Acer Chromebook
C736/C736T

LIFECYCLE EXTENSION GUIDE

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.

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
- Flat screwdriver
- Philips screwdriver
- Polydrive screwdriver
- Plastic tweezers
- Flat plastic pry

WEEE Annex VII Component

These components are classified as requiring selective treatment:

- Battery pack
- Touchpad module
- LTE module
- 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 the power adapter from the USB Type-C port (A) as shown in Figure 1-1 or from the USB-C port (C) as shown in Figure 1-2.
3. Remove all cables from system.
4. Insert the eject tool into the hole on the SIM card tray (B) (Figure 1-1). Then push to eject the card tray and remove the SIM card.

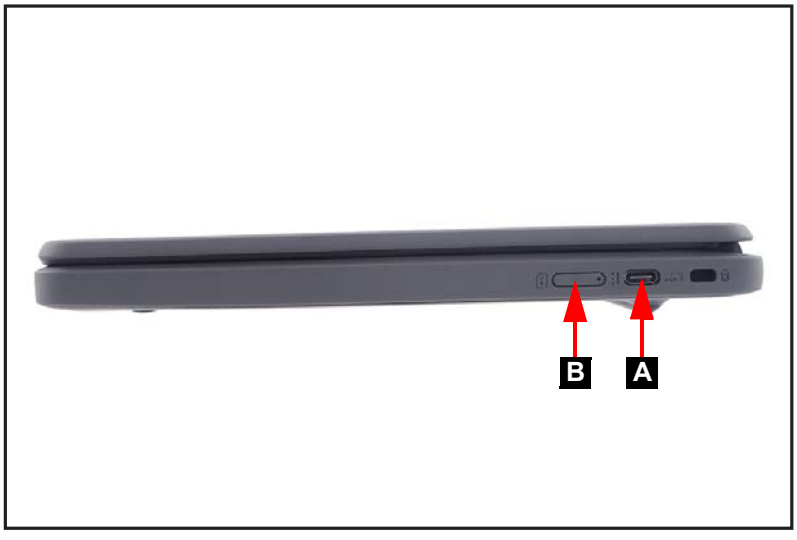

Figure 1-1. AC Adapter Outlet and SIM Card Removal

5. Remove the microSD card from the microSD card slot (D) (Figure 1-2).

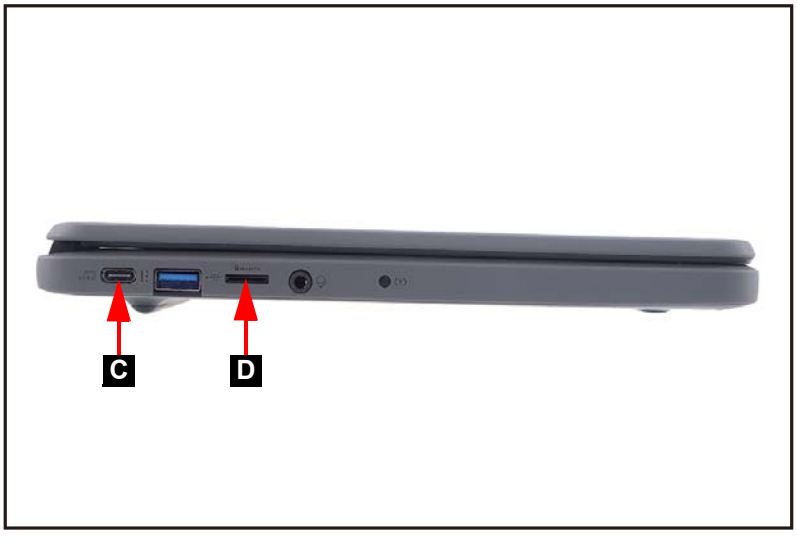

Figure 1-2. AC Adapter Outlet and MicroSD Card Removal

NOTE:

Make sure the system is completely powered off.

Base Cover Removal

1. Remove eleven (11) screws from the base cover. Then remove another two (2) screws securing the keyboard (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. Then 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) securing the battery cable to the mainboard connector (Figure 1-6).
3. Detach the transparent mylar (C) securing the battery cable (Figure 1-6).

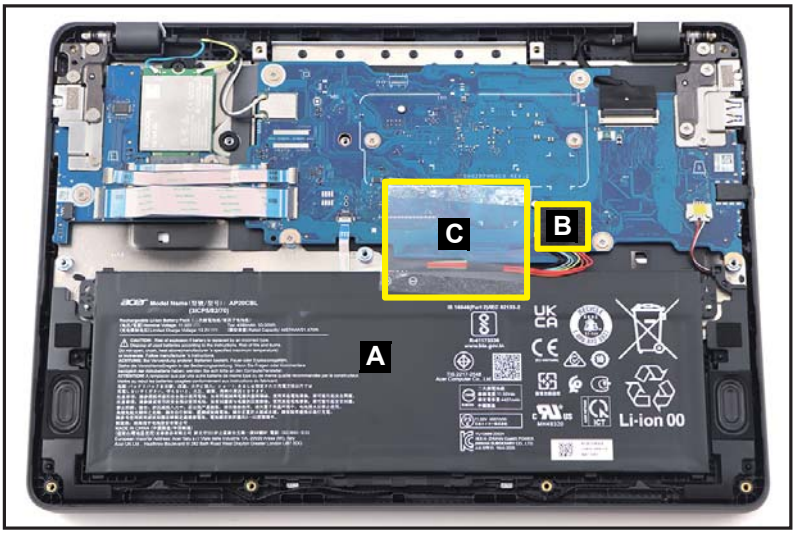

Figure 1-6. Battery Pack Removal

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

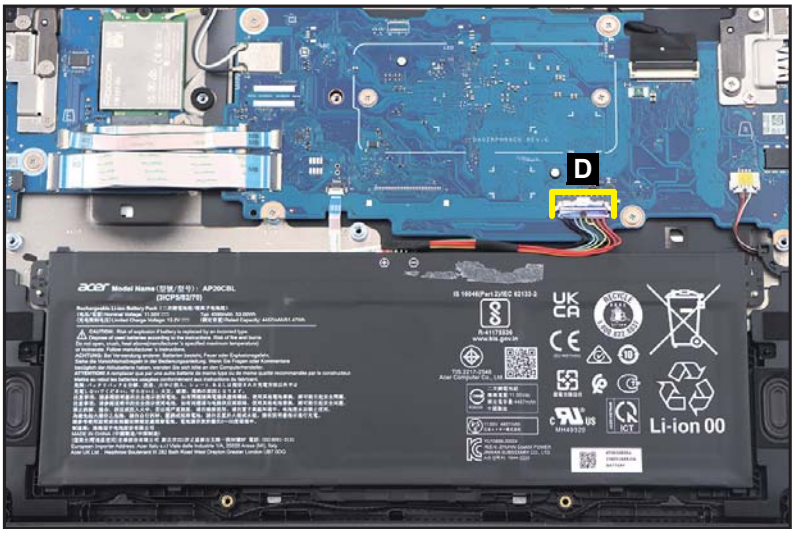

Figure 1-7. Battery Pack Removal

5. Lift to release the battery pack from the guide pins (E) (Figure 1-8). Then remove the battery pack from the top assembly.

Figure 1-8. 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 1-9).

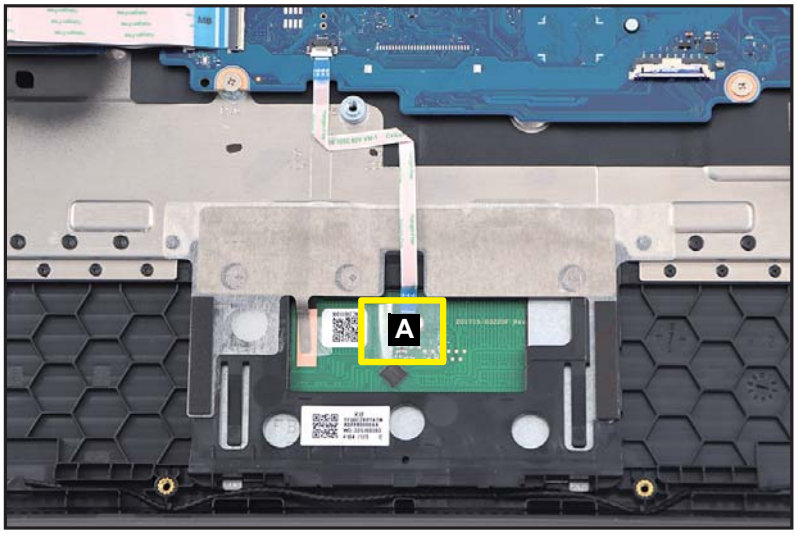

Figure 1-9. Touchpad Module Removal

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 1-10).

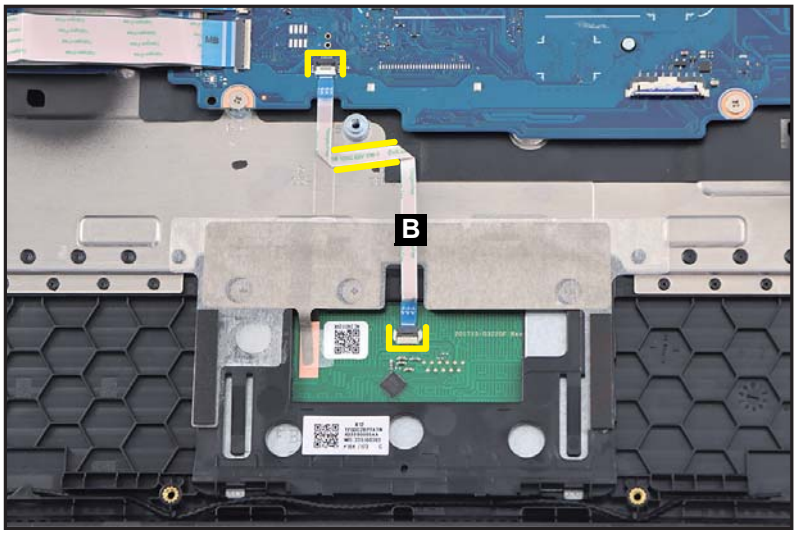

Figure 1-10. Touchpad Module Removal

⚠ 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 1-11).

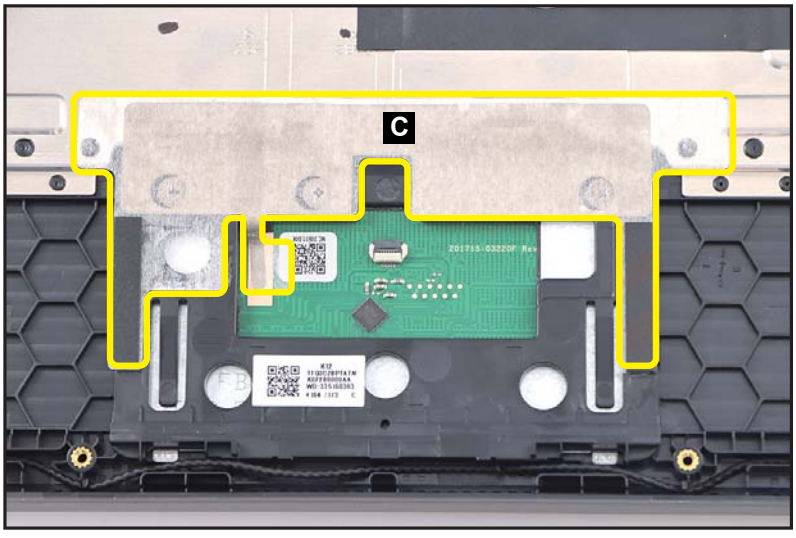

Figure 1-11. Touchpad Module Removal

4. Remove three (3) screws securing the touchpad module (Figure 1-12).

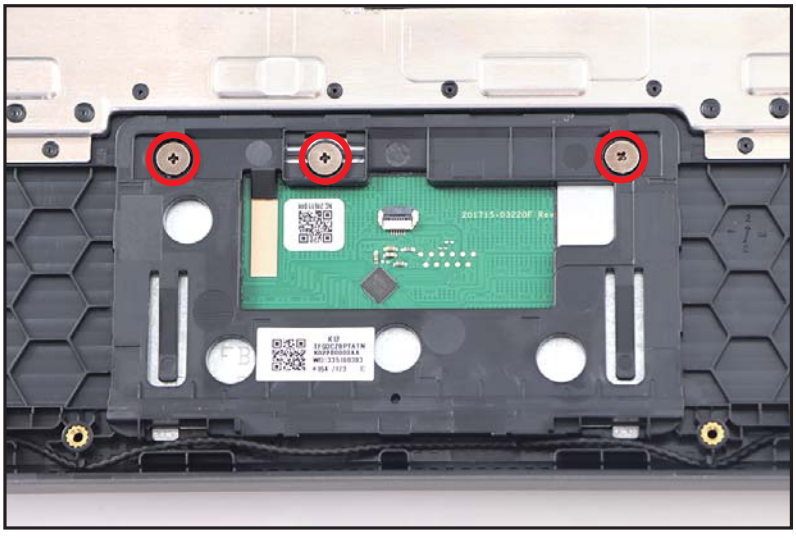

Figure 1-12. Touchpad Module Removal

5. Using the screwdriver, push the guide pins (D) firmly to release them from the top assembly (Figure 1-13).
6. 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 1-13).

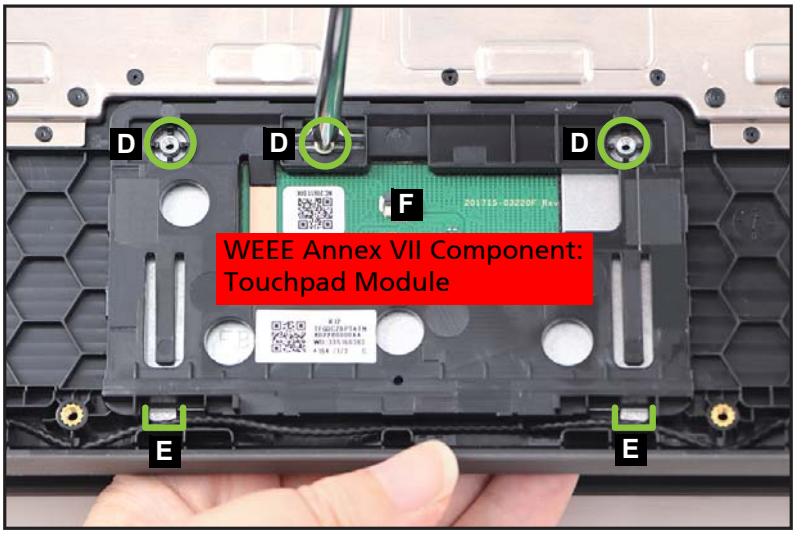

Figure 1-13. Touchpad Module Removal

Keyboard Removal

Prerequisite:

Battery Pack Removal

1. Carefully flip the top assembly and place it on the surface with the keyboard side facing up (Figure 1-14).
2. Using a flat-headed tool, carefully pry to disengage the bottom side latches of the keyboard (A) as shown in Figure 1-14.

Figure 1-14. Keyboard Removal

3. Carefully lift the bottom part of the keyboard to release it from the top assembly (Figure 1-15). The upper latches will automatically disengage as you release the keyboard.

Figure 1-15. Keyboard Removal

4. Detach the tape (B) securing the keyboard FPC (Figure 1-16).

Figure 1-16. Keyboard Removal

5. Disconnect the keyboard FPC from the mainboard connector (C) (Figure 1-17). Then remove the keyboard.

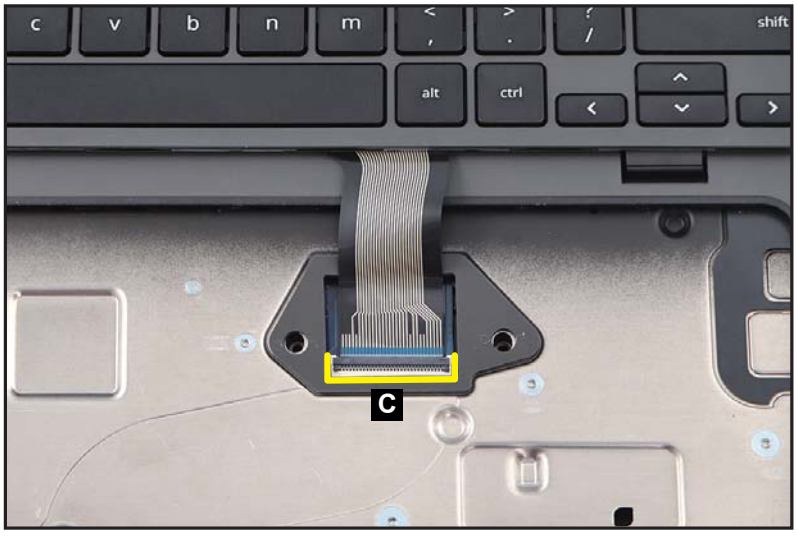

Figure 1-17. Keyboard Removal

⚠ CAUTION:

Keyboard FPC (Flexible Printed Circuit) can be damaged if removed while the mainboard connector is locked.

LTE Module Removal

Prerequisite:

Battery Pack Removal

1. Disconnect the LTE antennas cables from the LTE module connectors (A). Then unroute the cables from the cable guides (Figure 1-18).
2. Remove one (1) screw securing the LTE module (Figure 1-18).

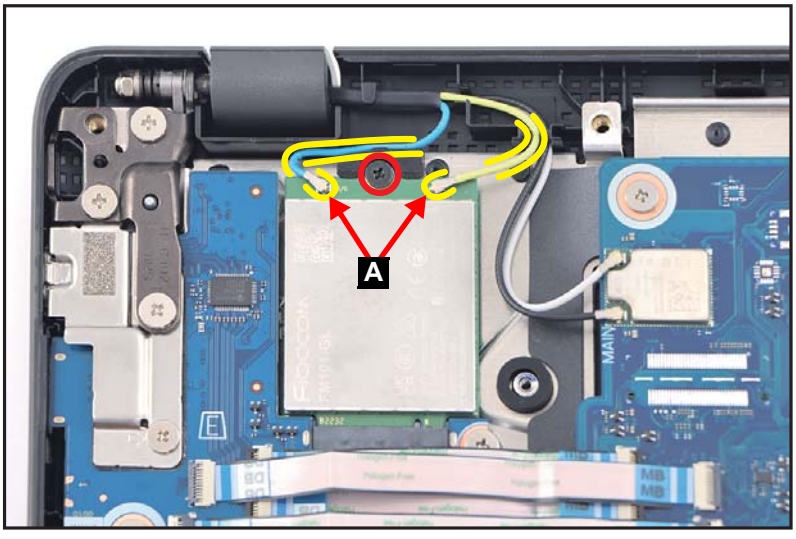

Figure 1-18. LTE Module Removal

3. Disconnect the LTE module (B) from the mainboard connector (C) (Figure 1-19). Then remove the LTE module.

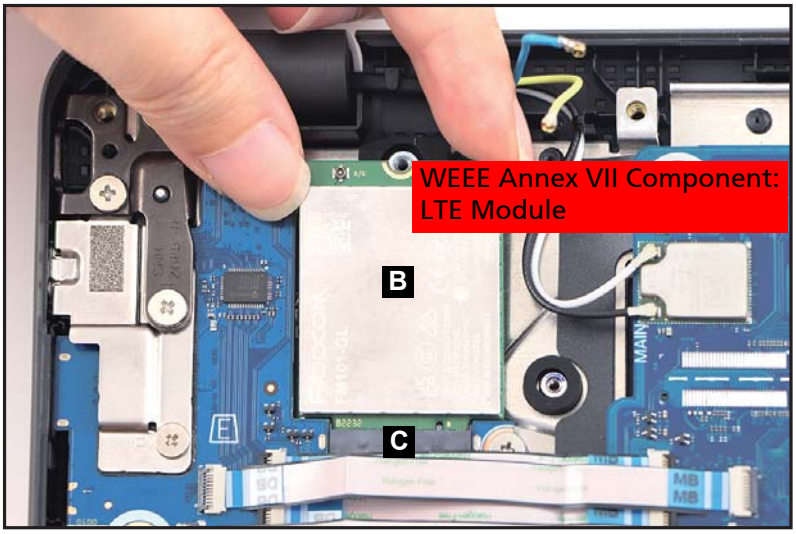

Figure 1-19. LTE Module Removal

LCD Module Removal

Prerequisite:

Battery Pack Removal

1. Disconnect the WLAN antennas cables from the WLAN module connectors (A). Then unroute the cables from the cable guides (Figure 1-20).
2. Disconnect the LTE antennas cables from the LTE module connectors (B). Then unroute the cables from the cable guides (Figure 1-20).

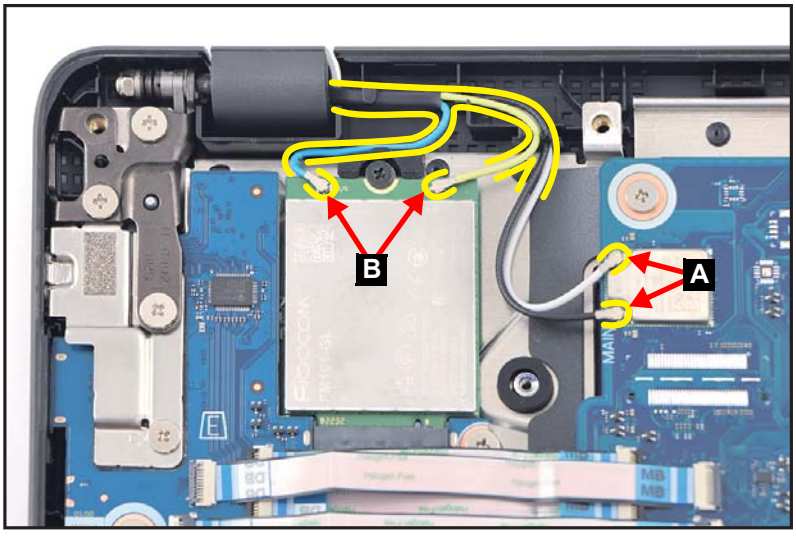

Figure 1-20. LCD Module Removal

3. Disconnect the eDP cable from the mainboard connector (C). Then unroute the cable from the cable guides (Figure 1-21).

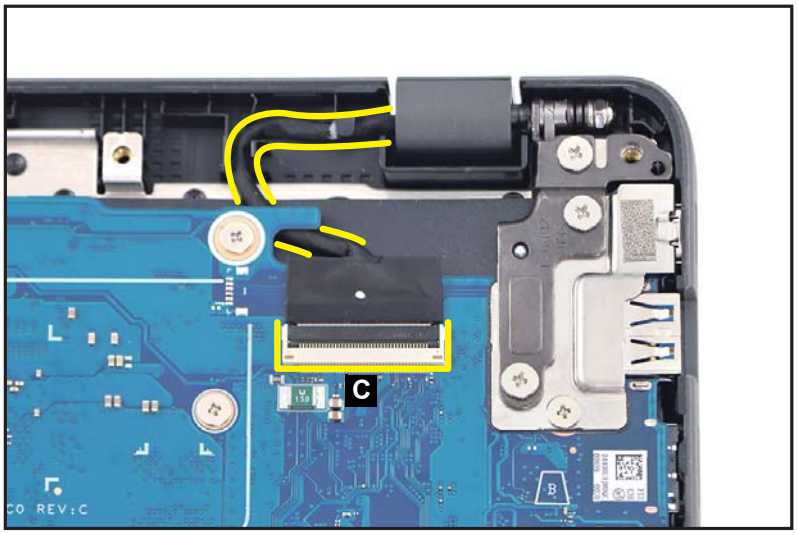

Figure 1-21. LCD Module Removal

4. Remove six (6) screws securing the LCD hinges (Figure 1-22).

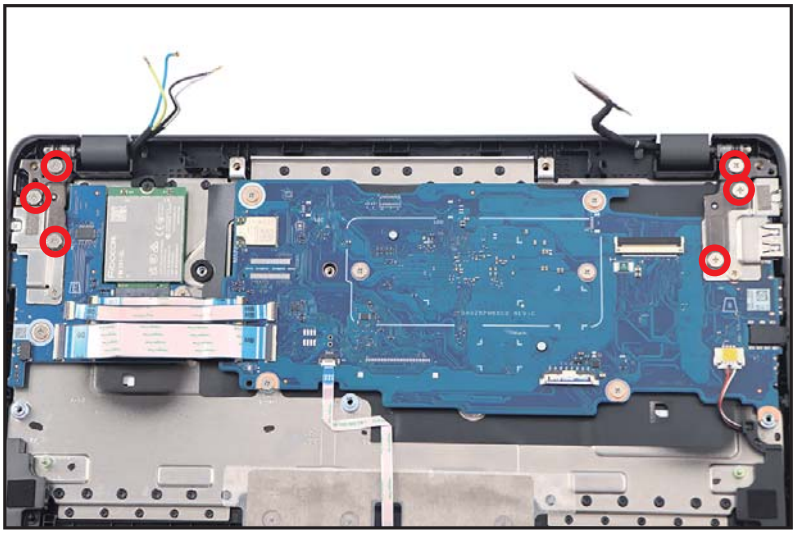

Figure 1-22. LCD Module Removal

5. Lift to slightly open the top assembly (Figure 1-23).

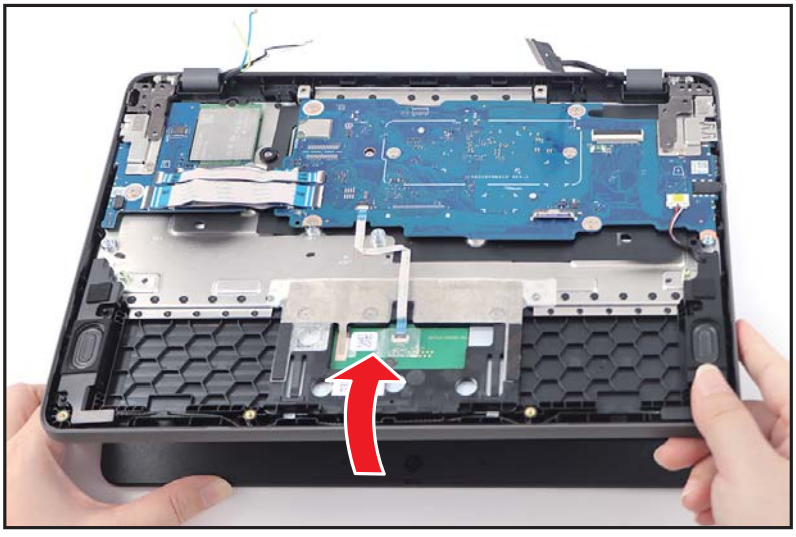

Figure 1-23. LCD Module Removal

6. Lift both LCD hinges until they are fully extended (Figure 1-24).

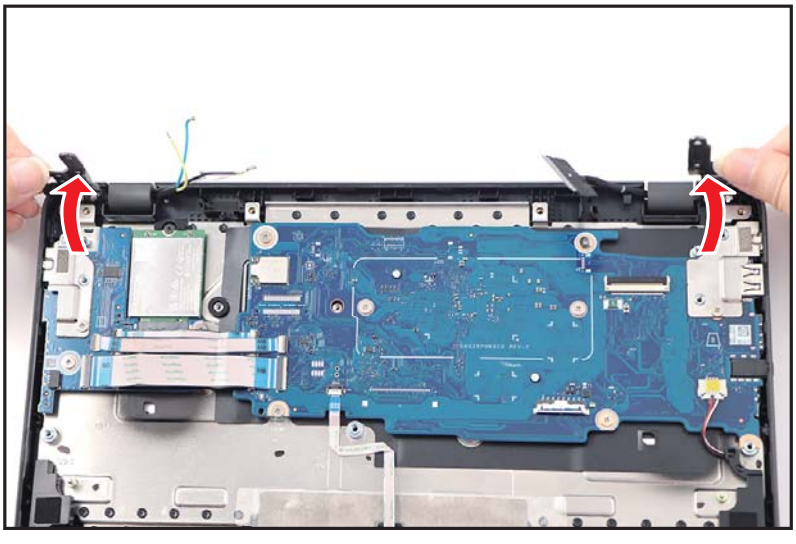

Figure 1-24. LCD Module Removal

7. Open the top assembly. Then remove the LCD module (D) away from the top assembly (Figure 1-25).

⚠ CAUTION:

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

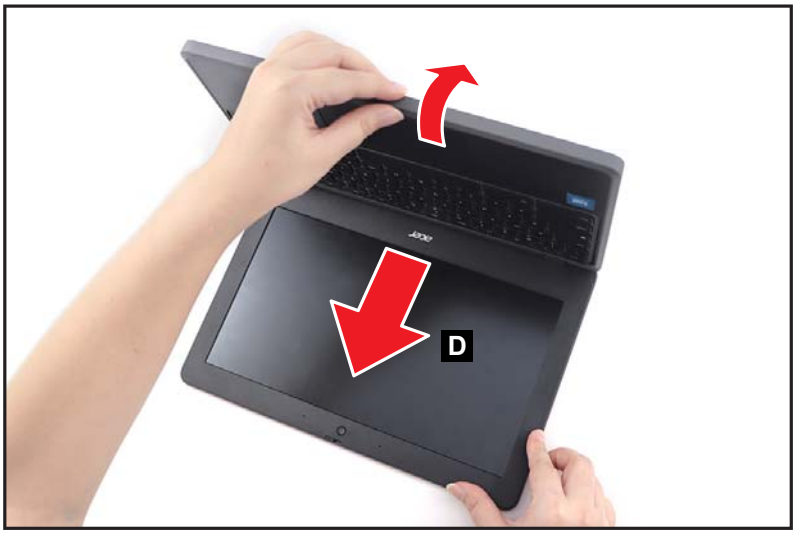

Figure 1-25. LCD Module Removal

Mainboard Removal

Prerequisite:

Keyboard Removal

1. Remove three (3) screws (A) securing the left LCD hinge (Figure 1-26).

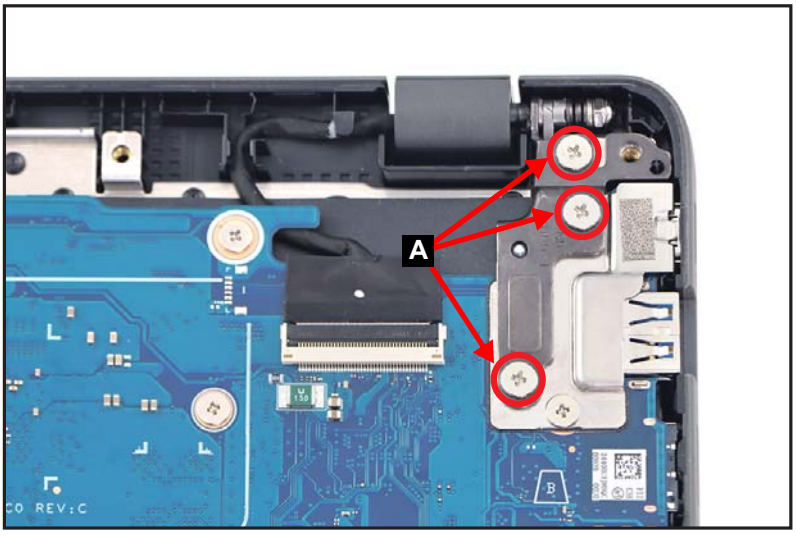

Figure 1-26. Mainboard Removal

2. Open the top assembly (Figure 1-27).

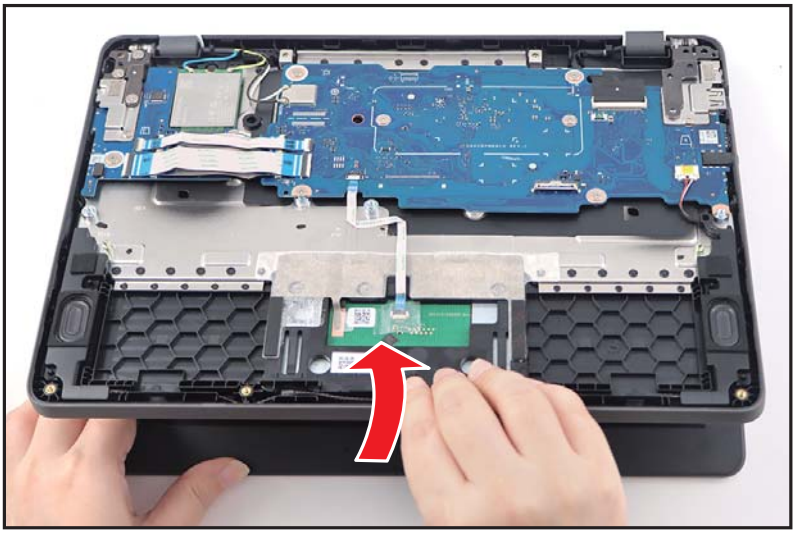

Figure 1-27. Mainboard Removal

3. Lift the left LCD hinge until it is fully extended (Figure 1-28).

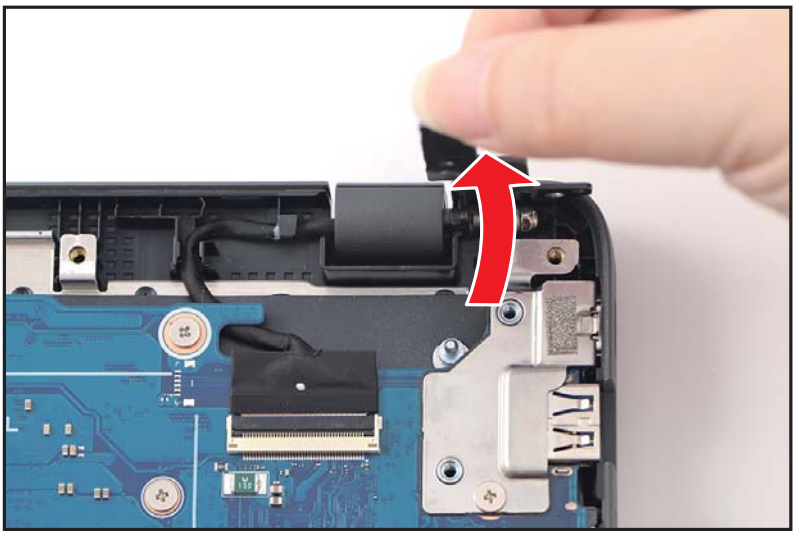

Figure 1-28. Mainboard Removal

4. Disconnect the WLAN antenna cables from the WLAN module connectors (B) (Figure 1-29).
5. Disconnect the eDP cable from the mainboard connector (C) (Figure 1-29).
6. Disconnect the speaker cable from the mainboard connector (D) (Figure 1-29).
7. Disconnect the touchpad FFC from the mainboard connector (E) (Figure 1-29).
8. Disconnect the USB board L FFC from the mainboard connector (F) (Figure 1-29).

9. Disconnect the LTE board FFC from the mainboard connector (G) (Figure 1-29).

⚠ CAUTION:

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

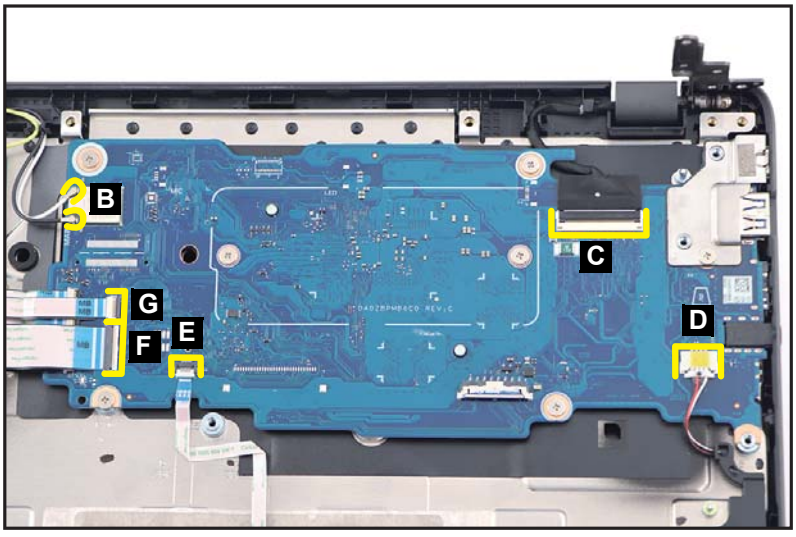

Figure 1-29. Mainboard Removal

10. Remove seven (7) screws (H) securing the mainboard and I/O bracket (Figure 1-30).
11. Disconnect the USB board H FFC from the mainboard connector (I) (Figure 1-30).

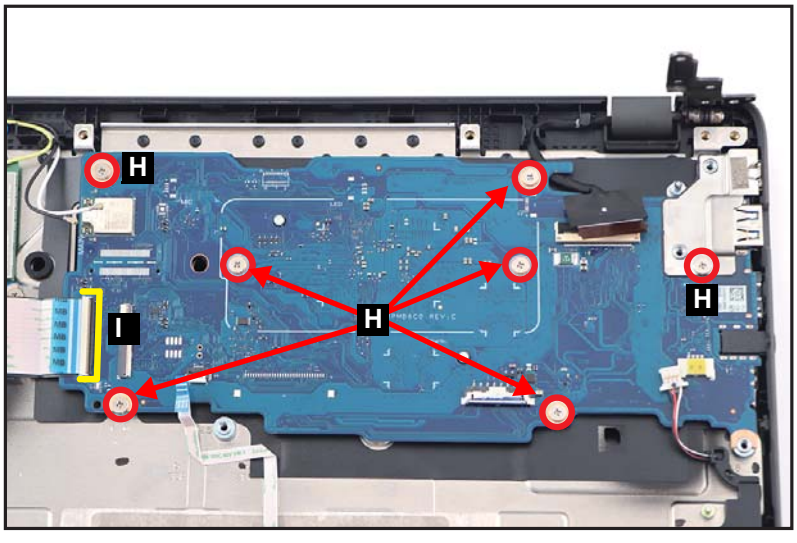

Figure 1-30. Mainboard Removal

⚠ CAUTION:

USB board H FFC (Flexible Flat Circuit) can be damaged if removed while the mainboard connector is locked.

12. Release the I/O bracket (J) from the I/O port slot and guide pins (K) on the top assembly (Figure 1-31). Then remove the I/O bracket.

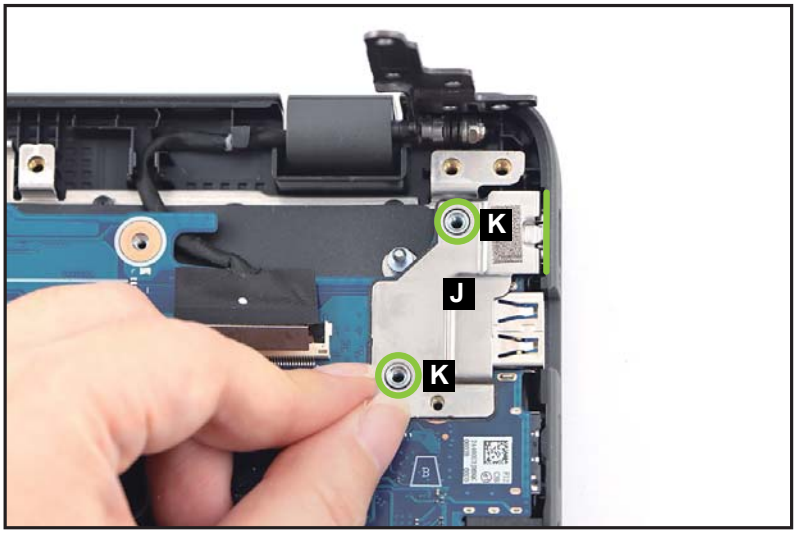

Figure 1-31. Mainboard Removal

13. Release the mainboard (L) from the I/O ports slots and guide pins (M) on the top assembly (Figure 1-32). Then remove the mainboard.

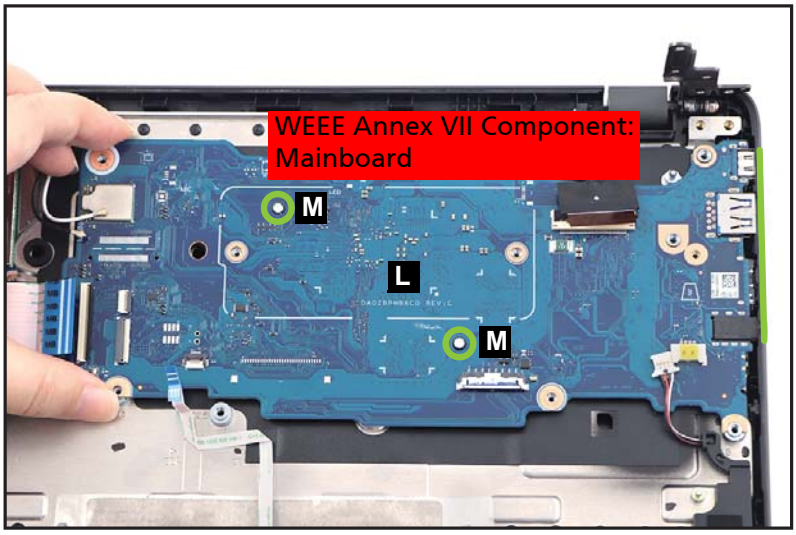

Figure 1-32. Mainboard Removal

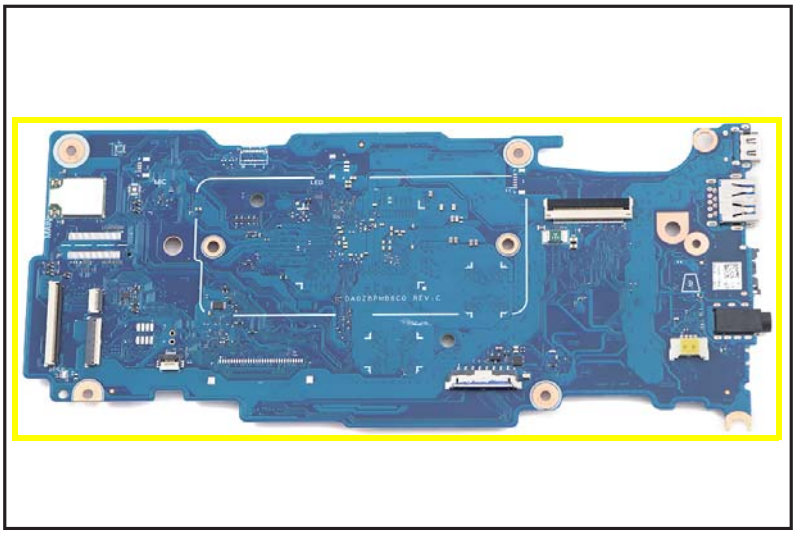

Figure 1-33. Mainboard

IMPORTANT:

Circuit boards >10 cm² have been highlighted with a yellow rectangle as shown in Figure 1-33. Remove the circuit board and follow local regulations for disposal.

USB Board Removal

Prerequisite:

LTE Module Removal

1. Remove three (3) screws (A) securing the right LCD hinge (Figure 1-34).

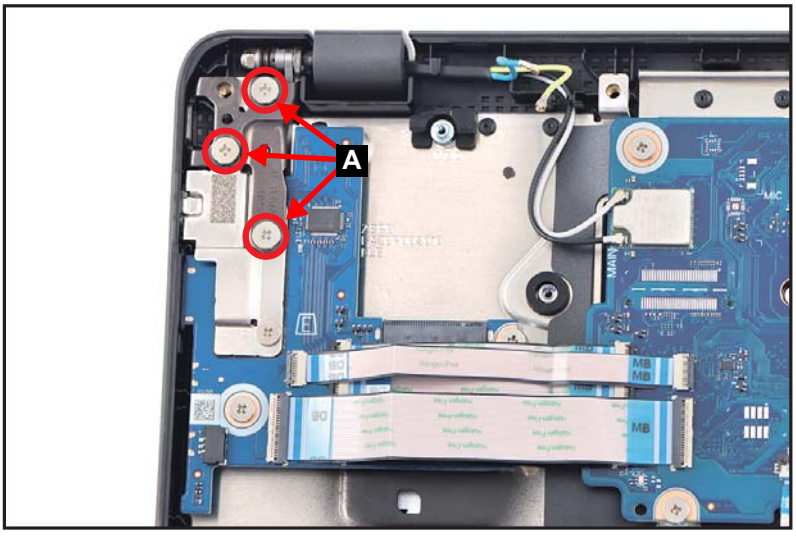

Figure 1-34. USB Board Removal

2. Lift the top assembly until it is fully open (Figure 1-35).

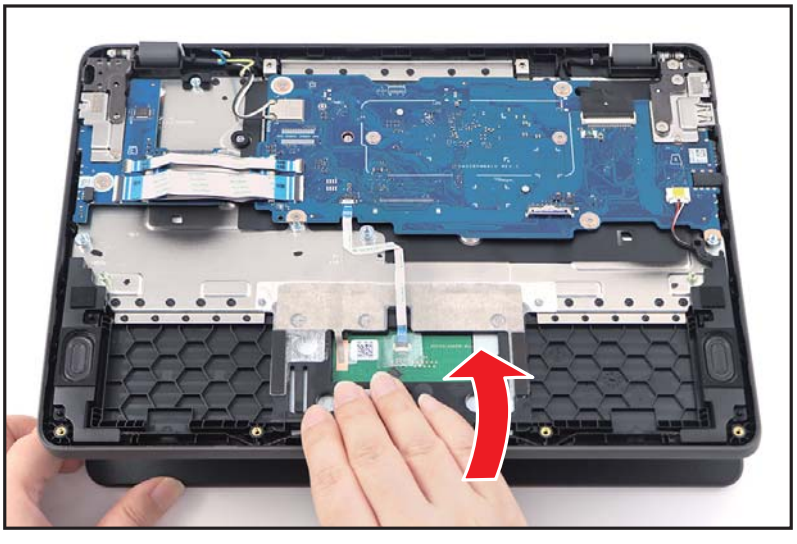

Figure 1-35. USB Board Removal

3. Close the top assembly and lift the right LCD hinge until it is fully extended (Figure 1-36).

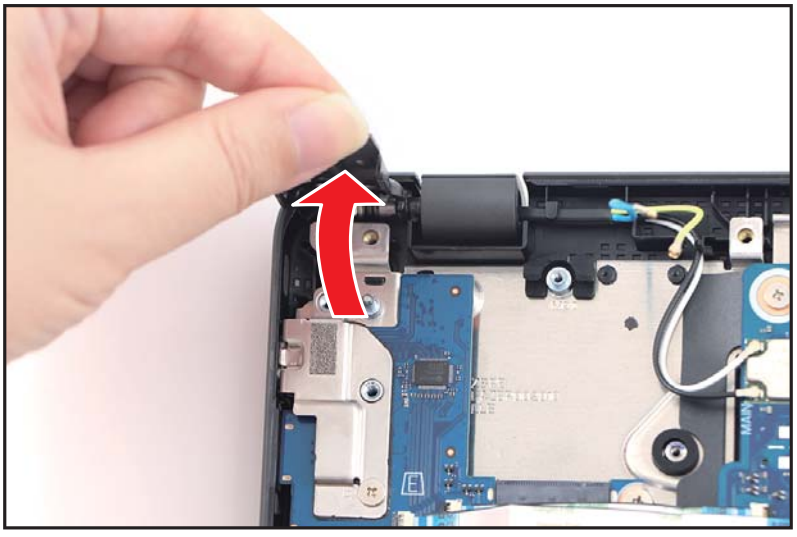

Figure 1-36. USB Board Removal

4. Disconnect the LTE board FFC (B) from the USB board and mainboard connectors (Figure 1-37). Then remove it from the top assembly.
5. Disconnect the USB board L FFC (C) from the USB board and mainboard connectors (Figure 1-37). Then remove it from the top assembly.

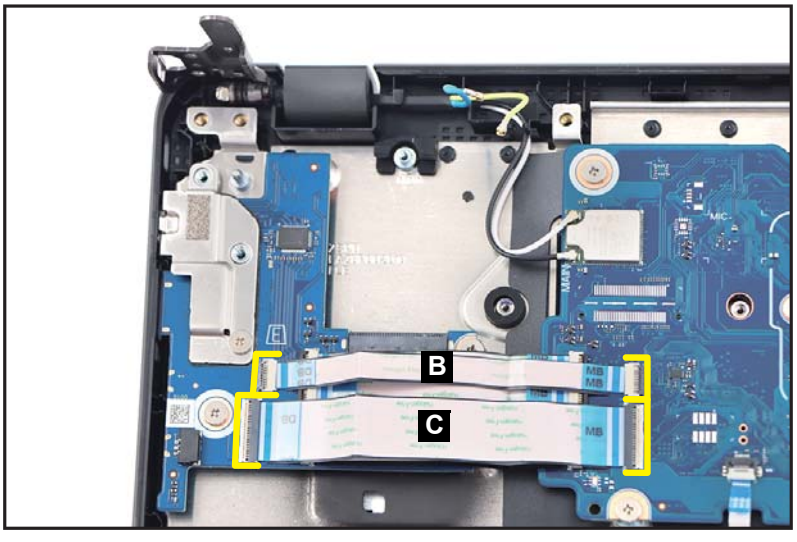

Figure 1-37. USB Board Removal

⚠ CAUTION:

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

6. Disconnect the USB board H FFC (D) from the USB board and mainboard connectors (Figure 1-38). Then remove it from the top assembly.
7. Remove three (3) screws (E) securing the USB board and I/O bracket (Figure 1-38).

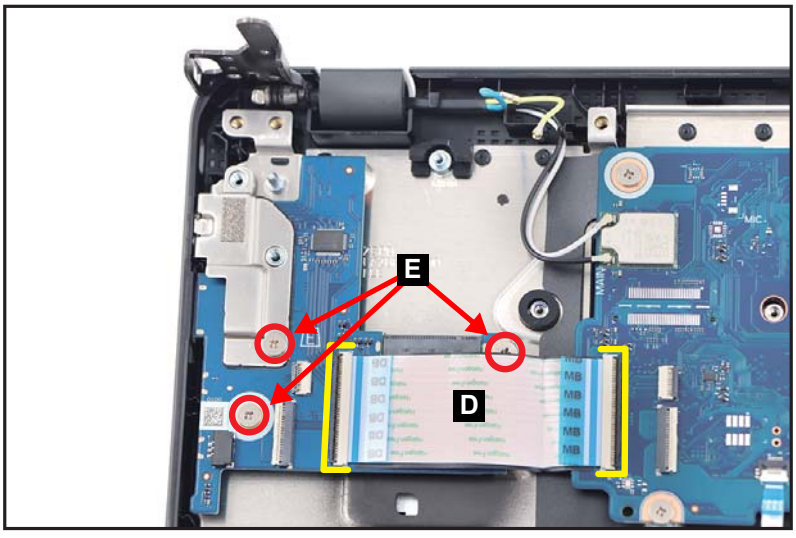

Figure 1-38. USB Board Removal

⚠ CAUTION:

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

8. Release the I/O bracket (F) from the I/O port slot and guide pins (G) on the top assembly (Figure 1-39). Then remove the I/O bracket.

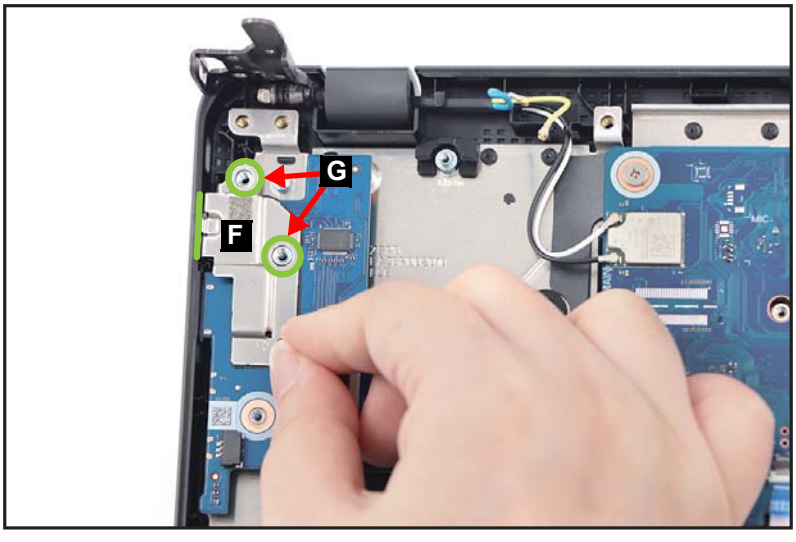

Figure 1-39. USB Board Removal

9. Release the USB board (H) from the I/O port slots and guide pins (I) on the top assembly (Figure 1-40). Then remove the USB board.

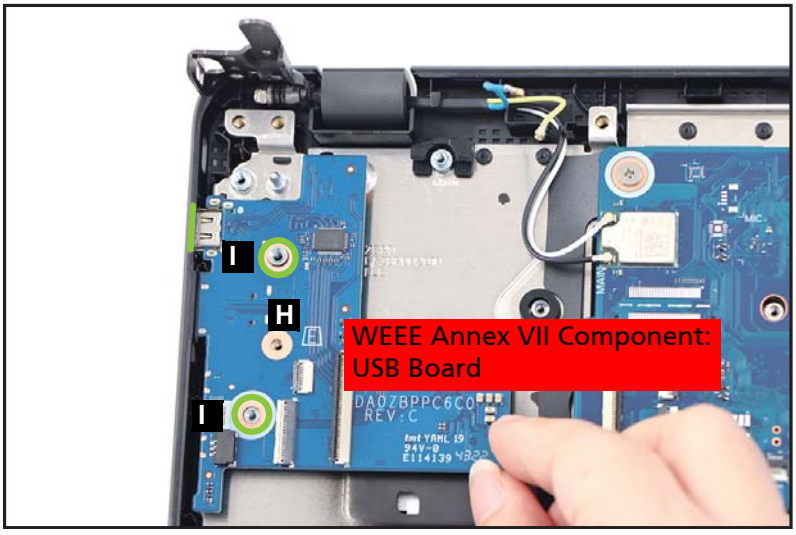

Figure 1-40. USB Board Removal

LCD Bezel Removal

Prerequisite:

LCD Module Removal

1. Pry the LCD bezel from the bottom side to release the 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).

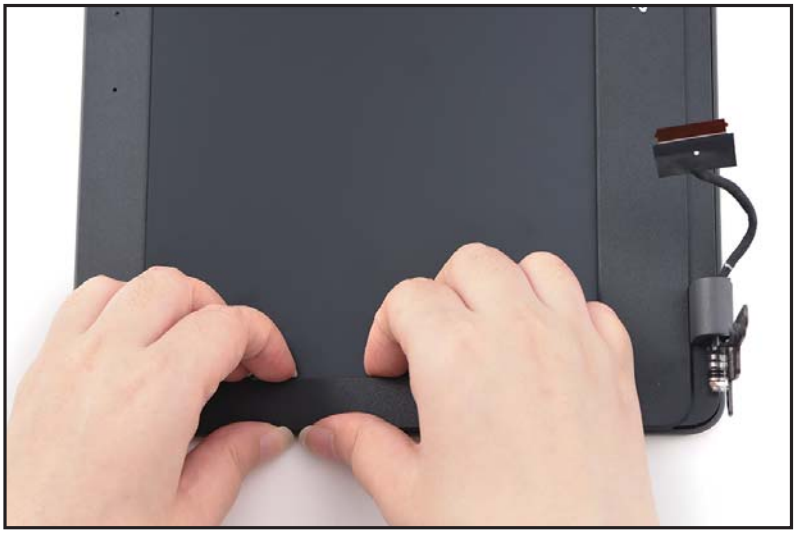

Figure 1-43. LCD Bezel Removal

4. Continue prying along the upper 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

NOTE:

Please take note that the eDP cable includes the LCD panel cable and the camera cable.

1. Unroute the eDP cable from the cable guides on the LCD cover (Figure 1-45).

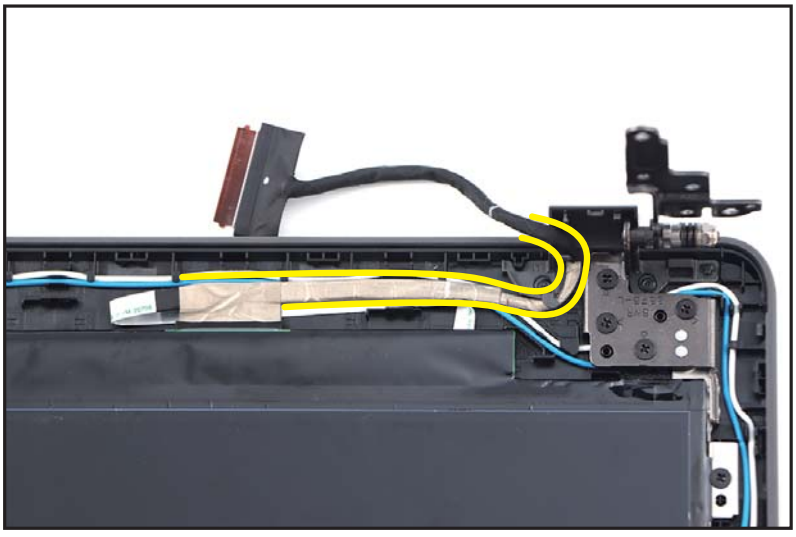

Figure 1-45. LCD Panel Removal

2. Remove four (4) screws securing the embedded brackets on the LCD panel (Figure 1-46).

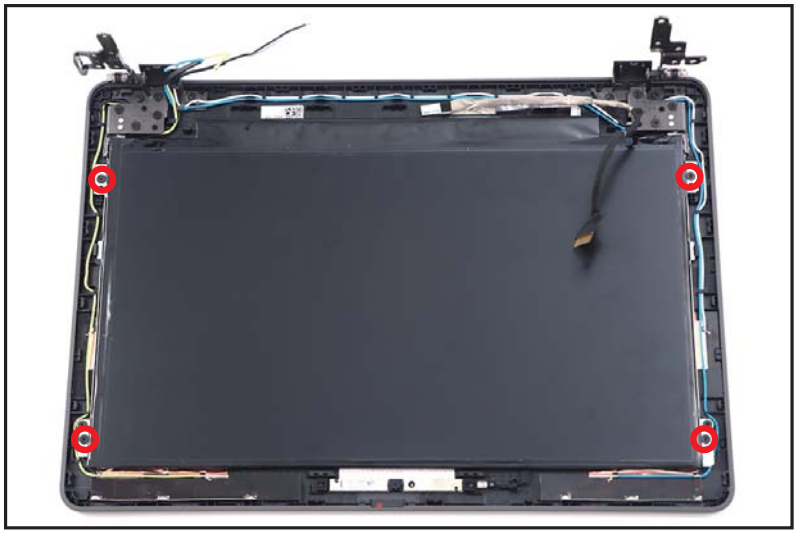

Figure 1-46. LCD Panel Removal

3. Lift the embedded brackets on the LCD panel (A) to release them from the guide pins (B). Then carefully turn the LCD panel over so that the display panel is facing down on a flat surface (Figure 1-47).

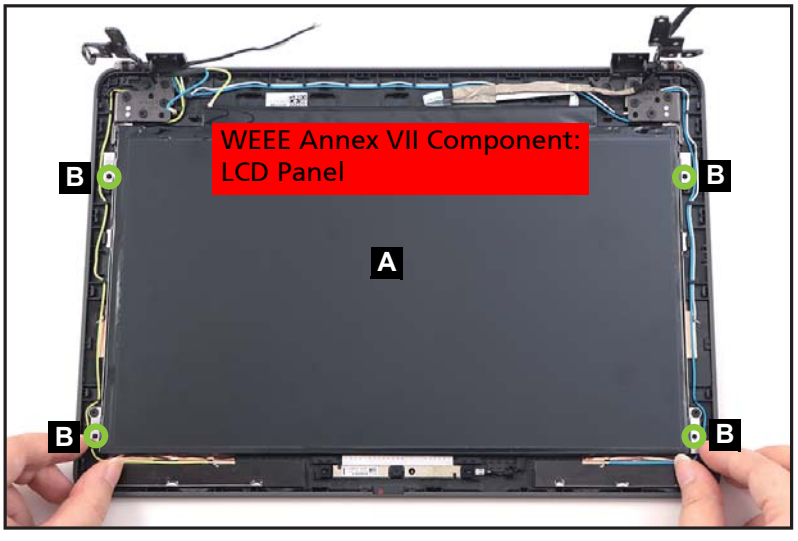

Figure 1-47. LCD Panel Removal

4. Detach the mylar tape (C) securing the eDP cable to the LCD panel (Figure 1-48).

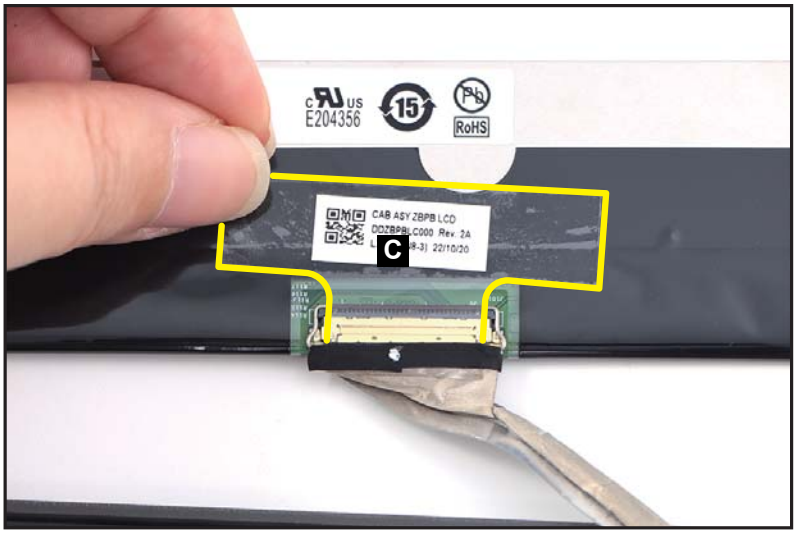

Figure 1-48. LCD Panel Removal

5. Lift the latch (D) securing the eDP cable (Figure 1-49).

Figure 1-49. LCD Panel Removal

6. Disconnect the eDP cable from the LCD panel connector (E) (Figure 1-50). Then remove the LCD panel.

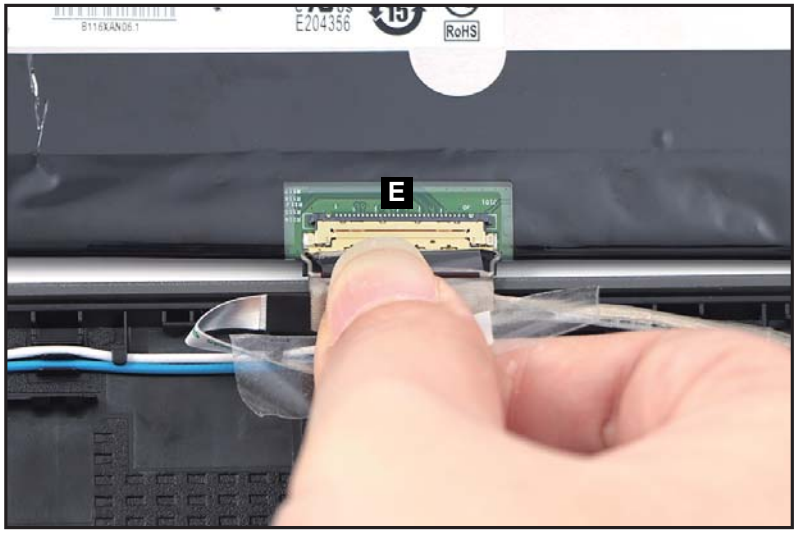

Figure 1-50. LCD Panel Removal

Top Assembly Removal

Prerequisite:

Ensure that the **Touchpad Module**, **Speakers**, **LCD Module**, **Mainboard**, and **USB Board** have been disassembled prior removing the top assembly.

Figure 1-51. Top Assembly

Electronic Boards Diagrams

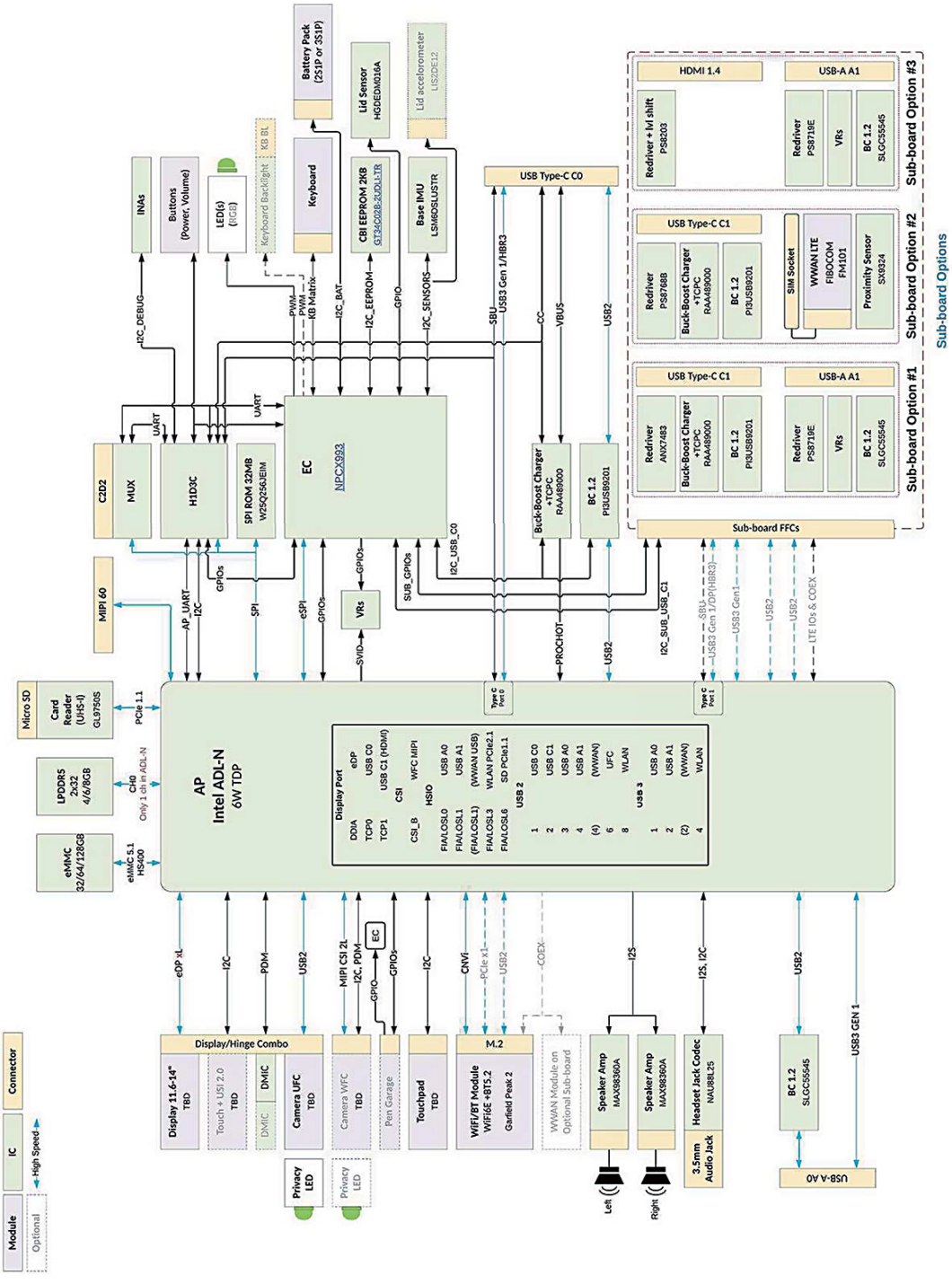

Figure 1-52. System Block Diagram

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.

Recover your Chromebook

When your Chromebook's operating system (OS) isn't working properly, you can recover it. Recovery is removing and reinstalling the OS.

NOTE:

If you're using your Chromebook at work or school, ask your administrator for help.
Administrators: For more help, contact Google support.

When to recover

You might want to recover if:

- You see this error message: "Chrome OS is missing or damaged".
- You've tried other troubleshooting steps and nothing has fixed your issue.
- You've asked the experts in our help forum for help fixing your issue, and they recommend recovery.

What you need to get started

- The Chromebook with the "Chrome OS is missing or damaged" error.
- Another Chromebook, or a Windows or Mac computer with Chrome installed.
- A USB flash drive that can hold at least 8 GB, and that you don't mind erasing. If your Chromebook has an SD card slot, you can use an SD card instead.

IMPORTANT:

Recovery permanently erases everything on your Chromebook's hard drive, including your downloaded files. If possible, back up your files before you recover your Chromebook.

What you need to do

Step 1: Try less invasive steps

If you can sign in to your Chromebook, try these steps first:

1. Turn your Chromebook off, then back on again.
2. If your Chromebook still has an error, reset to factory settings.

If neither of those steps fix the error, continue to Step 2.

Step 2: Download a new copy of the OS

On the working computer (not the Chromebook with the error):

1. If you're using a Mac or Windows computer:
    a. If you haven't yet, install Chrome.
    b. Open **Chrome** .
    c. Install the recovery extension.
2. To open the recovery extension:
    a. At the top right of your browser window, click **Extensions** .
    b. To launch the extension popup, click on the "**Chromebook Recovery Utility**" extension. If the extension popup doesn't automatically appear on your screen, make sure it's turned on.
3. Click **Get started**.
4. Click **Select** a model from a list, or type in the model number of the Chromebook you want to recover. To find this number, look at the bottom of the error message on your Chromebook screen.
5. Click **Continue**.
6. Insert your USB flash drive or SD card into the computer.
7. In the dropdown menu, choose the USB flash drive or SD card you inserted.
8. Click **Continue**.
9. Click **Create now**.
10. When you see a message saying that your recovery media is ready, remove the USB flash drive or SD card from the computer.

Step 3: Enter recovery mode

On the Chromebook with the error:

1. If you have anything connected to this Chromebook (such as a mouse or external hard drive), remove it.
2. Enter recovery mode:
    - Chromebook: Press and hold **Esc** + **Refresh** , then press **Power** . Let go of **Power**. When a message shows on the screen, let go of the other keys.
    - Chromebox: First, turn it off. Using a paper clip or similar object, press and hold the recovery button. Press the **Power** button to turn the Chromebox back on. When you see a message on screen, release the recovery button.
    - Chromebit: First, unplug it from power. Using a paper clip or similar object, press and hold the recovery button. Plug the Chromebit back in to power. When you see a message on screen, release the recovery button.

- Chromebook tablet: Press and hold the **Volume Up**, **Volume Down**, and **Power** buttons for at least 10 seconds, then release them.

3. You'll see one of these messages:
   - "Chrome OS is missing or damaged. Please insert a recovery USB stick or SD card.".
   - "Please insert a recovery USB stick or SD card.".
4. Insert the USB flash drive or SD card that you used to create recovery media.
5. Follow the on-screen instructions.

Make sure the recovery extension is turned on

1. On your computer, open **Chrome** .
2. At the top right, click **Extensions** > **Manage extensions**.
3. Next to “Chromebook Recovery,” toggle the switch to the right.
4. Optional: You can also click **Details** and toggle the switch to the right.
5. Once the extension is on, in the extension panel in your browser, click on the extension to open the popup.
6. Optional: If you use the extension frequently, you can pin it .

Optional: Reuse your USB flash drive or SD card

After recovering your Chromebook, you’ll need to erase the recovery media if you want to reuse your USB flash drive or SD card to store other files.

To erase the recovery media:

1. On your computer, open **Chrome** .
2. At the top right, click **Extensions** .
3. To launch the extension popup, click on the "**Chromebook Recovery Utility**" extension.
4. In the extension popup, click **Settings** .
5. Click **Erase recovery media**.
6. From the dropdown menu, select the USB drive or SD card you'd like to erase.
7. Click **Continue**.
8. Make sure the storage device you used for recovery is listed.
9. Click **Erase now**.
10. The tool will erase everything on your USB drive or SD card. When you see the message "Your recovery media has been erased," click **Done**.
11. Remove the USB flash drive or SD card from the computer.
12. Format the storage device using a tool provided by your operating system.

Fix problems with recovery

"An unexpected error has occurred".

1. Erase the storage device, then try recovery again.
2. Try using a different USB flash drive or SD card to recover. Some USB flash drives and SD cards don't work well with recovery.

If you're still having problems, contact your Chromebook manufacturer for help. Learn how to contact your manufacturer.

"Please remove all connected devices and start recovery".

First, remove anything that's connected to your Chromebook, such as a mouse, SD card or external hard drive. Then follow the steps to enter recovery mode.

"The device you inserted does not contain Chrome OS".

First, make sure that you inserted the USB drive or SD card that you used to create recovery media.

If you're using the correct storage device, but still see this error, the storage device might not be working properly.

1. Erase the storage device, then try recovery again.
2. Try using a different USB flash drive or SD card to recover. Some USB flash drives and SD cards don't work well with recovery.

If you're still having problems, contact your Chromebook manufacturer for help. Learn how to contact your manufacturer.

"The security module on this device is not working".

First, ask our experts for help:

- "If you use your Chromebook at work or school, contact your administrator. Administrators: contact Google support.
- "Chat with experts on the Chromebook help forum.

If you're still having problems, contact your manufacturer to repair your Chromebook. Learn how to contact your manufacturer.

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

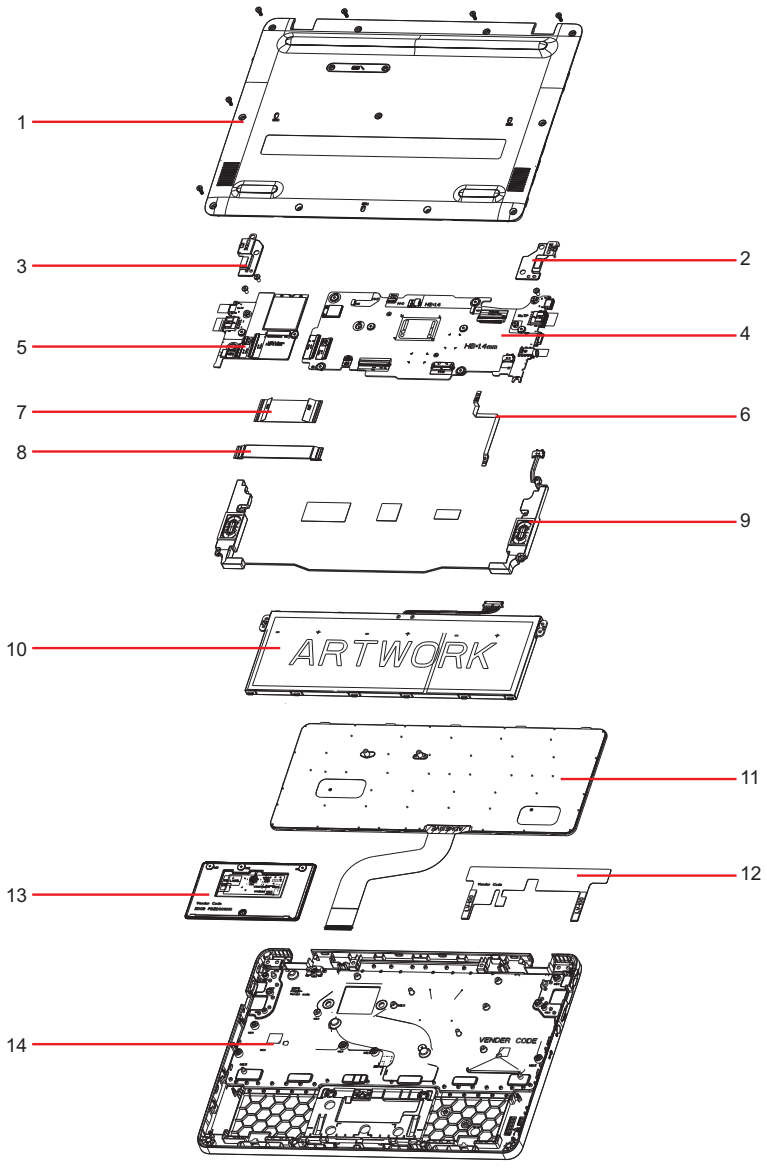

Figure 1-53. System Exploded Diagram

Table 1-1. System Exploded Diagram

No.	Description
1	Base Cover
2	I/O Bracket (mainboard)
3	I/O Bracket (USB board)
4	Mainboard
5	USB Board
6	Touchpad FFC
7	USB Board H FFC
8	USB Board L FFC
9	Speakers
10	Battery Pack
11	Keyboard
12	Conductive Tape
13	Touchpad Module
14	Top Assembly

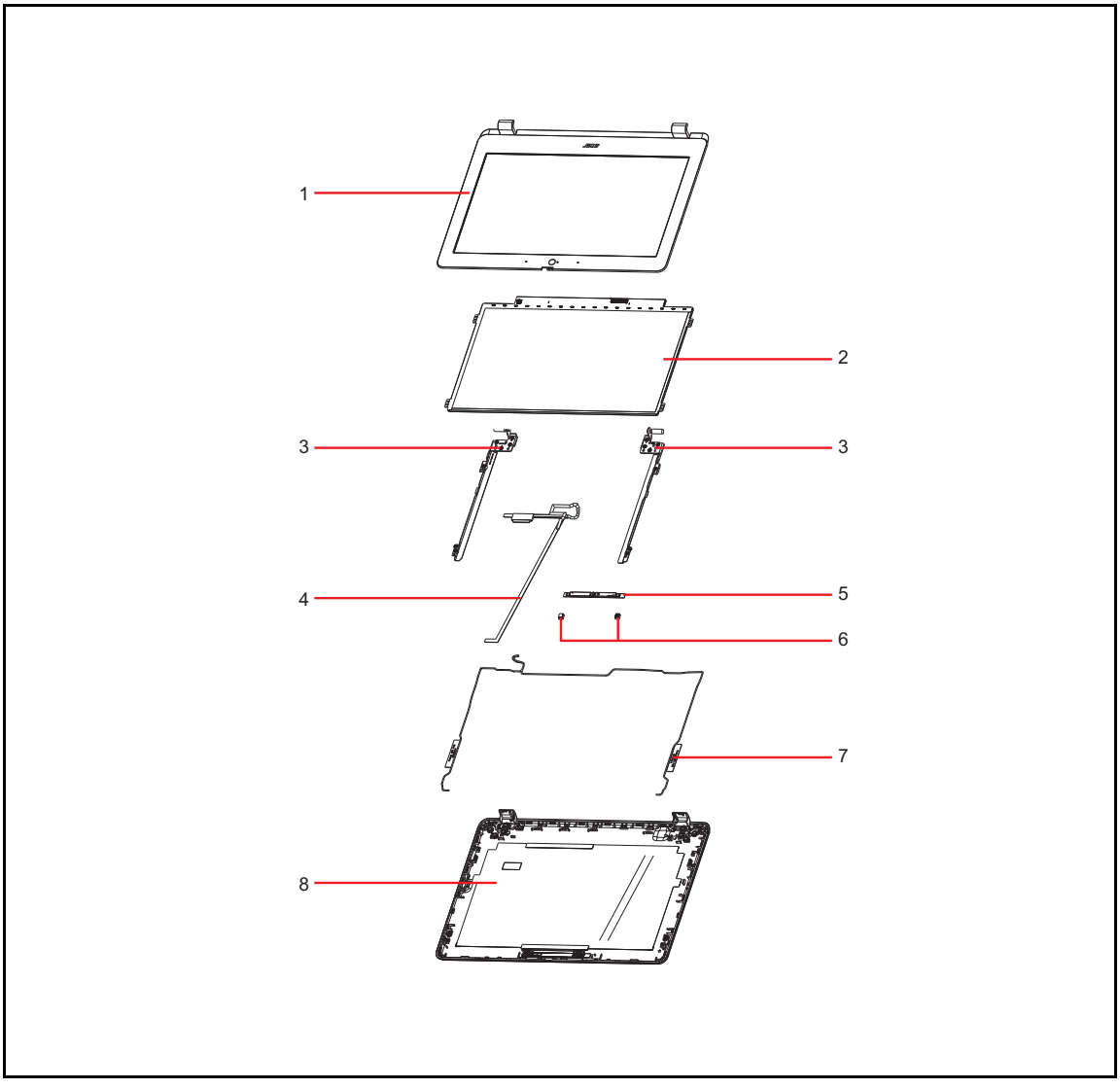

Figure 1-54. LCD Assembly Exploded Diagram

Table 1-2. LCD Assembly Exploded Diagram

No.	Description
1	LCD Bezel
2	LCD Panel
3	LCD Hinge L
	LCD Hinge R
4	eDP Cable
5	Camera Module
6	Microphone Rubbers

Table 1-2. LCD Assembly Exploded Diagram (Continued)

No.	Description
7	WLAN Antenna (MAIN+AUX)
8	LCD Cover

Check for updates yourself

1. Turn on your Chromebook.
2. Connect your Chromebook to Wi-Fi.
3. At the bottom right, select the time.
4. Select **Settings** .
5. At the bottom of the left panel, select **About Chrome OS**.
6. Under "Google Chrome OS", you'll find which version of the Chrome operating system your Chromebook uses.
7. Select **Check for updates**.
8. If your Chromebook finds a software update, it will start to download automatically.

Factory reset your Chromebook

1. Sign out of your Chromebook.
2. Press and hold **Ctrl + Alt + Shift + r**.
3. Select **Restart**.
4. In the box that appears, select **Powerwash** > **Continue**.
5. Follow the steps that appear and sign in with your Google Account.

NOTE:

The account you sign in with after you reset your Chromebook will be the owner account.