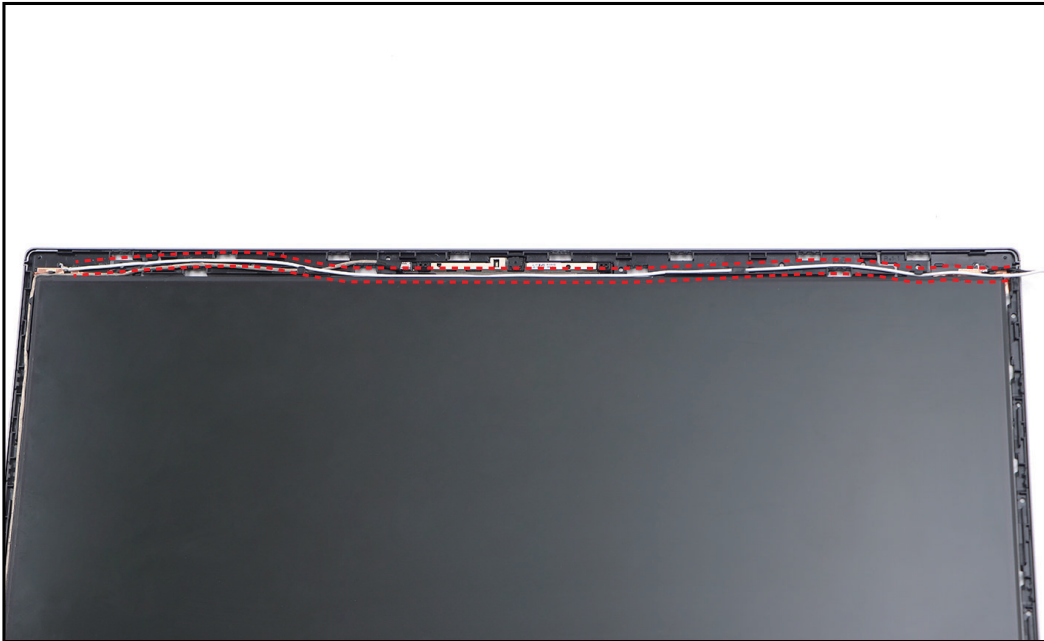


Figure 1-47. Unrouting the Antenna Cables

4. Unroute the eDP cable from the bottom and left side cable guides on the LCD cover.



Figure 1-48. Unrouting the eDP Cable

5. Continue unrouting the eDP cable from the upper side cable guides and then disconnect the eDP cable from the CMOS and dual microphone module connector.

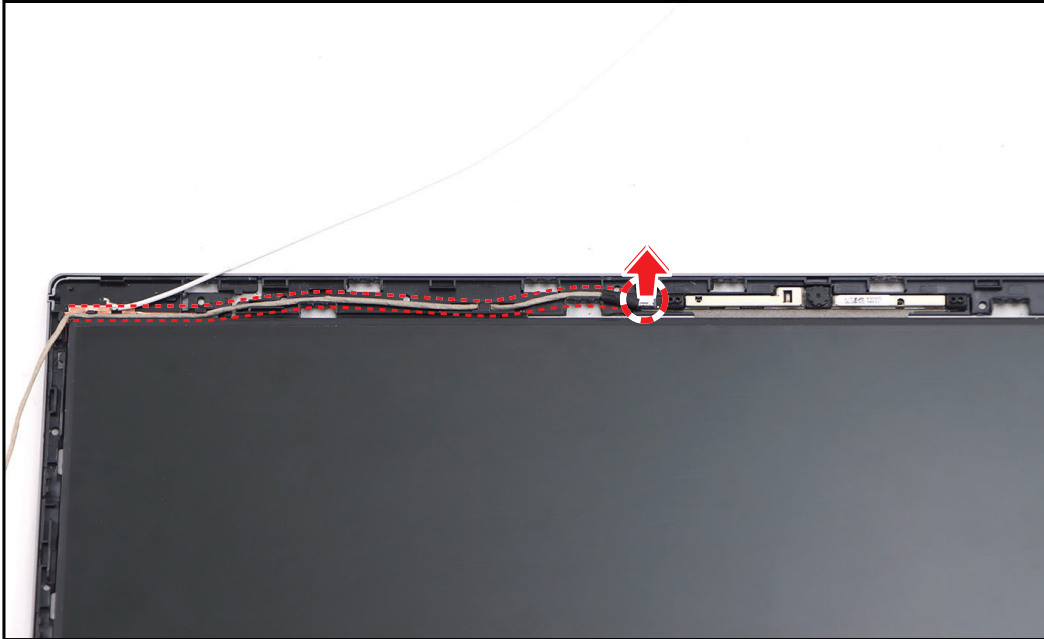


Figure 1-49. Removing the eDP Cable

6. Pry slightly to access the double-sided mounting tape underneath the LCD panel. Then pull to detach the double-sided mounting tape from the LCD cover. Repeat the same procedure to remove the double-sided mounting tape on another side of the LCD panel.

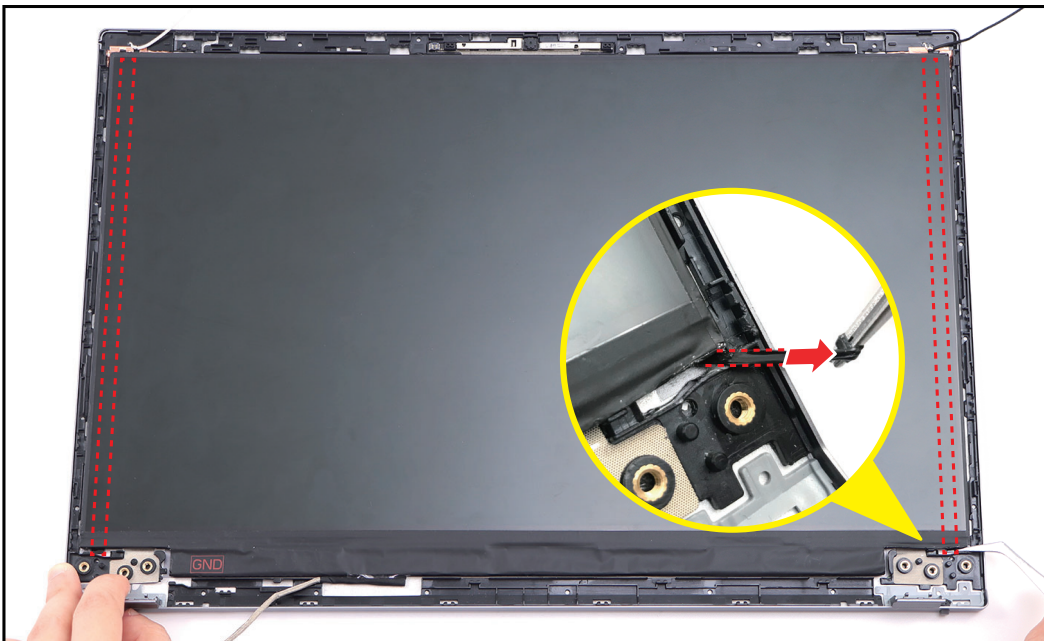


Figure 1-50. Detaching the Double-sided Mounting Tapes

7. Carefully flip the LCD panel to reveal the eDP cable connector. Then detach the mylar securing the eDP cable to the LCD panel connector.

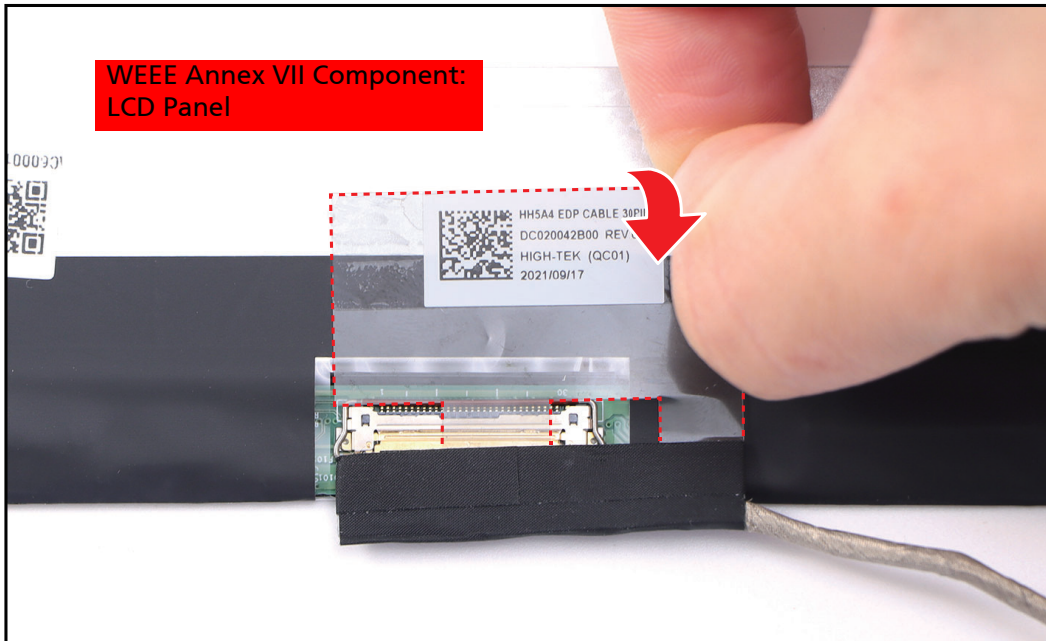


Figure 1-51. Detaching the Mylar

8. Release the eDP cable latch.

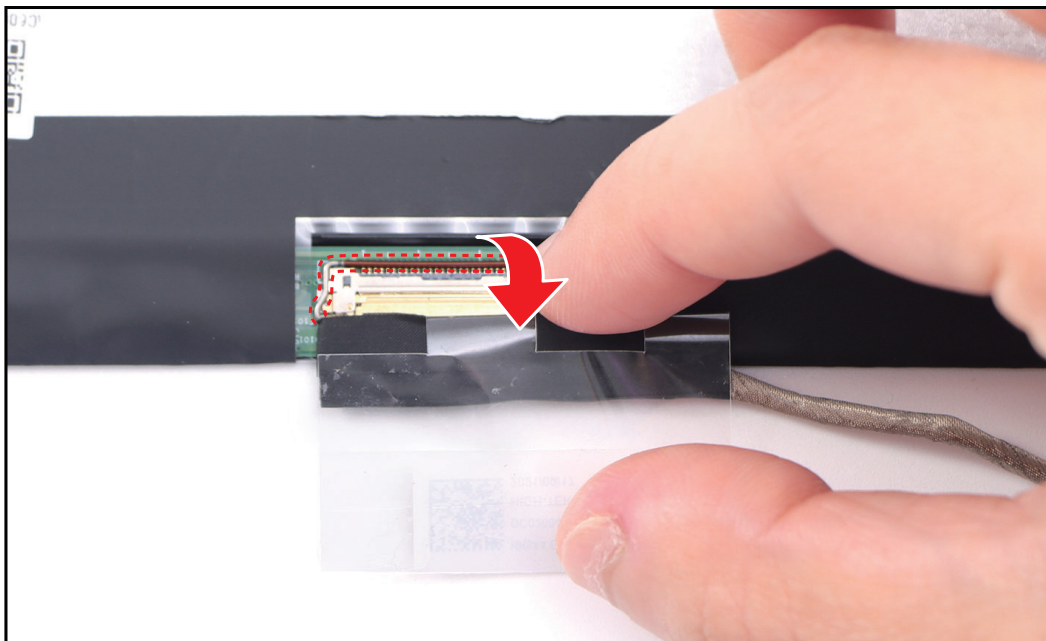


Figure 1-52. Releasing the eDP Cable Latch

9. Disconnect the eDP cable from the LCD panel connector. Then remove the LCD panel.

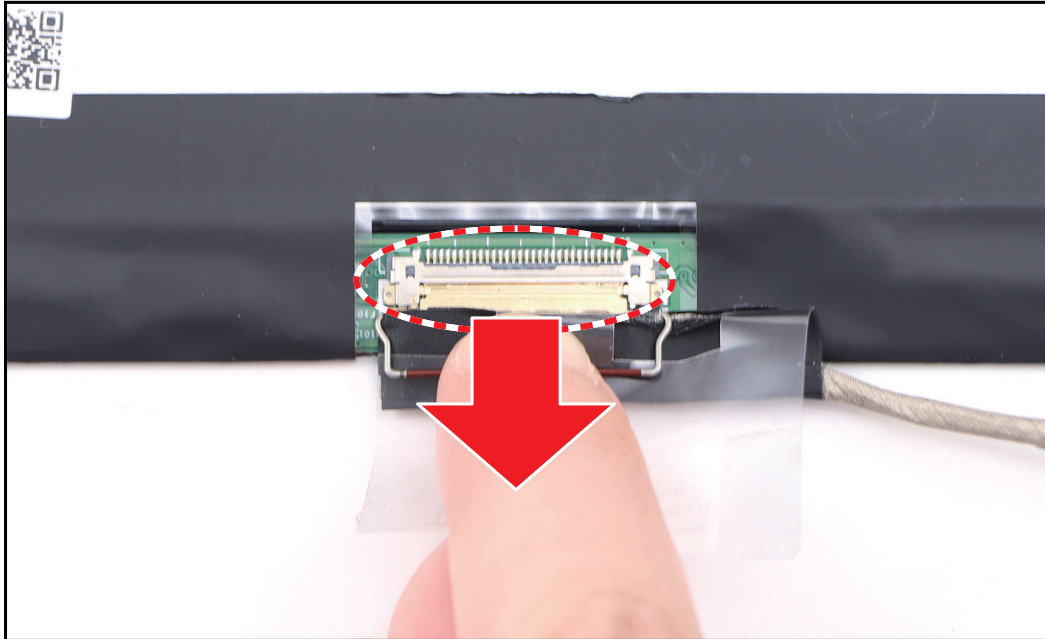


Figure 1-53. Disconnecting the eDP Cable

Troubleshooting

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.

Troubleshooting 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 message” 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 1-9. Error Messages

Error Messages	Corrective Action
CMOS battery bad	Contact your dealer or an authorized service center.
CMOS checksum error	Contact your dealer or an authorized service center.
Disk boot failure	Insert a system (bootable) disk, then press Enter to reboot.
Equipment configuration error	Press F2 (during POST) to enter BIOS utility, then press Exit in the BIOS utility 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.
Memory size mismatch	Press F2 (during POST) to enter BIOS utility, then press Exit in the BIOS utility to reboot.

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

Please contact your local service center to find out how to obtain the part or replace your device.

Exploded Diagrams

Main Assembly

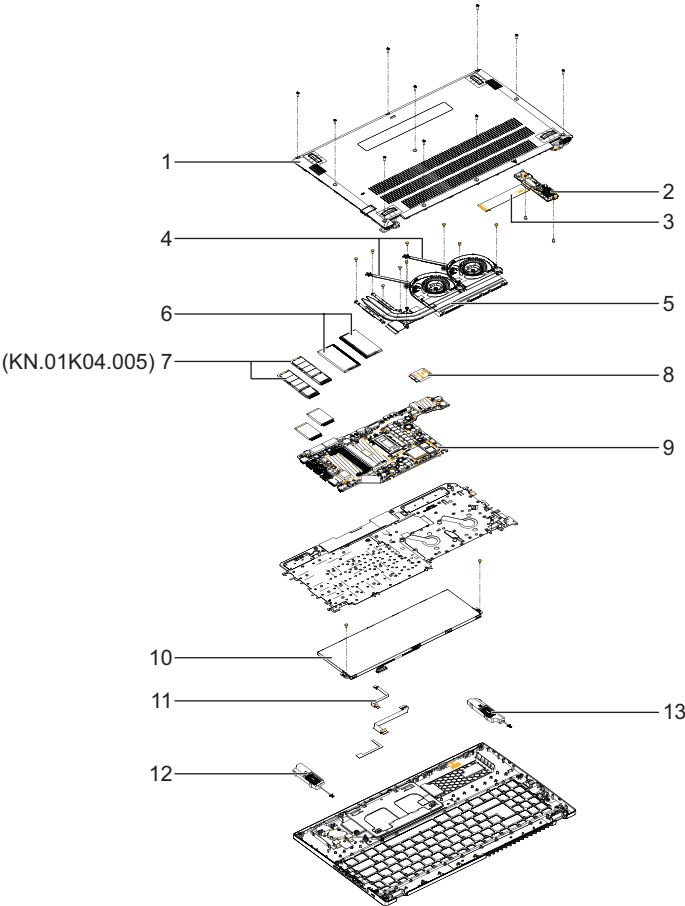


Figure 1-1. Main Assembly Exploded Diagram

Table 1-10. Main Assembly Exploded Diagram

No.	Description	Acer P/N
1	Lower case	60.K3MN2.001
2	I/O board	55.K3MN2.001
3	I/O board FFC	50.K3MN2.001
4	Fan	23.K3MN2.001
5	Thermal module (UMA model)	24.K3MN2.001
	Thermal module (discrete model)	24.K3DN2.001

No.	Description	Acer P/N
6	Memory	KN.16G0G.036
7	SSD	KN.01K0B.007
8	WLAN board	KE.11X0M.001
9	Mainboard	NB.K3J11.001
10	Battery	KT.0030G.020
11	Fingerprint FFC	50.K3LN2.001
12	Left speaker	23.K3MN2.002
13	Right speaker	23.K3MN2.003

Upper Case Assembly

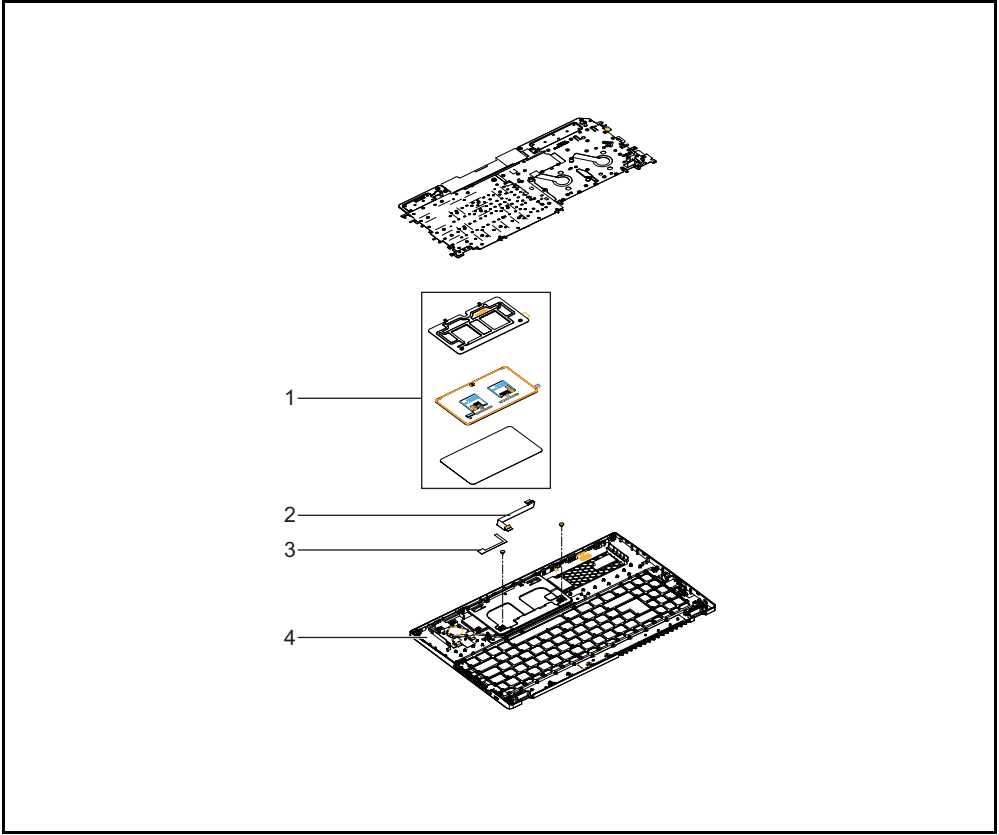


Figure 1-2. Upper Case Assembly Exploded Diagram

Table 1-11. Upper Case Assembly Exploded Diagram

No.	Description	Acer P/N
1	Touchpad	56.K3MN2.001
2	Touchpad FFC	50.K3MN2.002
3	Conductive tape	47.K3MN2.002
4	Upper case	6B.K3KN2.001

LCD Assembly

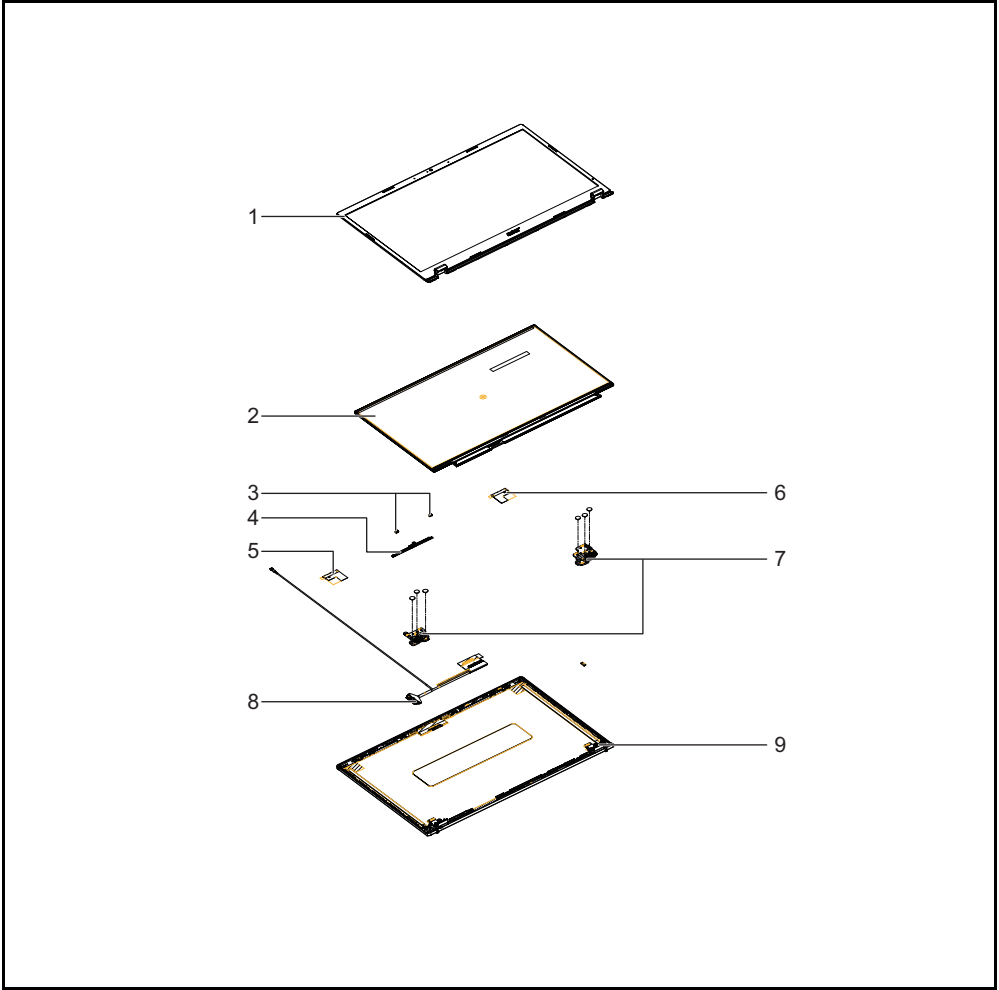


Figure 1-3. LCD Assembly Exploded Diagram

Table 1-12. LCD Assembly Exploded Diagram







No.	Description	Acer P/N
1	LCD bezel	60.K3MN2.003
2	LCD panel	KL.15605.071
3	Microphone rubber	47.K3MN2.001
4	Camera	KS.0HD06.032
5	Auxiliary WLAN antenna	50.K3MN2.004
6	Main WLAN antenna	50.K3MN2.003
7	Left LCD hinge	33.K3MN2.001
	Right LCD hinge	33.K3MN2.002
8	eDP cable	50.K3MN2.005
9	LCD cover	60.K3MN2.002

Software Update

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

Personal Data Removal

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**.