

TravelMate P214-55/P214-55G/P214-55-TCO

LIFECYCLE EXTENSION GUIDE

Self-Repair 1-1

Disassembly Procedures 1-3

Electronic Boards Diagrams 1-38

Troubleshooting 1-39

FRU (Field Replaceable Unit) List 1-40

Software Update 1-44

Personal Data Removal 1-45

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 equipment are recommended to do the following maintenance procedures:

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

WEEE Annex VII Component

These components are classified as requiring selective treatment:

- Battery
- SSD Module
- WLAN Module
- Memory
- RTC Battery
- Touchpad Module
- Card Reader Board
- Mainboard
- USB Board
- LCD Panel

Pre-disassembly Instructions

Do the following prior to starting any maintenance procedures:

1. Place the system on a stable work surface.
2. Remove AC adapter from any of the ports (A) or (B) of the system and from peripherals (Figure 1-1).
3. Remove all cables from system.

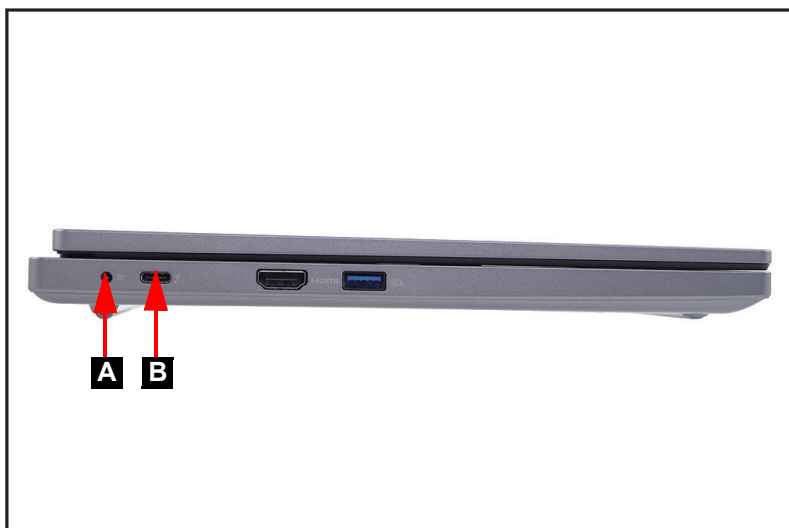


Figure 1-1. AC Adapter Outlet

4. Remove the smart card from the smart card slot (C) (Figure 1-2).

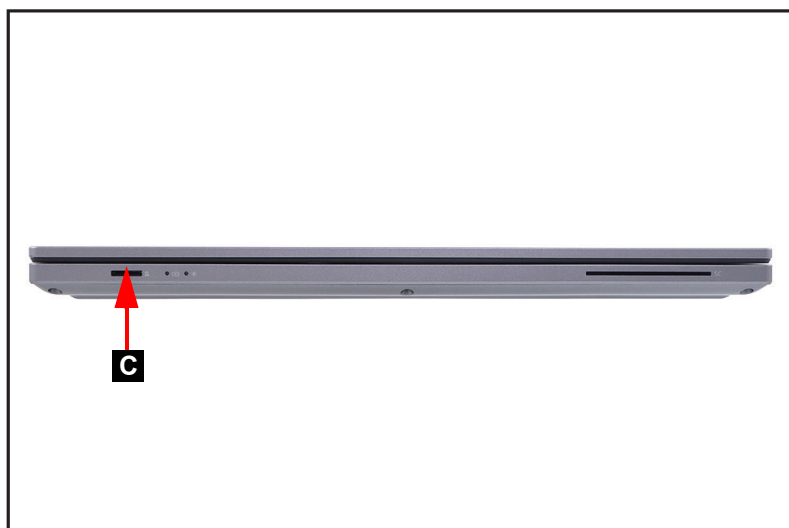


Figure 1-2. Smart Card Slot

⇒ **NOTE:**

Make sure the system is completely powered off.

Base Cover Removal

1. Remove eleven (11) screws from the base cover ([Figure 1-3](#)).

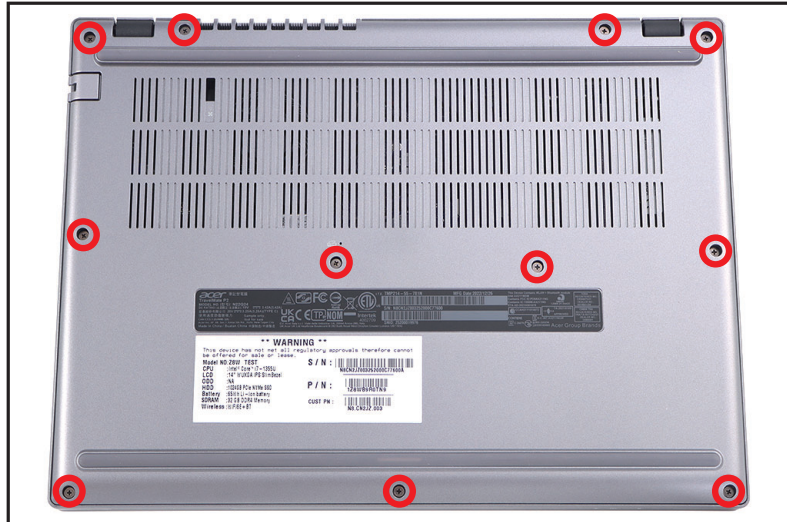


Figure 1-3. Base Cover Removal

2. Carefully pry up the base cover starting from the upper side to release the latches. Continue releasing the remaining latches on the left, right, and bottom sides ([Figure 1-4](#)).



Figure 1-4. Base Cover Removal

3. Grasp and remove the base cover from the system ([Figure 1-5](#)).



Figure 1-5. Base Cover Removal

Battery Pack Removal

Prerequisite:

Base Cover Removal

1. Find the battery pack (A) on the top assembly (Figure 1-6).
2. Detach the acetate tape (B) and mylar (C) securing the battery cable in place (Figure 1-6).

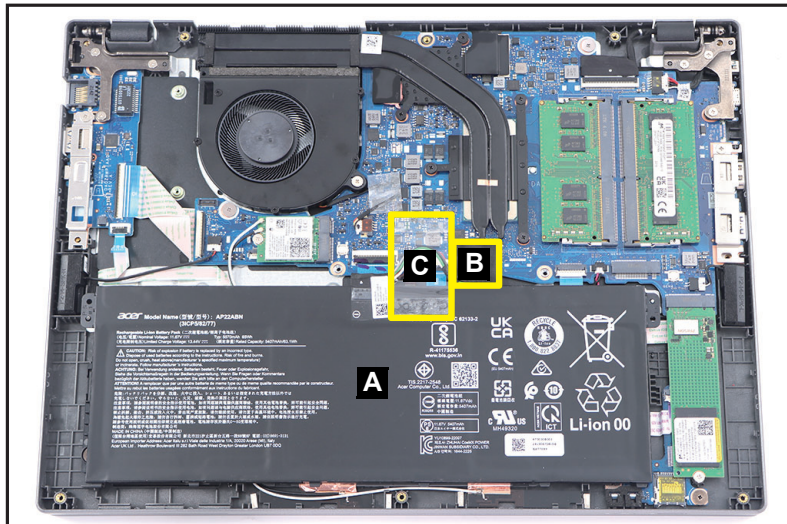


Figure 1-6. Battery Pack Removal

3. Disconnect the battery cable from the mainboard connector (D) (Figure 1-7).

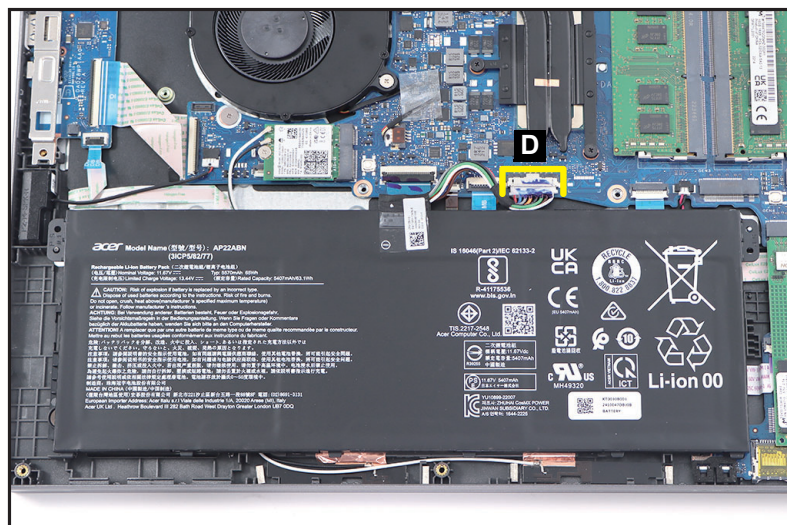


Figure 1-7. Battery Pack Removal

4. Release the battery pack from the guides (marked with green circles) and battery compartment edges (marked with green lines) on the top assembly and remove it (Figure 1-8).

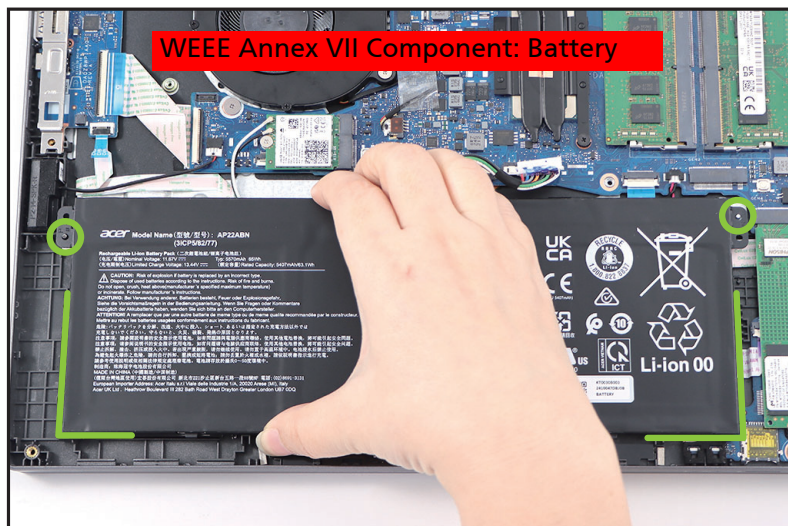


Figure 1-8. Battery Pack Removal

+ **IMPORTANT:**

Follow local regulations for battery disposal.

5. Detach the mylar tape (E) from the battery connector (Figure 1-9).

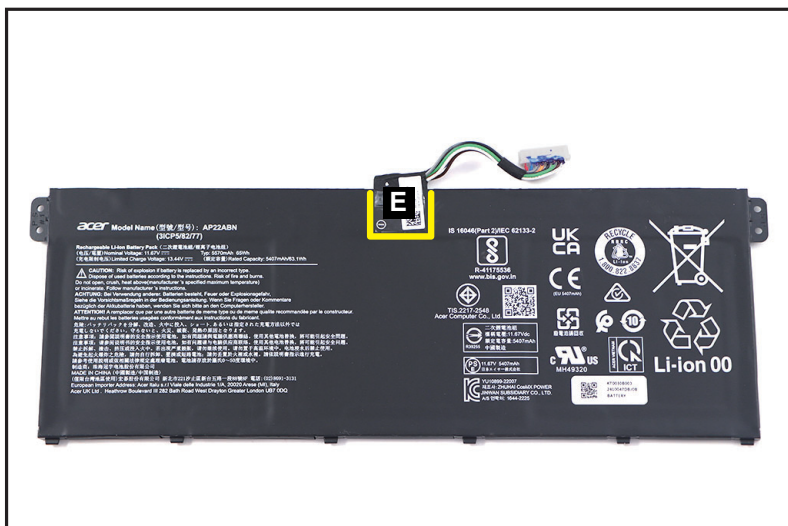


Figure 1-9. Battery Pack Removal

6. Disconnect the battery cable from the battery connector (F) (Figure 1-10).



Figure 1-10. Battery Pack Removal

SSD Module Removal

Prerequisite:

Battery Pack Removal

1. Remove one (1) screw securing the SSD module in place ([Figure 1-11](#)).

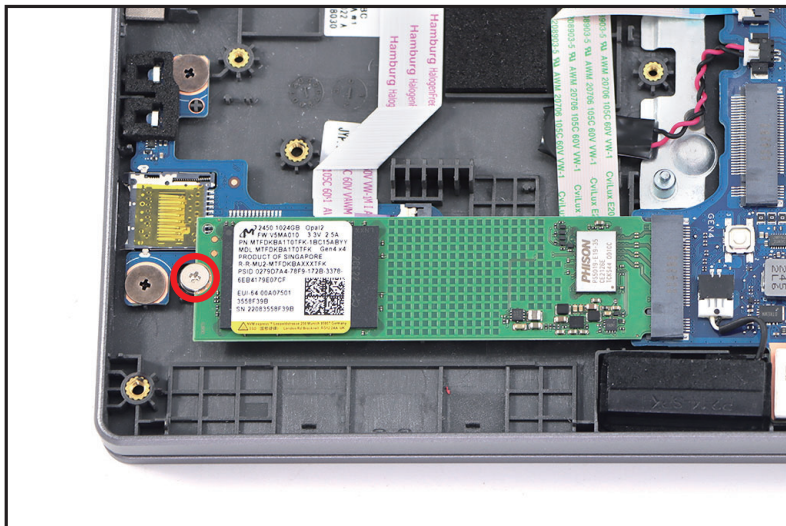


Figure 1-11. SSD Module Removal

2. Disconnect the SSD module from the mainboard connector (A) ([Figure 1-12](#)).

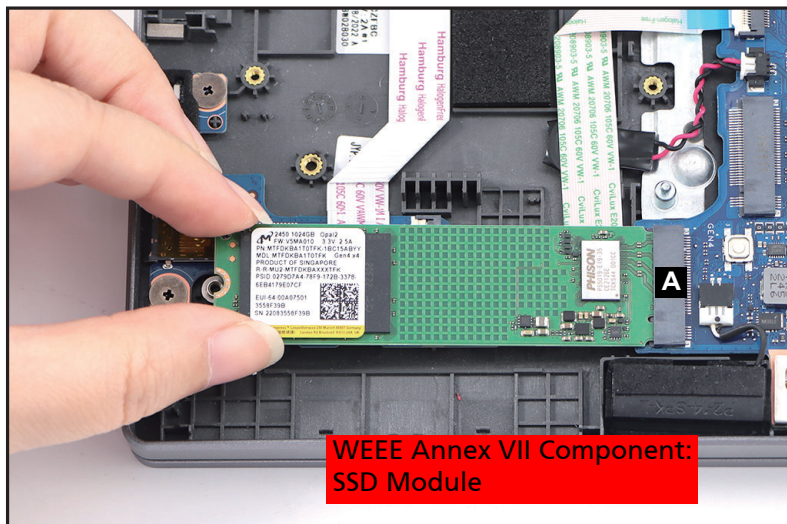


Figure 1-12. SSD Module Removal

WLAN Module Removal

Prerequisite:

Battery Pack Removal

1. Find the WLAN module (A) on the top assembly (Figure 1-13).

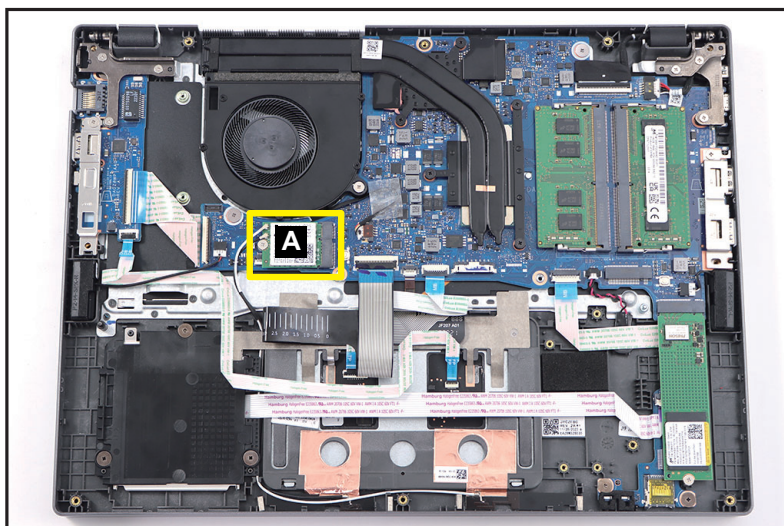


Figure 1-13. WLAN Module Location

2. Disconnect the WLAN antenna cables from the WLAN module connectors (B) (Figure 1-14).
3. Remove one (1) screw securing the WLAN module in place (Figure 1-14).

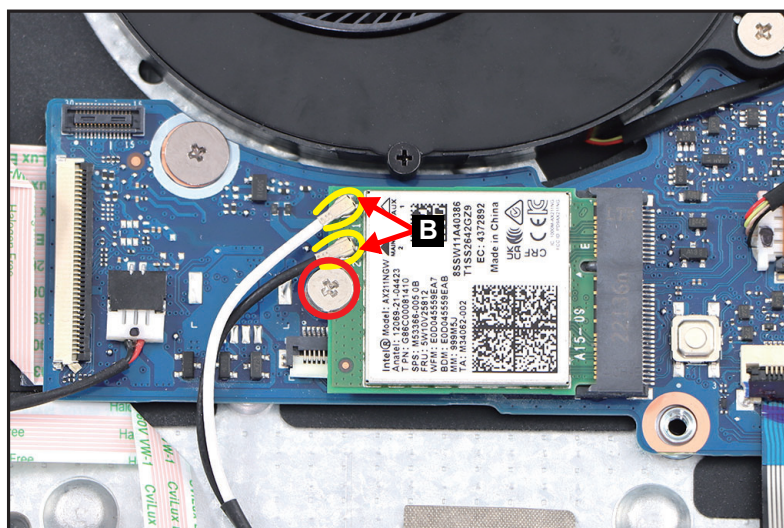


Figure 1-14. WLAN Module Removal

4. Remove the WLAN module from the mainboard connector (C) (Figure 1-15).



Figure 1-15. WLAN Module Removal

DIMM (Dual In-line Memory Module) Removal

Prerequisite:

Battery Pack Removal

1. Find the DIMM module (A) in the system (Figure 1-16).
2. Push the DIMM module clips (B) outwards (Figure 1-16).

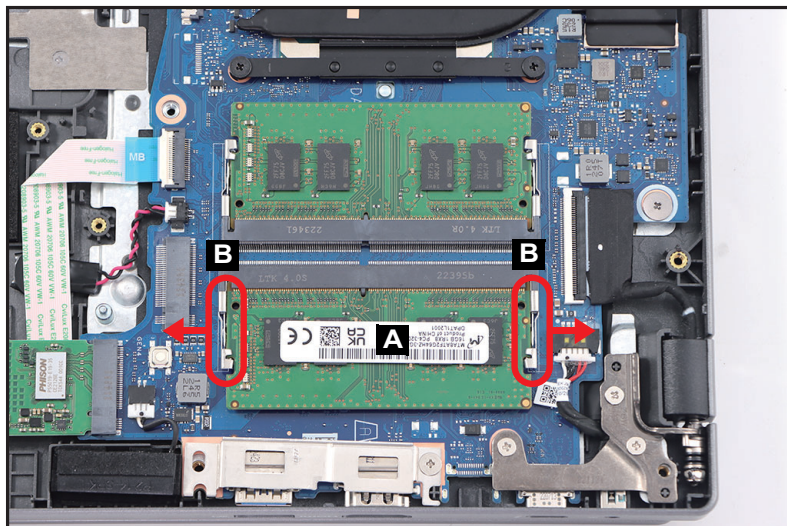


Figure 1-16. DIMM Module Removal

3. Remove the DIMM module from the mainboard connector (C) (Figure 1-17).

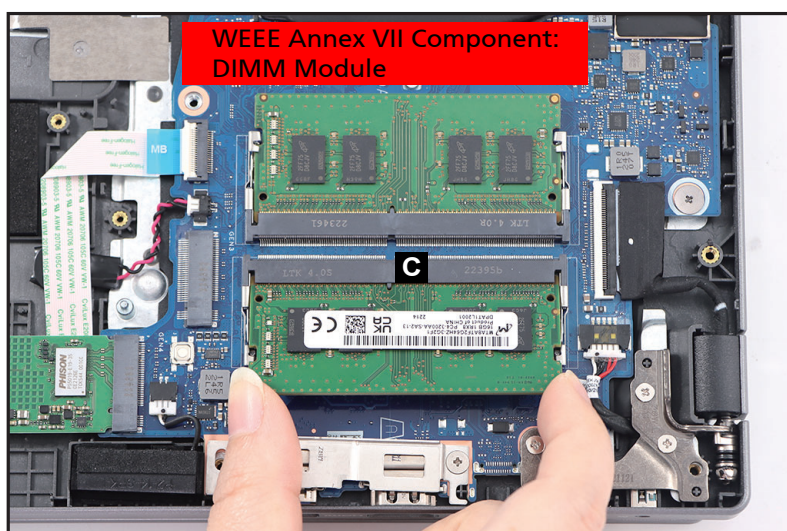


Figure 1-17. DIMM Module Removal

4. Repeat steps 2 to 3 to remove another DIMM module (if applicable).

LCD Module Removal

Prerequisite:

Battery Pack Removal

1. Disconnect the eDP cable from the mainboard connector (A) (Figure 1-18).

⚠ CAUTION:

eDP cable can be damaged if removed while the mainboard connector is locked.

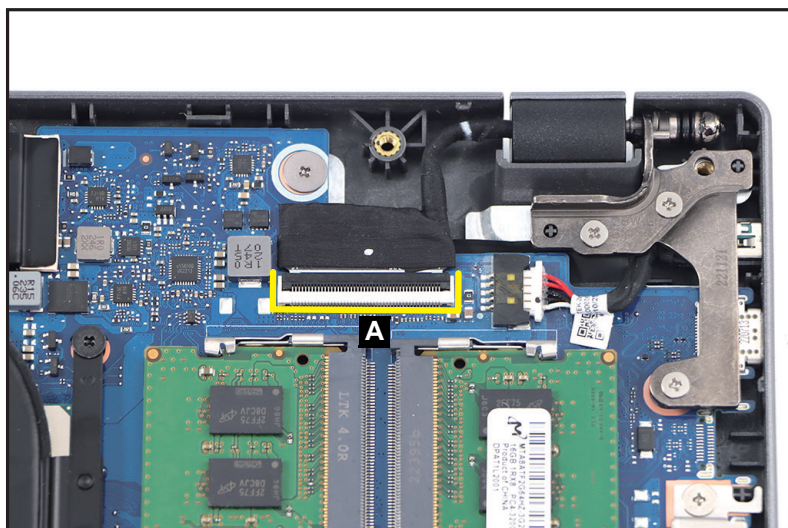


Figure 1-18. LCD Module Removal

2. Remove six (6) screws securing the LCD hinges in place (Figure 1-19).

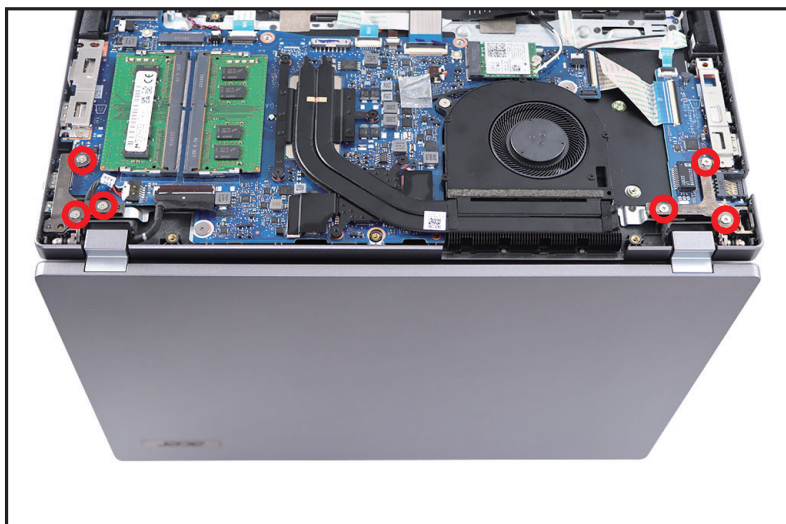


Figure 1-19. LCD Module Removal

3. Remove the LCD module away from the top assembly (Figure 1-20).

⚠ CAUTION:

Make sure all cables and antennas are moved away from the device to avoid damage during removal.

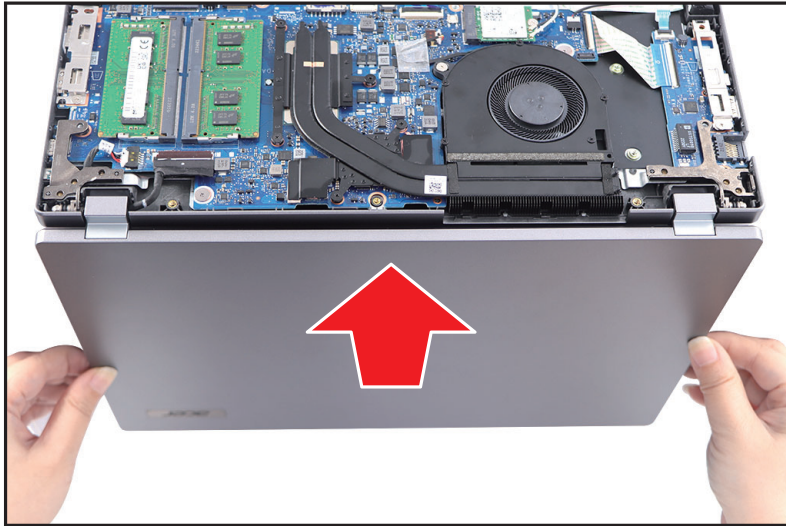


Figure 1-20. LCD Module Removal

RTC Battery Removal

Prerequisite:

SSD Module Removal

1. Disconnect the LED board FFC from the mainboard connector (A) (Figure 1-21).

⚠ CAUTION:

LED board FFC can be damaged if removed while the mainboard connector is locked.

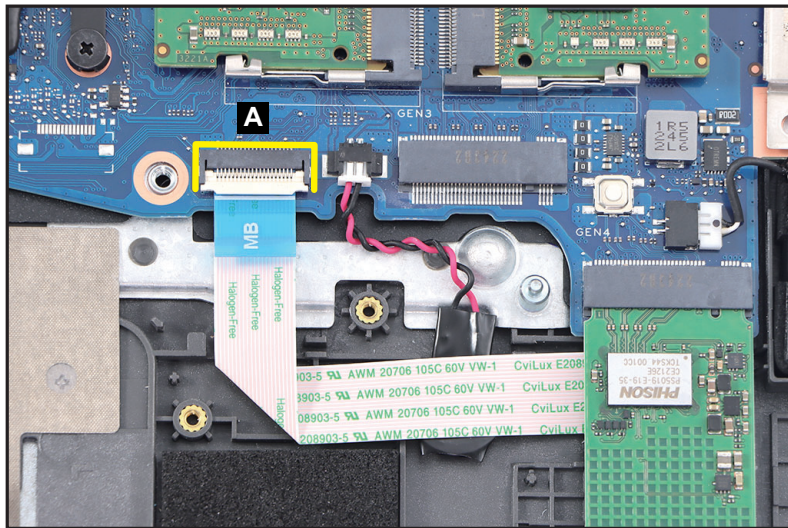


Figure 1-21. RTC Battery Removal

2. Disconnect the RTC battery cable from the mainboard connector (B) (Figure 1-22).
3. Using plastic tweezers, carefully pry to detach the adhesive tape underneath the RTC battery (C) and then remove the RTC battery (Figure 1-22).

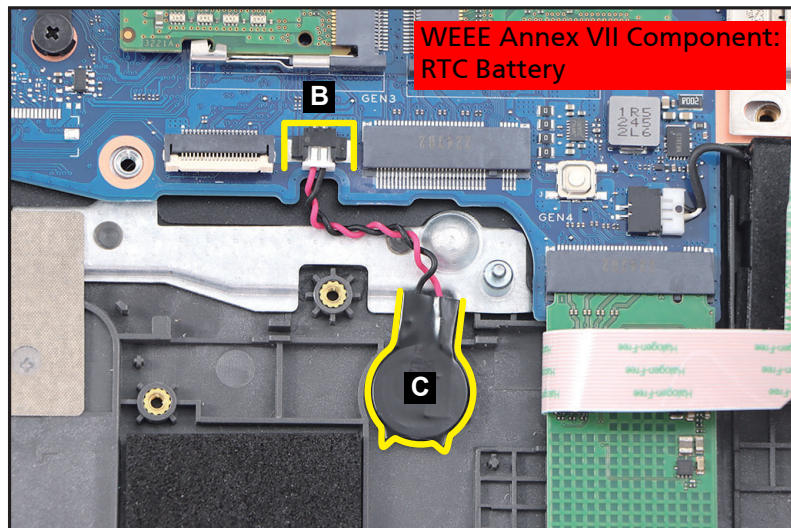


Figure 1-22. RTC Battery Removal

- + **IMPORTANT:**
Follow local regulations for battery disposal.

Touchpad Module Removal

Prerequisite:

WLAN Module Removal

1. Disconnect the fingerprint board FFC (A) from the touchpad and mainboard connectors. Then remove it from the top assembly ([Figure 1-23](#)).
2. Disconnect the keyboard FPC from the mainboard connector (B) ([Figure 1-23](#)).

⚠ CAUTION:

Fingerprint board FFC and keyboard FPC can be damaged if removed while the mainboard and touchpad module connectors are locked.

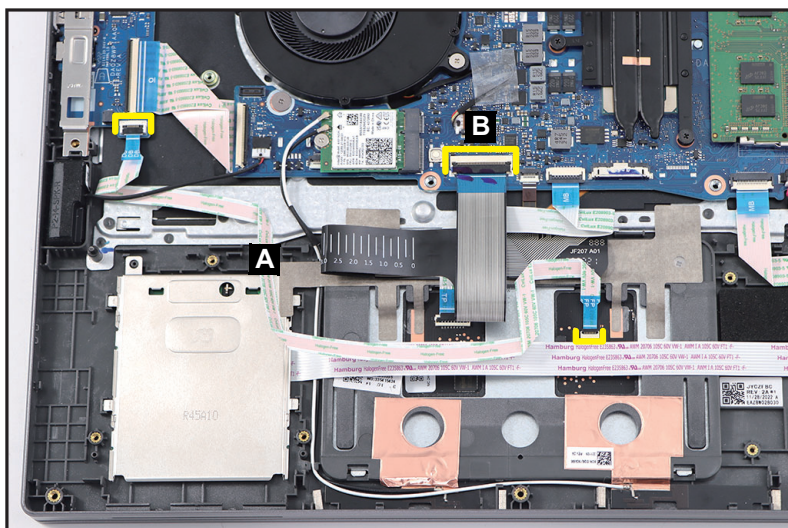


Figure 1-23. Touchpad Module Removal

3. Disconnect the touchpad module FFC (C) from the touchpad and mainboard connectors (Figure 1-24).

⚠ CAUTION:

Touchpad FFC can be damaged if removed while the mainboard and touchpad module connectors are locked.

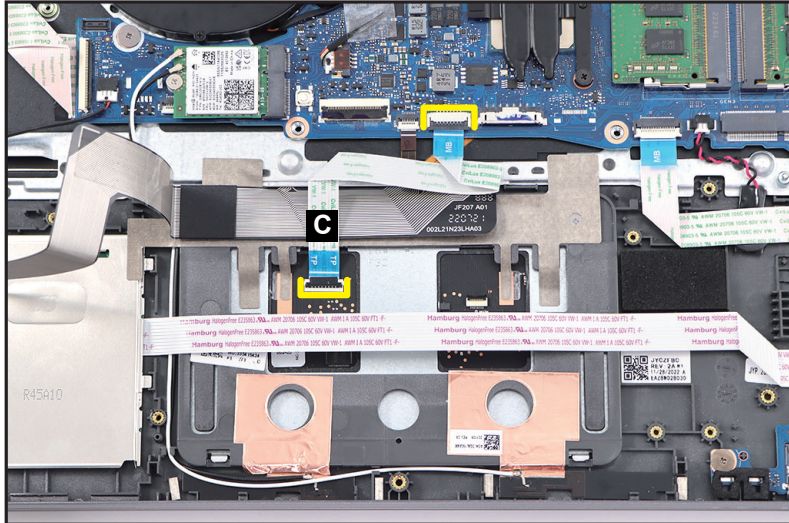


Figure 1-24. Touchpad Module Removal

4. Gently peel off the insulator mylar (D) from the touchpad module (Figure 1-25).

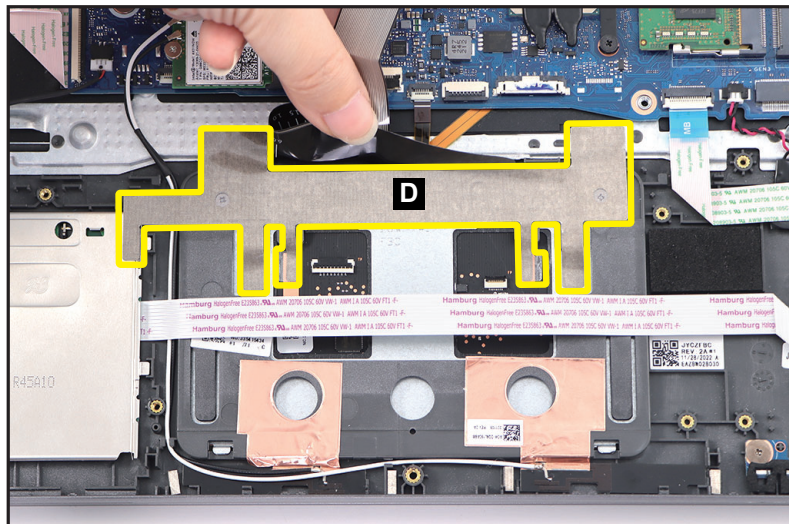


Figure 1-25. Touchpad Module Removal

5. Lift the mylar tab. Remove three (3) screws securing the touchpad module in place (Figure 1-26).

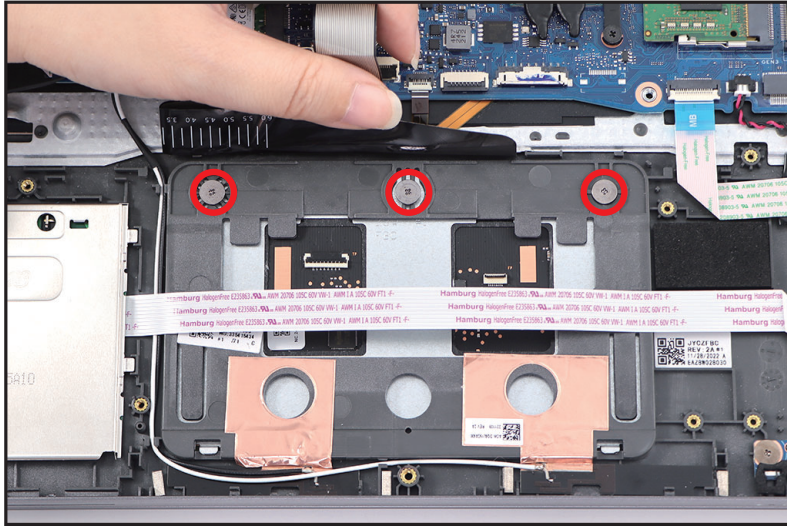


Figure 1-26. Touchpad Module Removal

6. Using the screwdriver, push the screw sleeve (marked with green circle) firmly to release it from the top assembly (Figure 1-27).
7. Slide the touchpad module slightly to disengage it from the bottom latches (E), and then remove the touchpad module (F) from the top assembly (Figure 1-27).

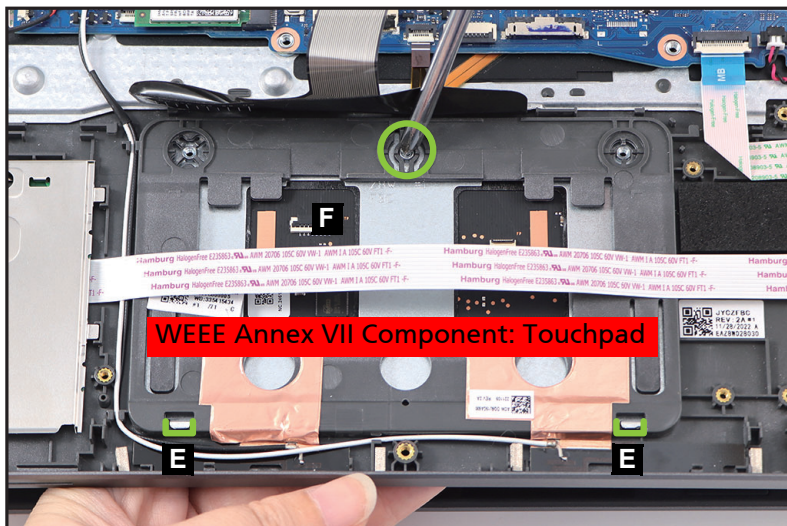


Figure 1-27. Touchpad Module Removal

Card Reader Board Removal

Prerequisite:

SSD Module Removal

1. Disconnect the card reader board FFC (A) from the mainboard and card reader board connectors (Figure 1-28).
2. Disconnect the card reader FFC from the card reader board connector (B) (Figure 1-28).
3. Remove the card reader board rubber (C) (Figure 1-28).

⚠ CAUTION:

Card reader board FFC and card reader FFC can be damaged if removed while the mainboard and card reader board connectors are locked.

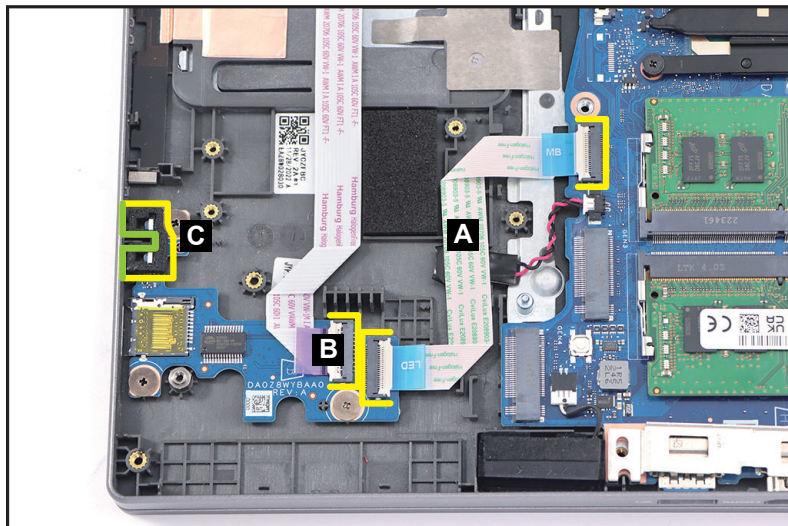


Figure 1-28. Card Reader Board Removal

4. Remove three (3) screws securing the card reader board in place (Figure 1-29).

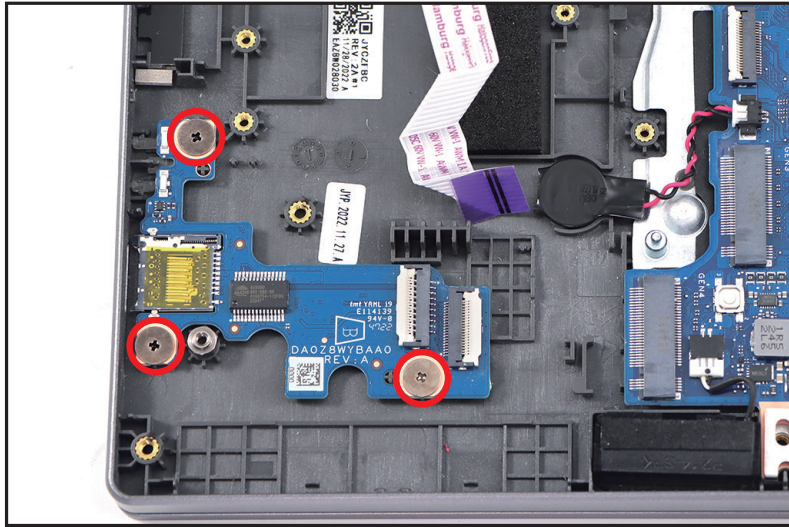


Figure 1-29. Card Reader Board Removal

5. Release the card reader board from the guides (marked with green circles) and remove from the top assembly (Figure 1-30).



Figure 1-30. Card Reader Board Removal

Mainboard Removal

Prerequisite:

Ensure that the **SSD Module**, **WLAN Module**, **DIMM Modules**, **Thermal Module**, and **LCD Module** have been disassembled prior removing the mainboard.

1. Disconnect the USB board FFC from the mainboard connector (A) (Figure 1-31).
2. Disconnect the right fan cable from the mainboard connector (B) (Figure 1-31).
3. Disconnect the keyboard FPC from the mainboard connector (C) (Figure 1-31).
4. Disconnect the keyboard backlight FFC from the mainboard connector (D) (Figure 1-31).
5. Disconnect the touchpad module FFC from the mainboard connector (E) (Figure 1-31).
6. Disconnect the card reader board FFC from the mainboard connector (F) (Figure 1-31).
7. Disconnect the speaker cable from the mainboard connector (G) (Figure 1-31).
8. Disconnect the DC-IN cable from the mainboard connector (H) (Figure 1-31).

⚠ CAUTION:

FFCs and FPC can be damaged if removed while the mainboard connectors are locked.

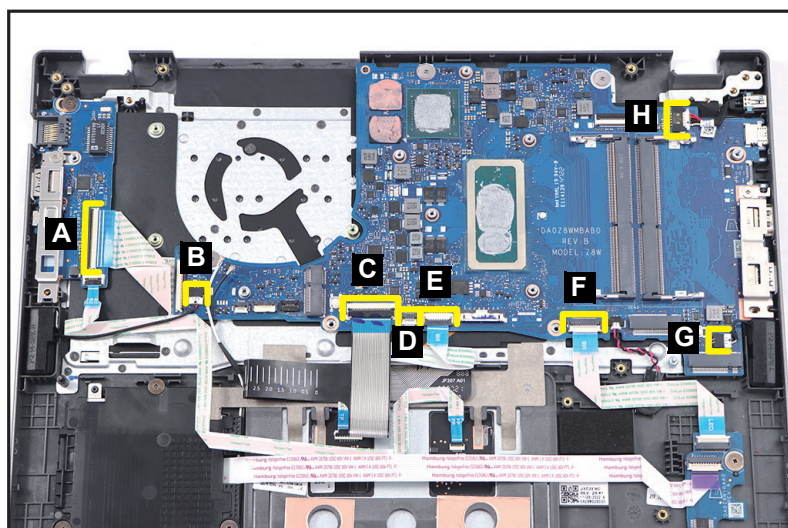


Figure 1-31. Mainboard Removal

9. Remove four (4) screws securing the mainboard in place (Figure 1-32).
10. Using plastic tweezers, carefully pry to detach the adhesive tape underneath the RTC battery (I) and then remove the RTC battery (Figure 1-32).

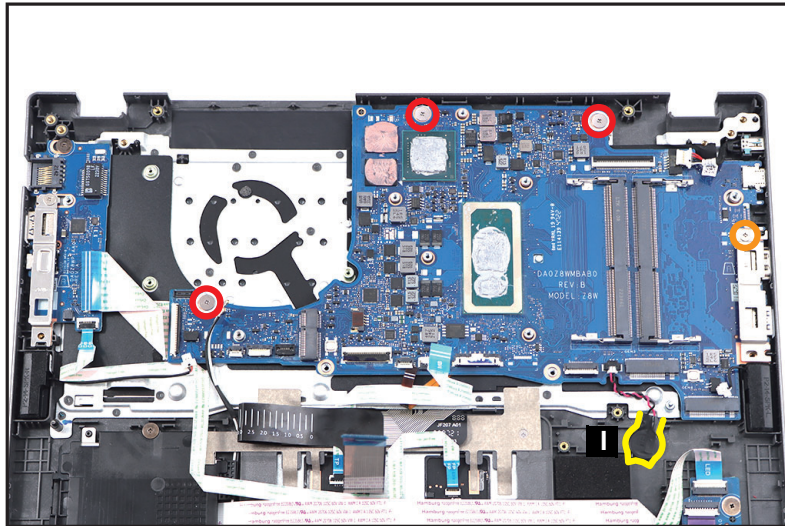


Figure 1-32. Mainboard Removal

11. Release the mainboard bracket from the guide (marked with green circle) on the top assembly and remove it (Figure 1-33).

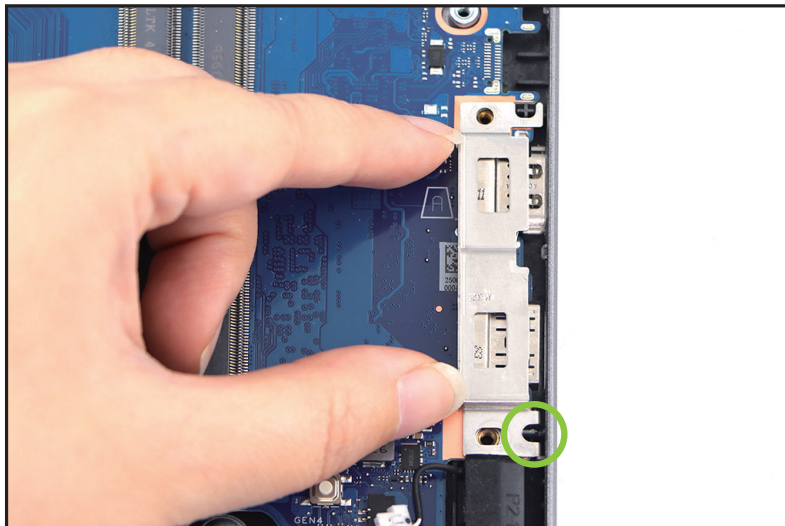


Figure 1-33. Mainboard Removal

12. Slightly lift to release the mainboard from the guides (marked with green circles) and then release it's I/O ports from the I/O slots on the top assembly ([Figure 1-34](#)).

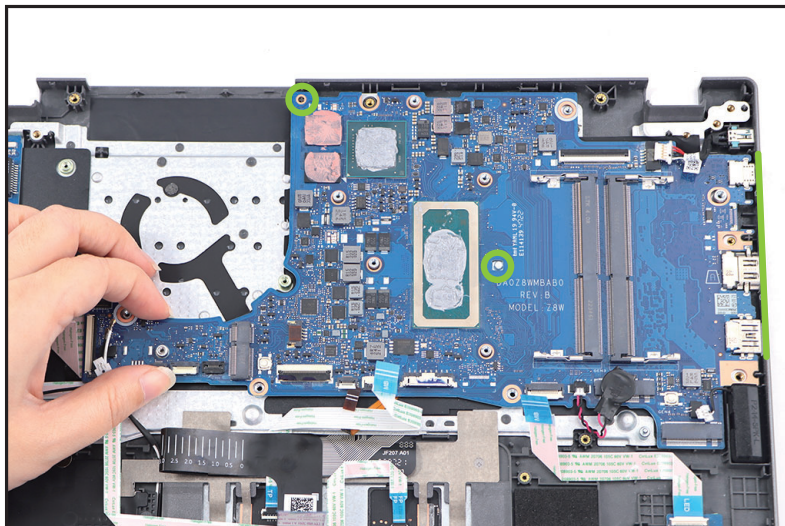


Figure 1-34. Mainboard Removal

13. Detach the acetate tape (J) from the USB board FFC ([Figure 1-35](#)).

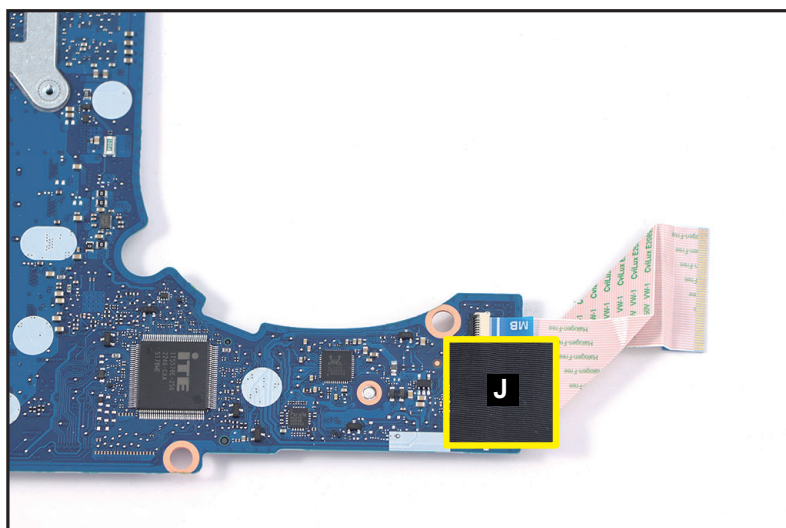


Figure 1-35. Mainboard Removal

14. Disconnect the UBS board FFC from the mainboard connector (K) (Figure 1-36).

⚠ CAUTION:

USB board FFC can be damaged if removed while the mainboard connector is locked.

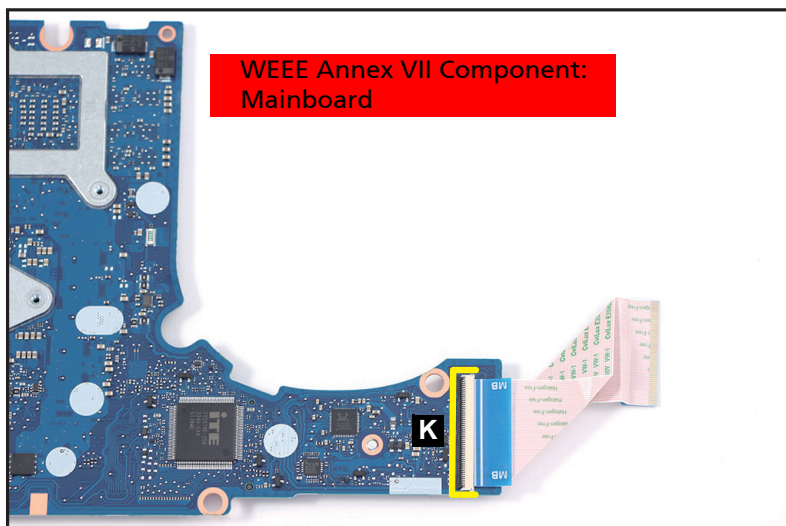


Figure 1-36. Mainboard Removal

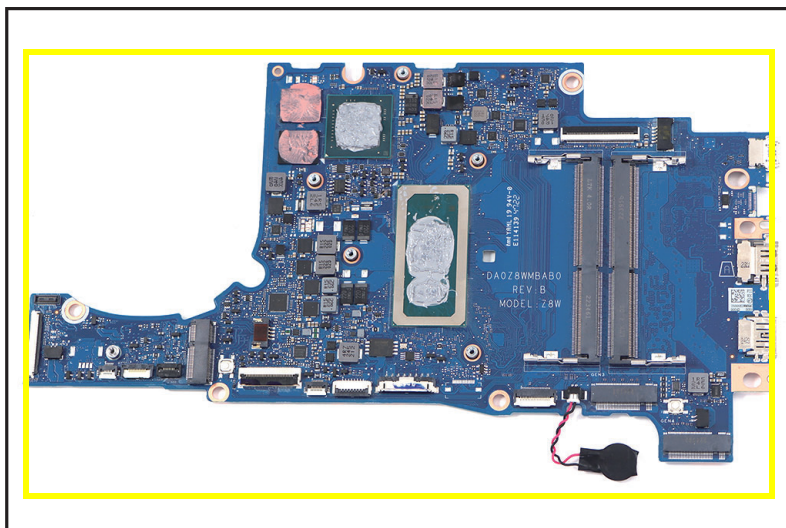


Figure 1-37. Mainboard

+ IMPORTANT:

Circuit boards >10 cm² have been highlighted with a yellow rectangle as shown in Figure 1-37. Remove the circuit board and follow local regulations for disposal.

USB Board Removal

Prerequisite:

LCD Module Removal

1. Remove one (1) screw from the USB board (Figure 1-38).
2. Remove one (1) screw from the USB bracket (Figure 1-38).
3. Disconnect the USB FFC from the USB board connector (A) (Figure 1-38).
4. Disconnect the fingerprint board FFC from the USB board connector (B) (Figure 1-38).

⚠ CAUTION:

USB board FFC and fingerprint board FFC can be damaged if removed while the USB board connectors are locked.

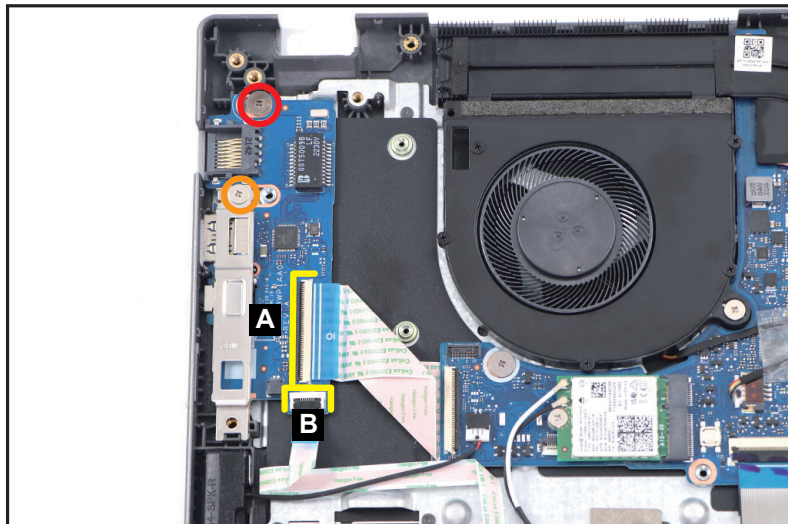


Figure 1-38. USB Board Removal

5. Release the USB bracket from the guide (marked with green circle) and tab (marked with green line) and remove it (Figure 1-39).



Figure 1-39. USB Board Removal

6. Slightly lift the USB board to release it from the guide (marked with green circle). Then slide the USB board backwards to release its I/O connectors from the I/O slots and remove it (Figure 1-40).



Figure 1-40. USB Board Removal

LCD Bezel Removal

Prerequisite:

[LCD Module Removal](#)

1. Pry the LCD bezel from the upper side to release latches ([Figure 1-41](#)).



Figure 1-41. LCD Bezel Removal

2. Continue prying along the right side of the bezel ([Figure 1-42](#)).



Figure 1-42. LCD Bezel Removal

3. Continue prying along the left side of the bezel ([Figure 1-43](#)).

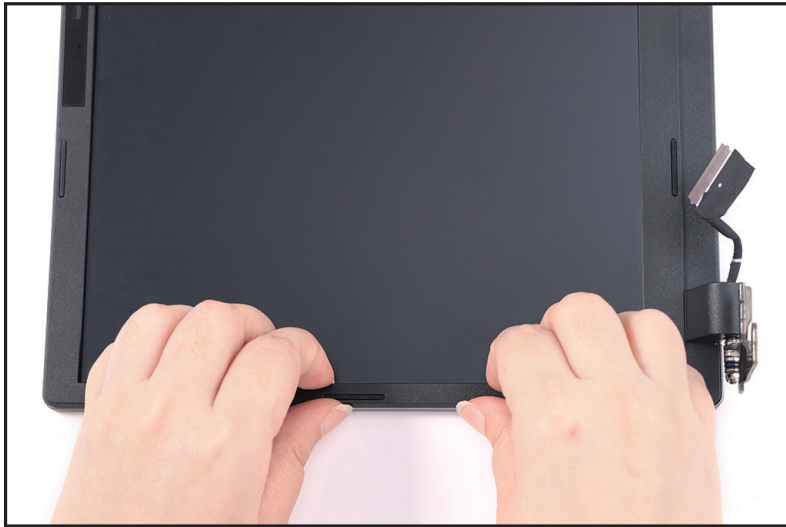


Figure 1-43. LCD Bezel Removal

4. Continue prying along the bottom side of the bezel until all the latches have been released ([Figure 1-44](#)). Then remove the LCD bezel from the LCD cover.



Figure 1-44. LCD Bezel Removal

LCD Panel Removal

Prerequisite:

[LCD Bezel Removal](#)

1. Release the LVDS cable from the LCD hinge and from the bottom cable guides on the LCD cover ([Figure 1-45](#)).

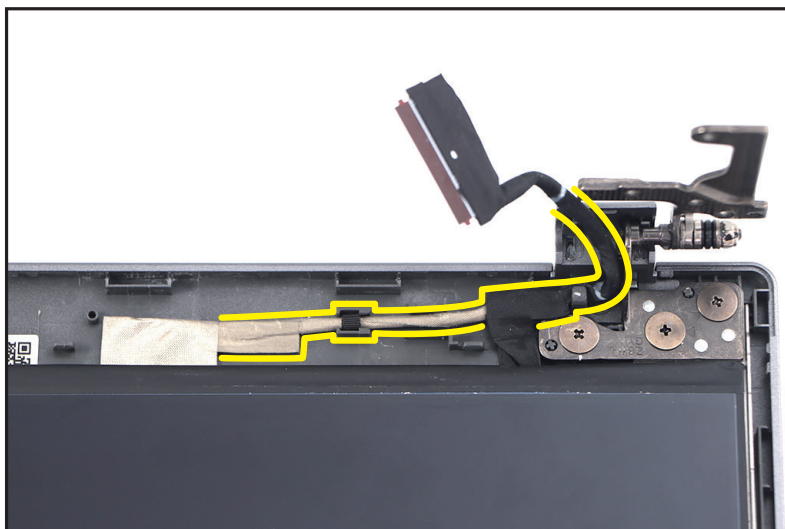


Figure 1-45. LCD Panel Removal

2. Pry slightly to access the double-sided mounting tape (A) underneath the LCD panel (B). 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 1-46).

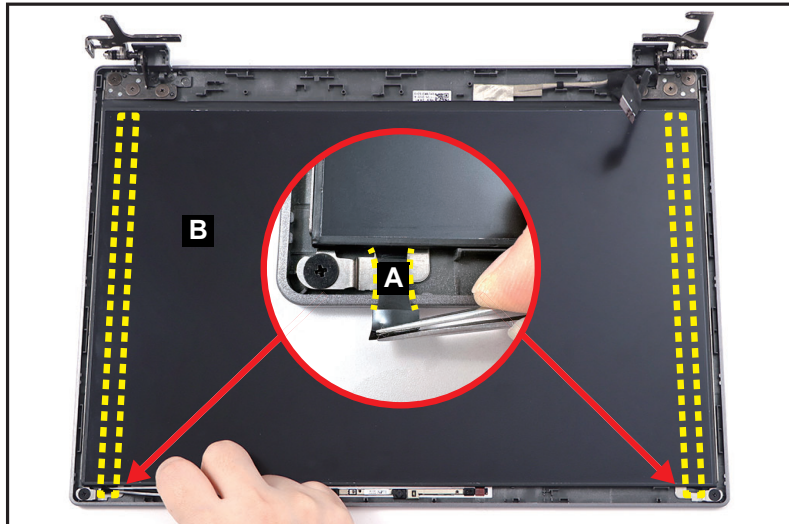


Figure 1-46. LCD Panel Removal

3. Carefully turn the LCD panel over so that the display panel is facing down on a flat surface (Figure 1-47).
4. Detach the mylar tape securing the LVDS cable to the LCD panel (Figure 1-47).

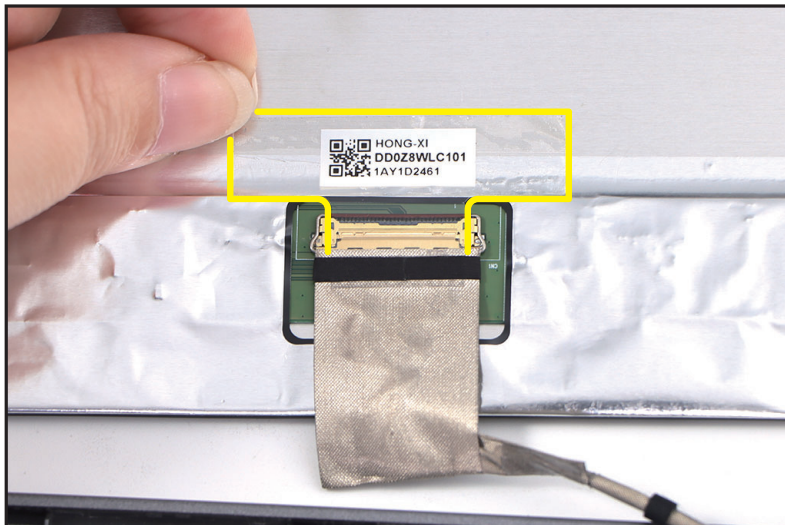


Figure 1-47. LCD Panel Removal

5. Release the LVDS cable latch (Figure 1-48).



Figure 1-48. LCD Panel Removal

6. Disconnect the LVDS cable from the LCD panel connector (C) (Figure 1-49).

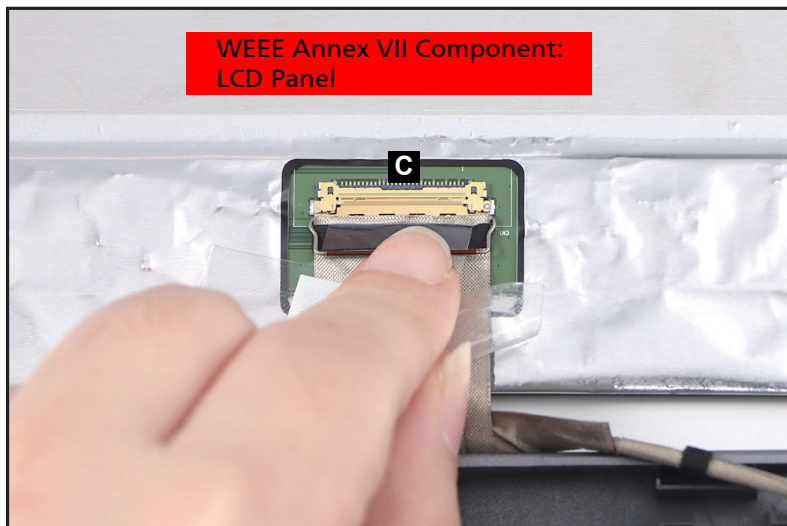


Figure 1-49. LCD Panel Removal

7. Remove the LCD panel.

⚠ CAUTION:

Make sure the LVDS cable is moved away from the device to avoid damage during LCD Panel removal.

Top Assembly Removal

Prerequisite:

Ensure that the **Card Reader**, **Card Reader Board**, **Mainboard**, **USB Board**, **DC-IN Cable**, **Right Speaker**, **Left Speaker**, and **Touchpad** have been disassembled prior removing the top assembly.

⇒ NOTE:

The keyboard is included as part of the top assembly and can not be disassembled. In the event that the keyboard can no longer be used, replace the entire top assembly.



Figure 1-50. Top Assembly

Electronic Boards Diagrams

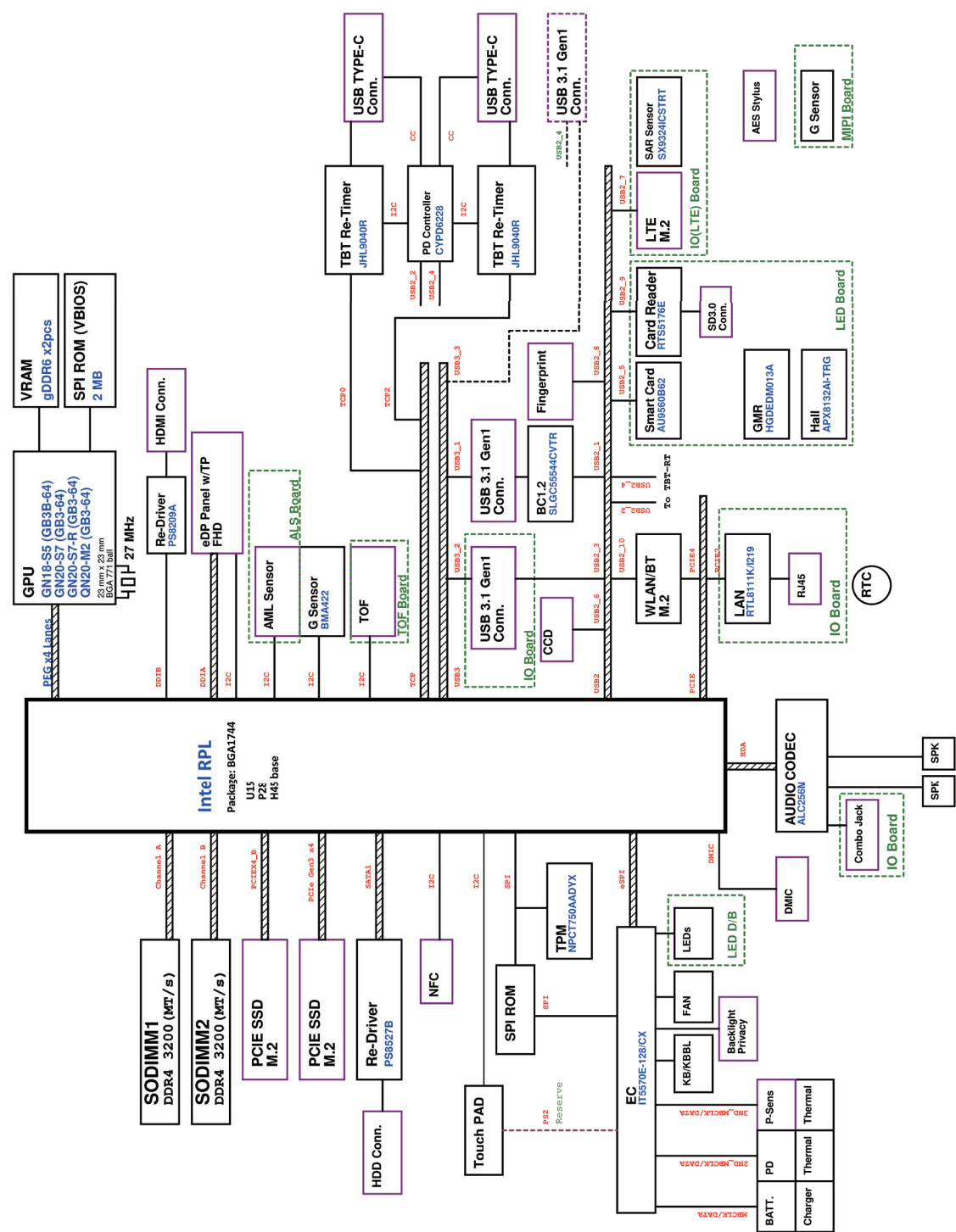


Figure 1-51. System Block Diagram

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 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	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

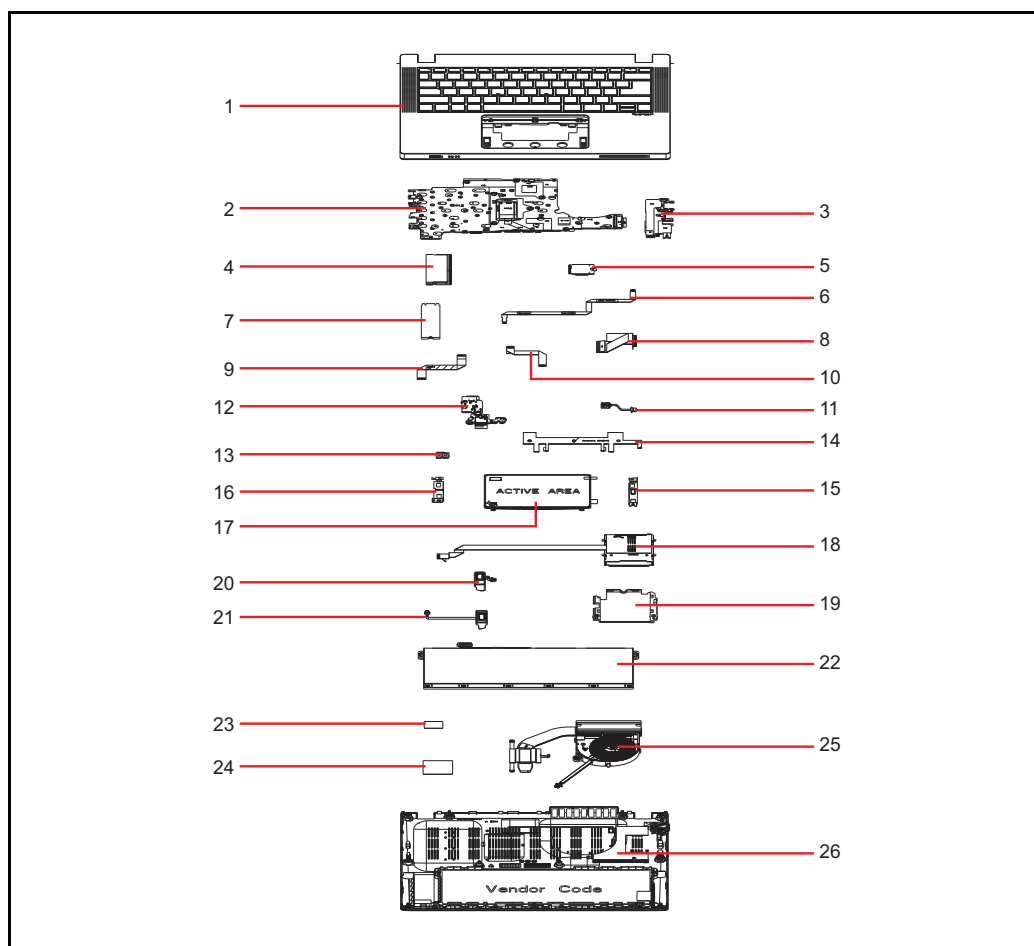


Figure 1-52. System Exploded Diagram

Table 1-2. System Exploded Diagram

No.	Description
1	Top assembly
2	Mainboard
3	USB board
4	Memory
5	Wireless LAN module
6	Fingerprint module FFC
7	SSD module
8	USB board FFC
9	LED board FFC

Table 1-2. System Exploded Diagram

No.	Description
10	Touchpad FFC
11	DC-IN cable
12	Hall sensor board
13	Sponge with mylar
14	Conductive tape for the touchpad
15	Right I/O bracket
16	Left I/O bracket
17	Touchpad module
18	Card reader board
19	Card reader holder
20	Left speaker
21	Right speaker
22	Battery
23	Acetate tape for the battery
24	Mylar tape for battery cable connector
25	Thermal module
26	Base cover

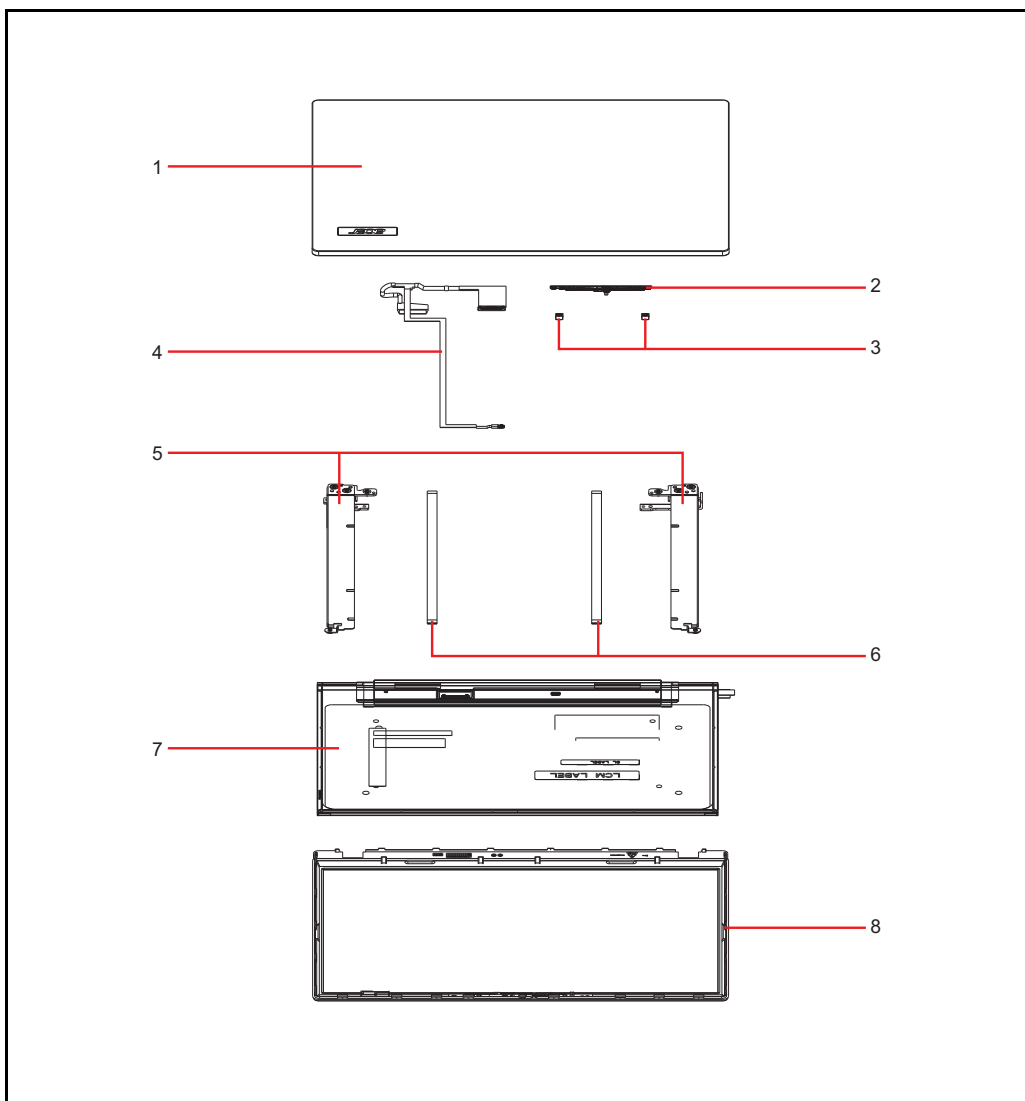


Figure 1-53. LCD Assembly Exploded Diagram

Table 1-3. LCD Assembly Exploded Diagram

No.	Description
1	LCD cover
2	Camera
3	Rubber for microphone
4	LCD cable
5	Hinges
6	LCD adhesive tape
7	LCD panel
8	LCD bezel

Software Update







Updating your software

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

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**.