TravelMate
X414-51/X414T-51/X414-51-TCO/
X414T-51-TCO
Lute_LNV

LIFECYCLE EXTENSION GUIDE

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Self-Repair

This chapter offers limited customer self-repair capabilities.

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

Due to the complexity of circuit boards, electronic components which are embedded to the motherboard or daughterboard(s) are strongly not advised to self-repair.

NOTE:

Before handling components, wear anti-static gloves to avoid damaging them due to static electricity.

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

Safety Guidelines

This chapter contains step by step procedures on how to remove and de-install components from the computer. Use these 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 if any damage is done to the unit or components during the repair. 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
- SSD module
- WLAN module
- USB board
- RTC battery
- Touchpad module
- Mainboard
- 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 or B) as shown in Figure 1-1.
3. Remove all cables from the system.

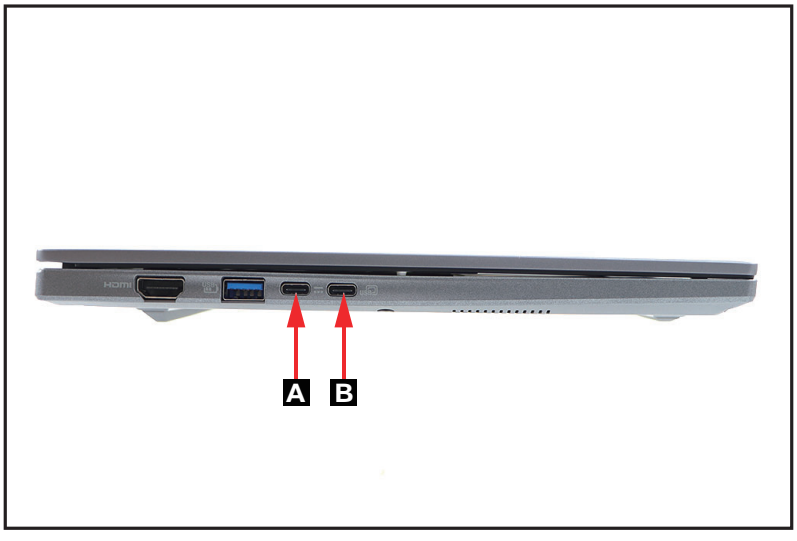


Figure 1-1. Adapter Outlet

NOTE:

Make sure the system is completely powered off.

Base Cover Removal

1. Remove eight (8) screws from the base cover (Figure 1-2).



Figure 1-2. Base Cover Removal

2. Starting from the bottom side, carefully pry up the base cover to release the latches as shown in Figure 1-3.

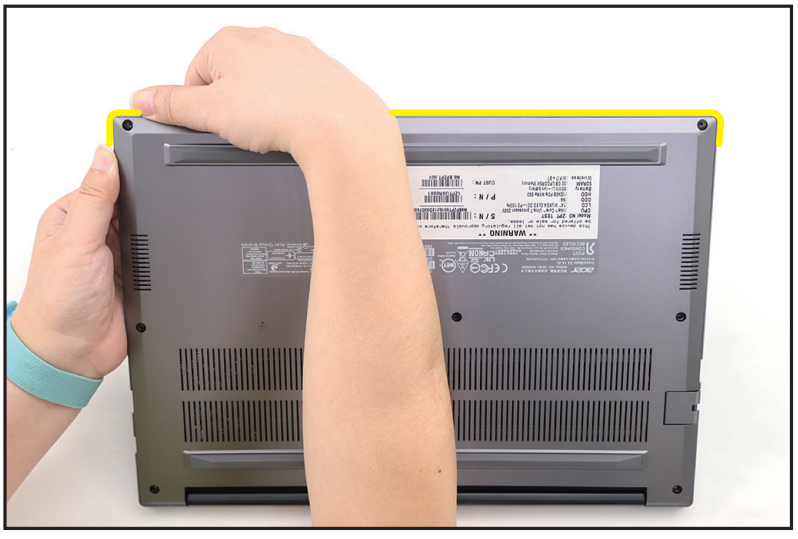


Figure 1-3. Base Cover Removal

3. Continue to release the left and upper side latches (Figure 1-4).

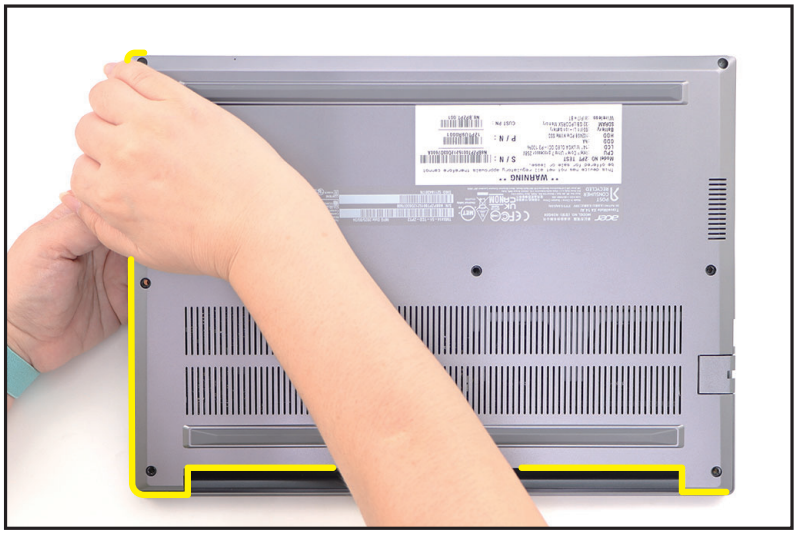


Figure 1-4. Base Cover Removal

4. Continue to release the right side latches until all latches are disengaged. Then remove the base cover from the system (Figure 1-5).

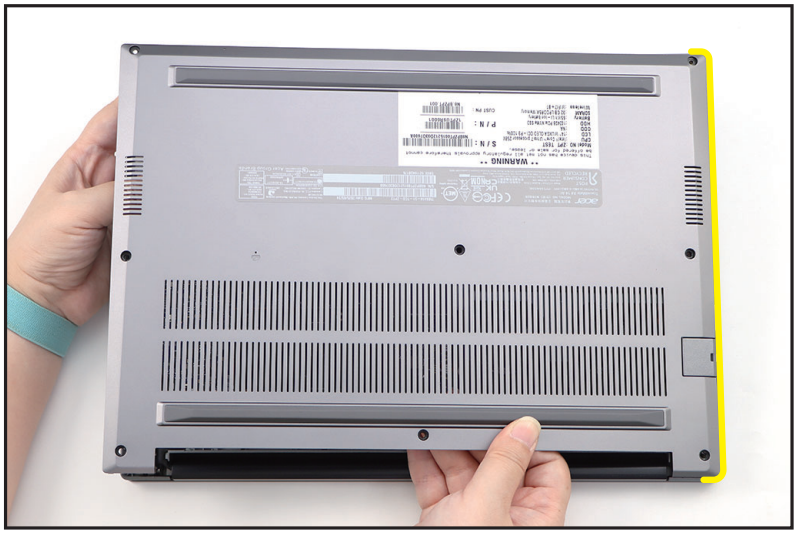


Figure 1-5. Base Cover Removal

Battery Pack Removal

Prerequisite:

Base Cover Removal

1. Detach the tape (A) securing the battery cable connection as shown in Figure 1-6.

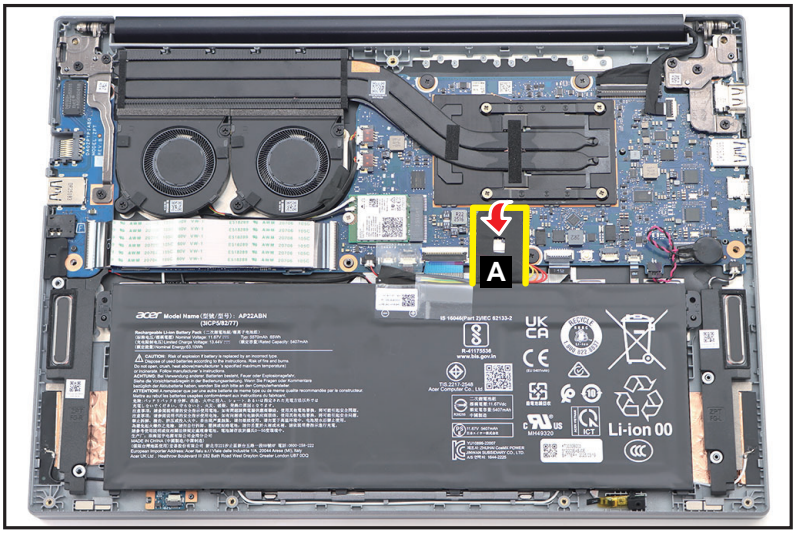


Figure 1-6. Battery Pack Removal

2. Disconnect the battery cable from the mainboard connector (B) (Figure 1-7).

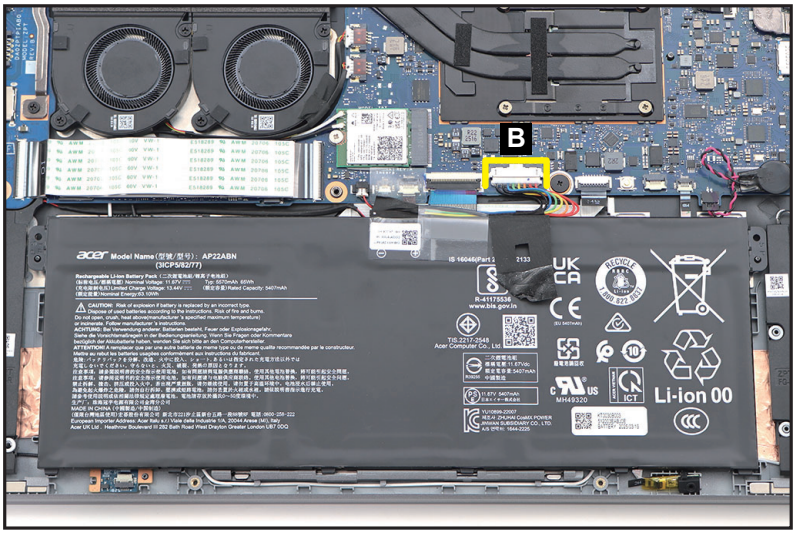


Figure 1-7. Battery Pack Removal

3. Lift to release the battery pack (C) from the guide pins (highlighted with the green circles) (Figure 1-8). Then remove the battery pack from the top assembly.



Figure 1-8. Battery Pack Removal

4. Detach the mylar (D) securing the battery cable in place (Figure 1-9).

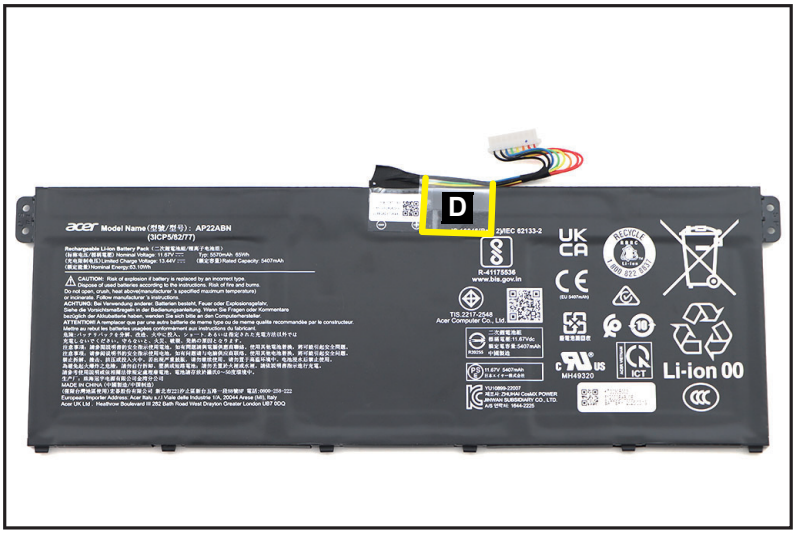


Figure 1-9. Battery Pack Removal

5. Detach the mylar (E) from the battery pack (Figure 1-10).
6. Disconnect the battery cable from the battery connector (F) (Figure 1-10). Then remove the battery cable.

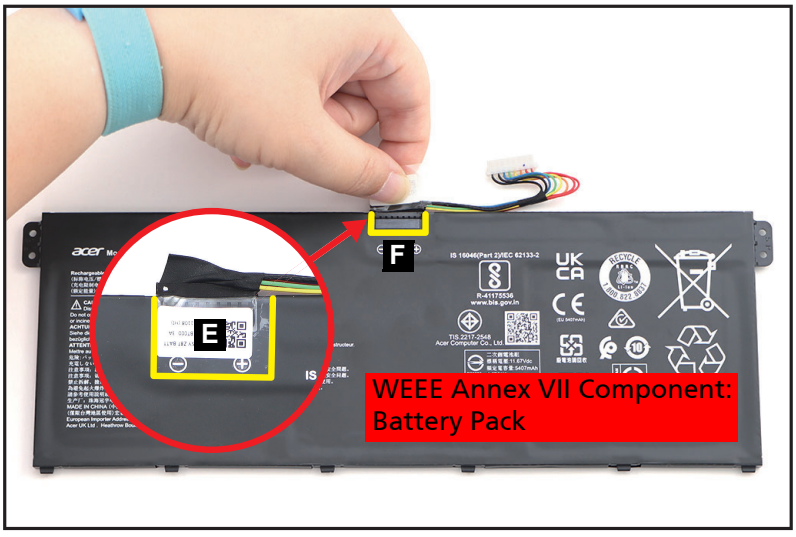


Figure 1-10. Battery Pack Removal

IMPORTANT:

Follow local regulations for battery disposal.

SSD Module Removal

Prerequisite:

Battery Pack Removal

1. Disconnect the USB board FFC (A) from the mainboard and USB board connectors. Then, remove the USB board FFC (Figure 1-11).

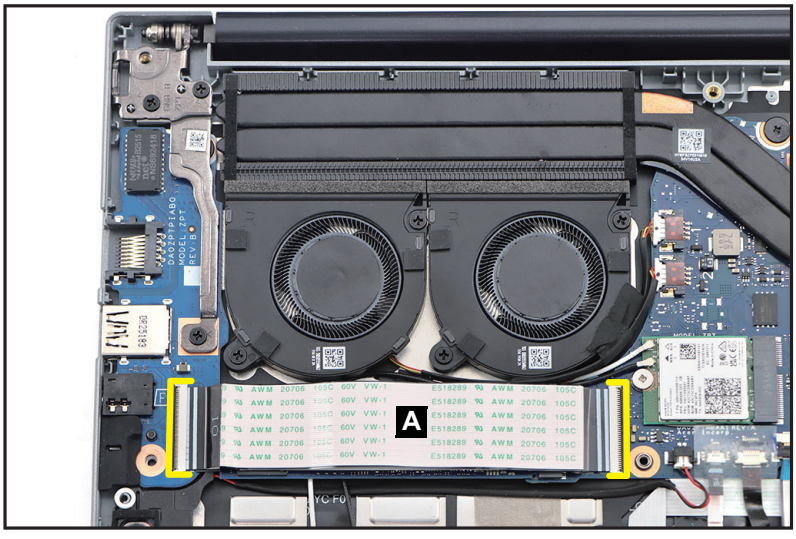


Figure 1-11. SSD Module Removal

⚠ CAUTION:

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

2. Remove one (1) screw securing the SSD module (Figure 1-12).

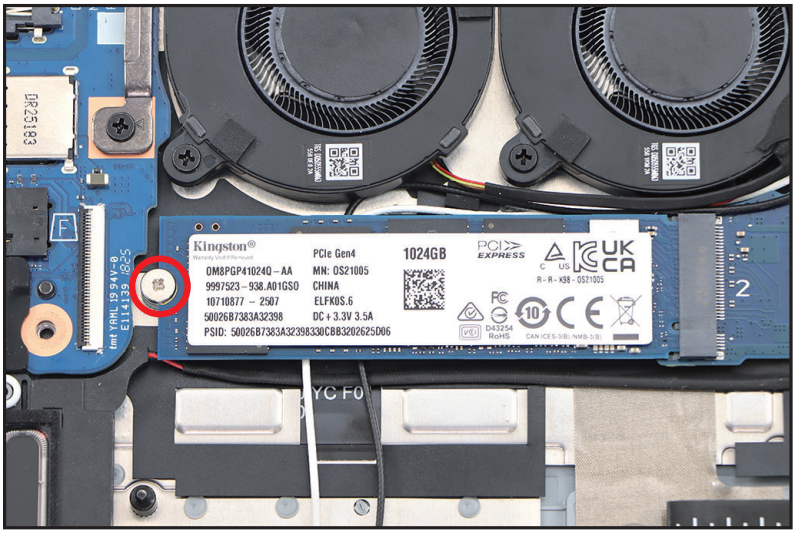


Figure 1-12. SSD Module Removal

3. Disconnect the SSD module (B) from the mainboard connector (C) (Figure 1-13). Then, remove the SSD module.

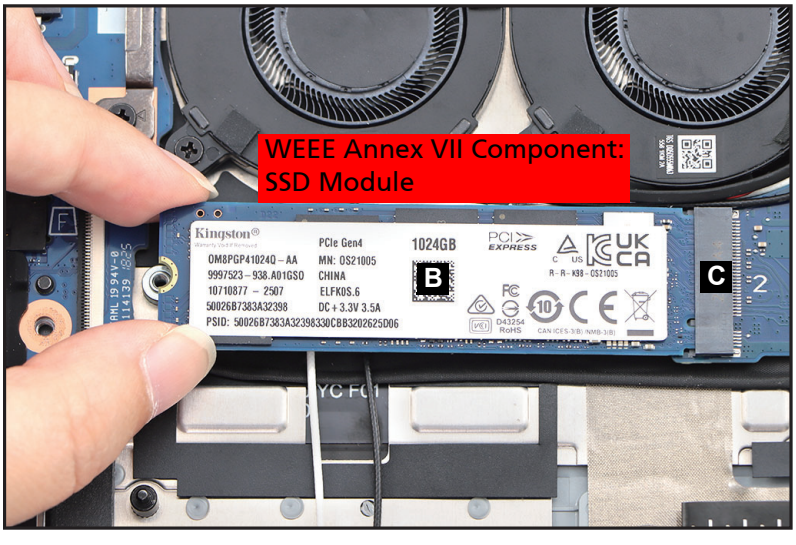


Figure 1-13. SSD Module Removal

WLAN Module Removal

Prerequisite:

Battery Pack Removal

1. Find the WLAN module (A) on the top assembly (Figure 1-14).

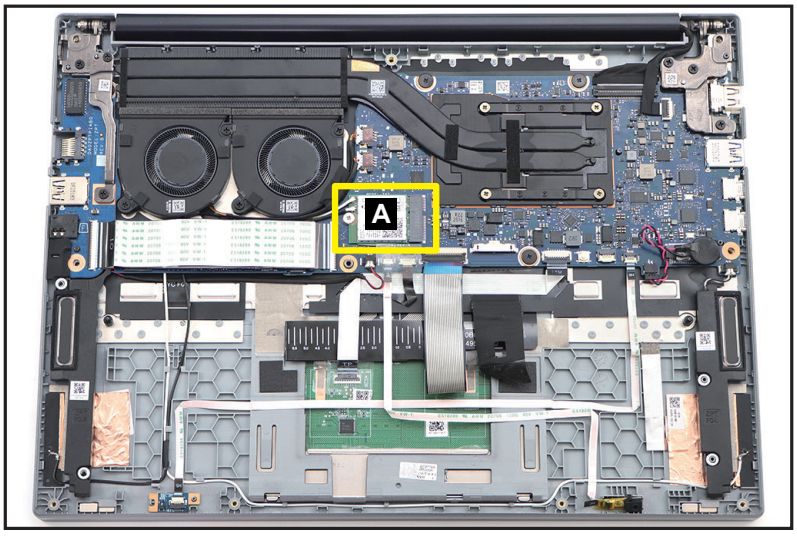


Figure 1-14. WLAN Module Location

2. Disconnect the WLAN antenna cables from the WLAN module connectors (B) (Figure 1-15).
3. Remove one (1) screw securing the WLAN module in place (Figure 1-15).

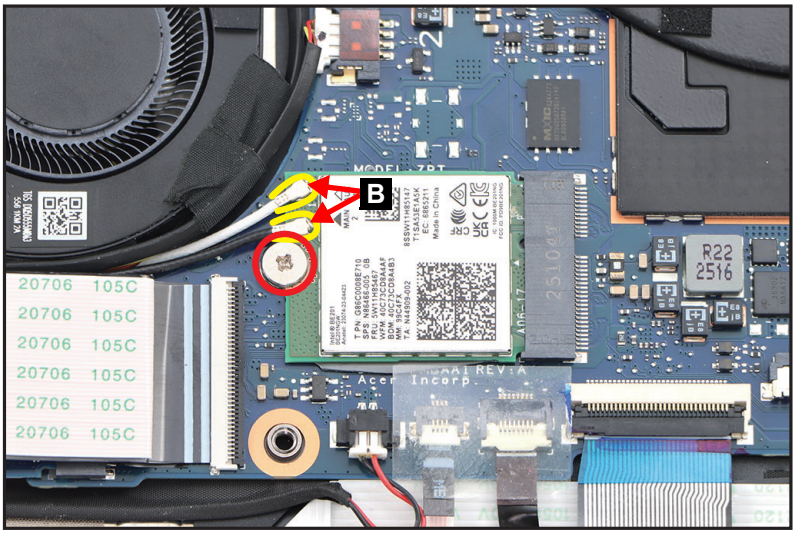


Figure 1-15. WLAN Module Removal

4. Disconnect the WLAN module from the mainboard connector (C) (Figure 1-16). Then, remove the WLAN module.



Figure 1-16. WLAN Module Removal

LCD Module Removal

Prerequisite:

Battery Pack Removal

1. Disconnect the LCD cable from the mainboard connectors (A&B). Then, unroute the LCD cable from the cable guide (Figure 1-17).

⚠ CAUTION:

LCD cable can be damaged if removed while the mainboard connectors are locked.

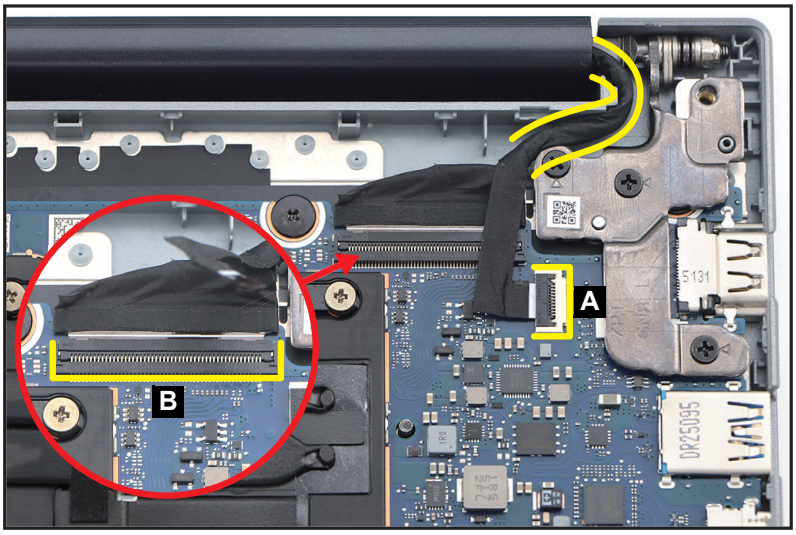


Figure 1-17. LCD Module Removal

2. Remove six (6) screws securing the LCD hinges (Figure 1-18).

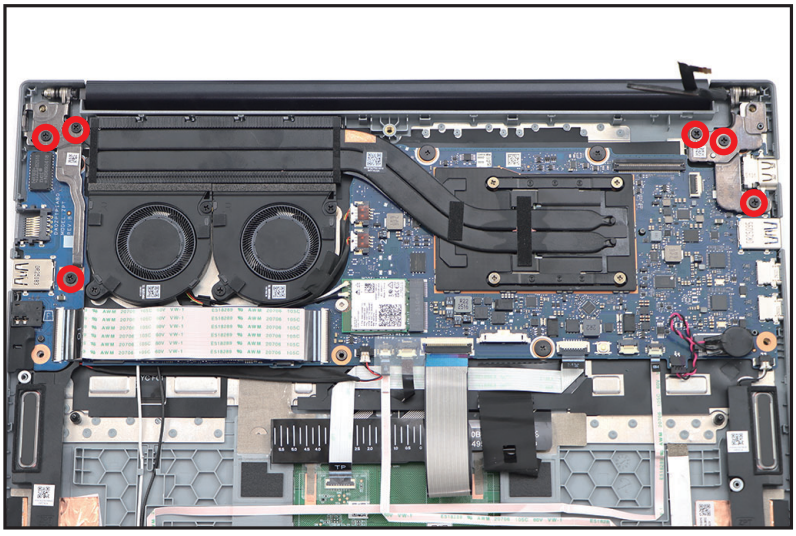


Figure 1-18. LCD Module Removal

3. Open the top assembly (Figure 1-19).

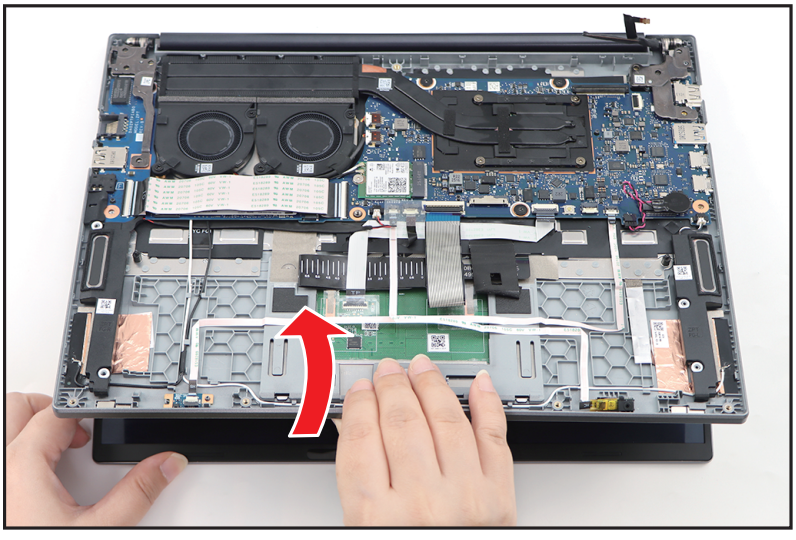


Figure 1-19. LCD Module Removal

4. Lift both LCD hinges until they are fully extended (Figure 1-20).

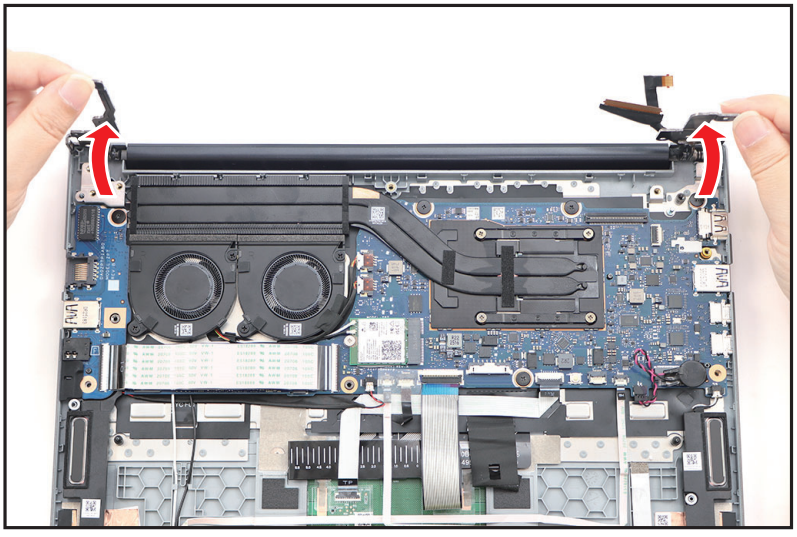


Figure 1-20. LCD Module Removal

5. Open the top assembly. Then remove the LCD module (C) away from the top assembly (Figure 1-21).

⚠ CAUTION:

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

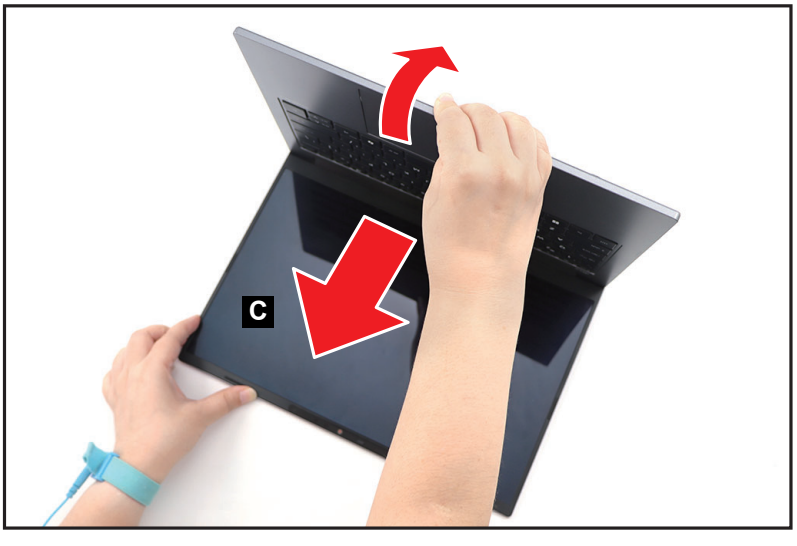


Figure 1-21. LCD Module Removal

USB Board Removal

Prerequisite:

Battery Pack Removal

1. Remove three (3) screws securing the LCD hinge in place (Figure 1-22).

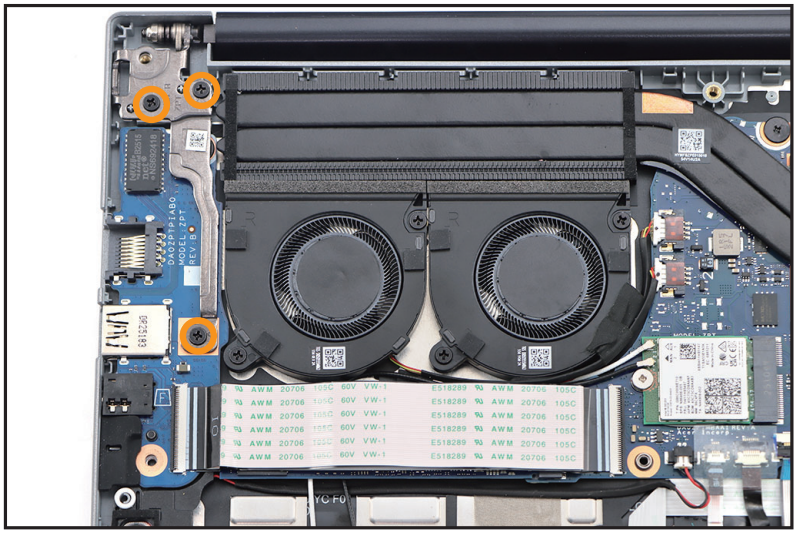


Figure 1-22. USB Board Removal

2. Open the top assembly (Figure 1-23).

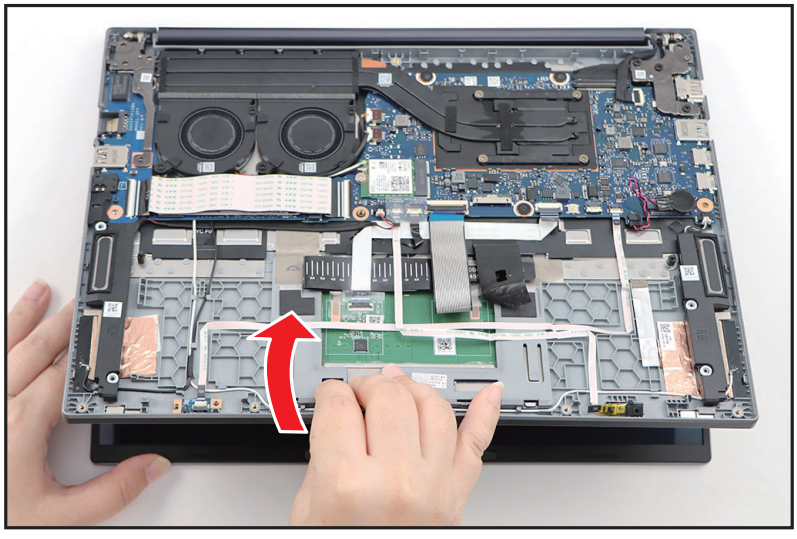


Figure 1-23. USB Board Removal

3. Close the top assembly and lift the left side hinge until it is fully extended (Figure 1-24).

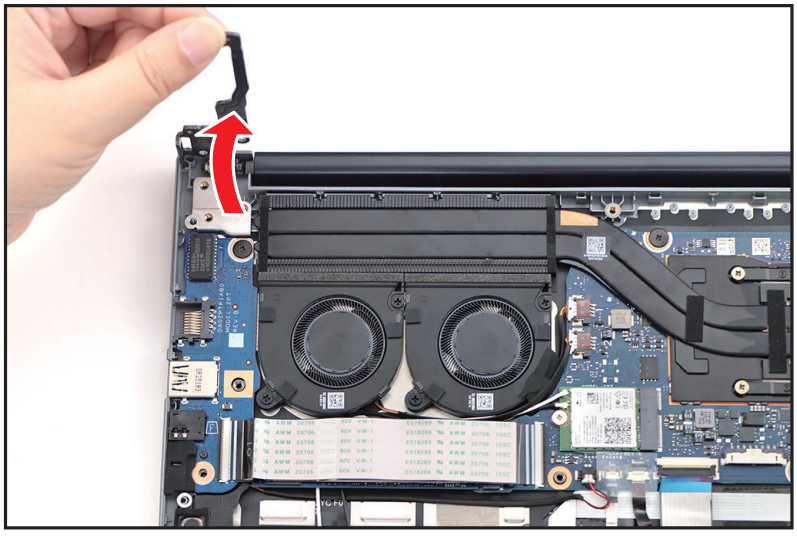


Figure 1-24. USB Board Removal

4. Remove the rubber tab (A) (Figure 1-25).

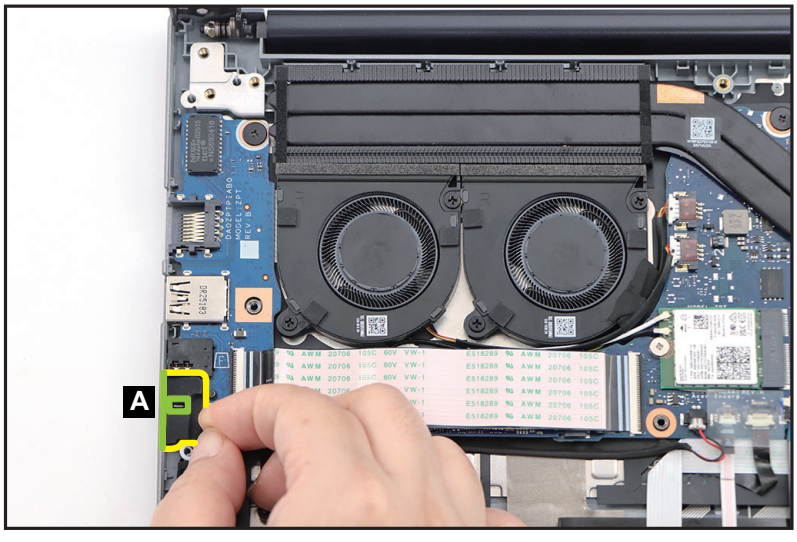


Figure 1-25. USB Board Removal

5. Disconnect the USB board FFC (B) from the USB board and mainboard connectors (Figure 1-26).
6. Remove one (1) screw securing the USB board in place (Figure 1-26).

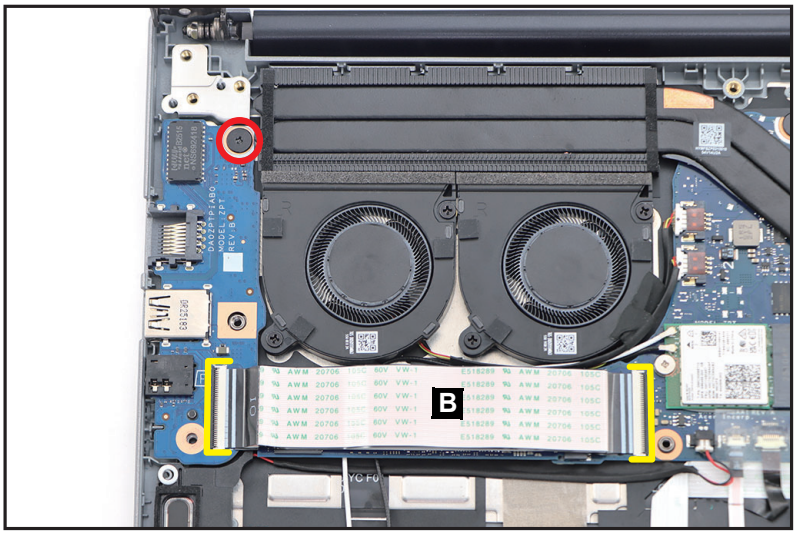


Figure 1-26. USB Board Removal

⚠ CAUTION:

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

7. Release the USB board (C) from the I/O port slots (highlighted with the green line) and guide pin (highlighted with the green circle) on the top assembly (Figure 1-27). Then, remove the USB board.

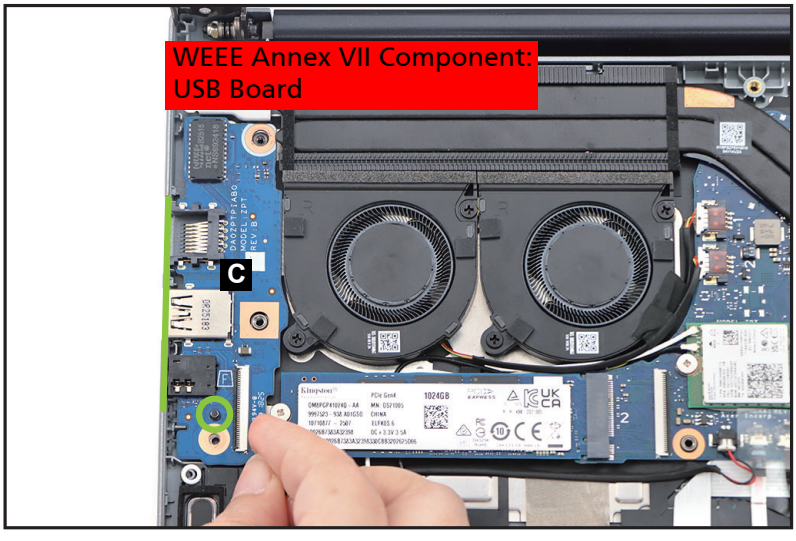


Figure 1-27. USB Board Removal

RTC Battery Removal

Prerequisite:

SSD Module Removal

1. Disconnect the RTC battery cable from the mainboard connector (A) (Figure 1-28).
2. Using plastic tweezers, carefully pry to detach the adhesive tape underneath the RTC battery (B) (Figure 1-28). Then, remove the RTC battery.

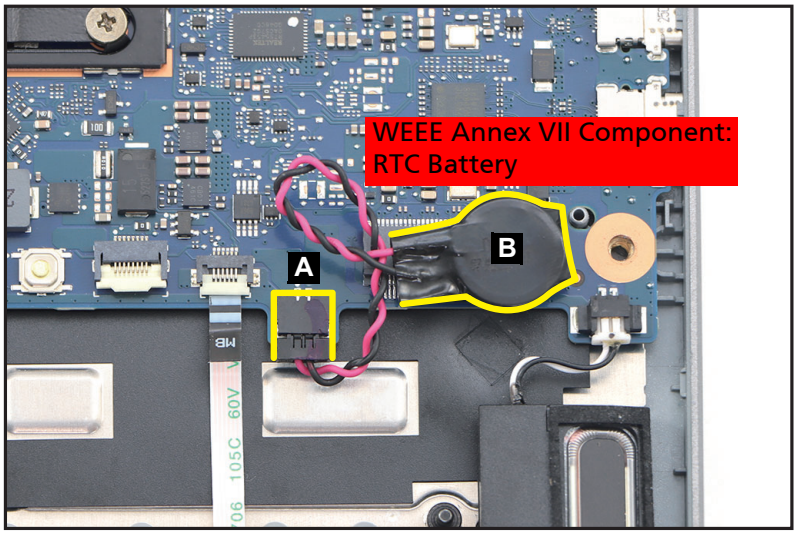


Figure 1-28. RTC Battery Removal

IMPORTANT:

Follow local regulations for battery disposal.

Touchpad Module Removal

Prerequisite:

SSD Module Removal

1. Detach the mylar (A) from the microphone board FFC and the keyboard backlight FFC connectors (Figure 1-29).
2. Detach the mylar (B) from the touchpad FFC connector (Figure 1-29).

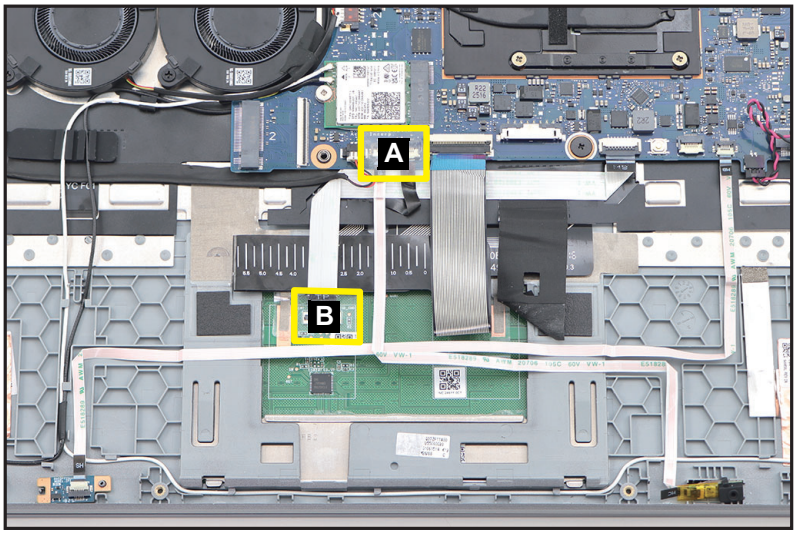


Figure 1-29. Touchpad Module Removal

3. Disconnect the right speaker cable from the mainboard connector (C). Then, detach the cable from the top assembly (Figure 1-30).
4. Disconnect the microphone board FFC from the mainboard connector (D). Then, carefully detach the FFC from its underneath adhesives (highlighted with the yellow lines) as shown in Figure 1-30.
5. Disconnect the keyboard backlight FFC from the mainboard connector (E) (Figure 1-30).
6. Disconnect the keyboard FPC from the mainboard connector (F) (Figure 1-30).
7. Disconnect the hall sensor FFC from the mainboard connector (G). Then, carefully detach the FFC from its underneath adhesives (highlighted with the yellow lines) as shown in Figure 1-30.

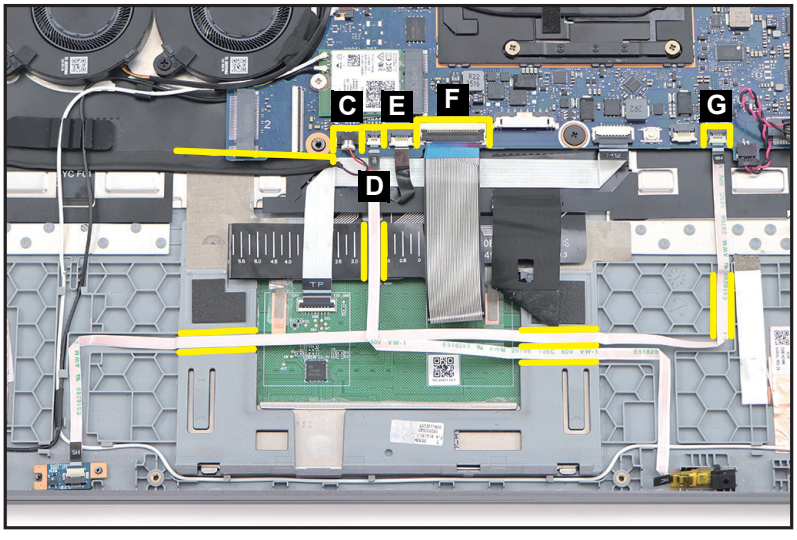


Figure 1-30. Touchpad Module Removal

⚠ CAUTION:

FPC (Flexible Printed Circuit) and FFCs (Flexible Flat Circuit) can be damaged if removed while the mainboard connectors are locked.

8. Disconnect the touchpad FFC (H) from the mainboard and touchpad module connectors. Then, carefully detach the FFC from its underneath adhesive (highlighted with the yellow lines) and remove the touchpad FFC (Figure 1-31).

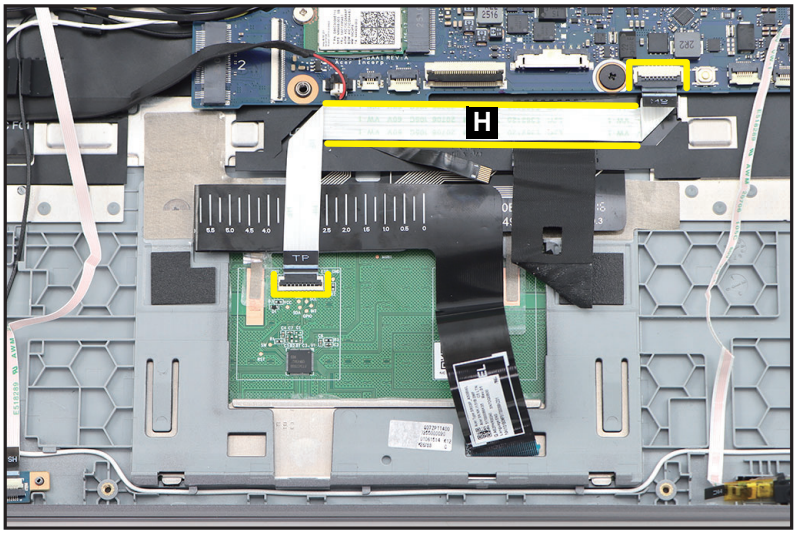


Figure 1-31. Touchpad Module Removal

⚠ CAUTION:

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

9. Slightly detach and lift the mylar. Then, detach the conductive tape (I) from the touchpad module and top assembly (Figure 1-32).

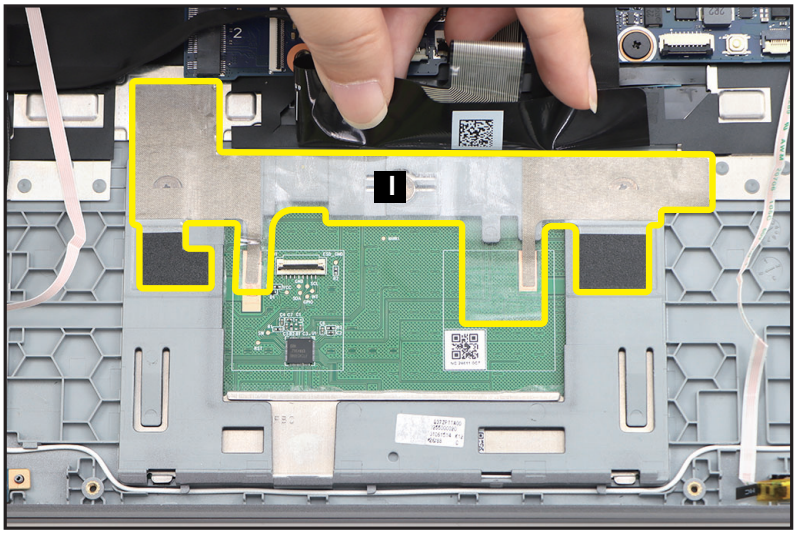


Figure 1-32. Touchpad Module Removal

10. Remove three (3) screws securing the touchpad module (Figure 1-33).

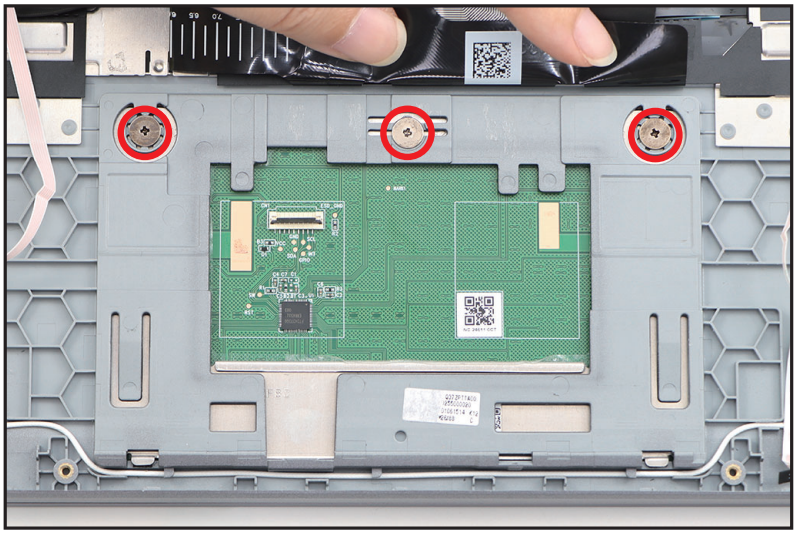


Figure 1-33. Touchpad Module Removal

11. Push the upper part of the touchpad module (J) to release it from the screw hole studs (highlighted with the green circles) (Figure 1-34).

12. Slide the touchpad module slightly to disengage it from the bottom latches (highlighted with the green lines) (Figure 1-34). Then, remove the touchpad module from the top assembly.

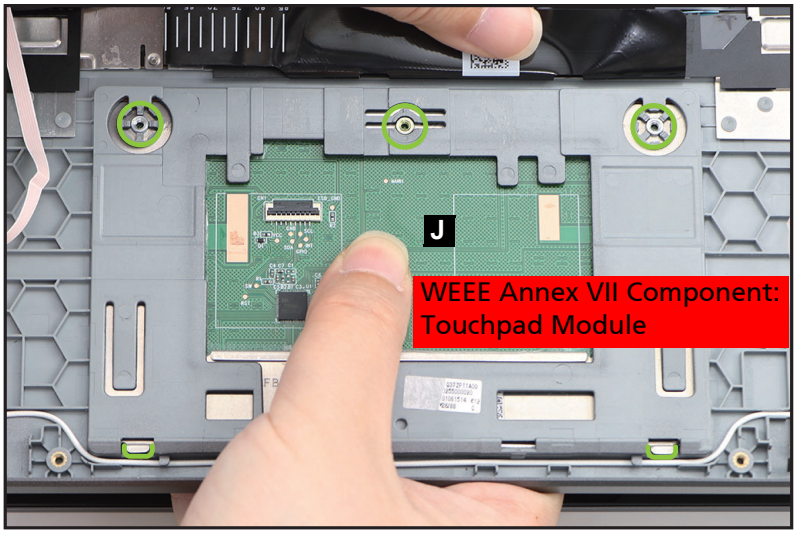


Figure 1-34. Touchpad Module Removal

Mainboard Removal

Prerequisite:

Ensure that the **SSD Module**, **WLAN Module**, and **Heatsink** have been disassembled prior removing the mainboard.

1. Remove three (3) screws securing the right LCD hinge in place (Figure 1-35).

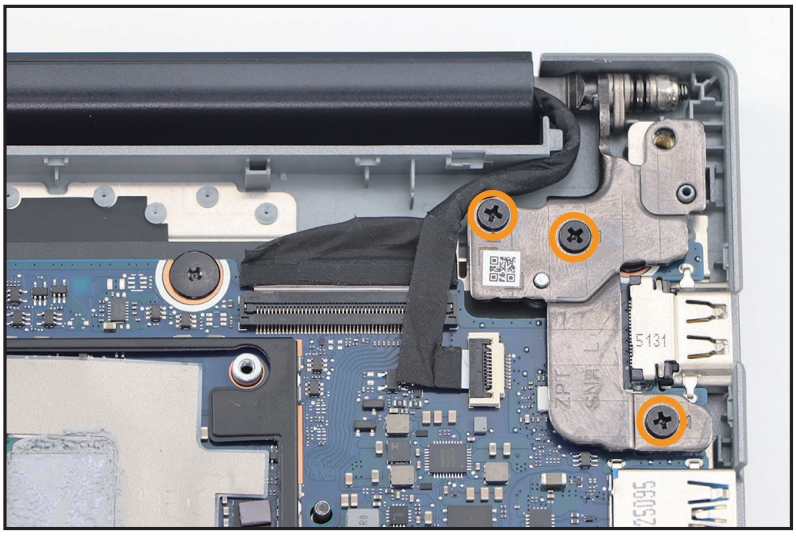


Figure 1-35. Mainboard Removal

2. Lift the top assembly until it is fully open (Figure 1-36).

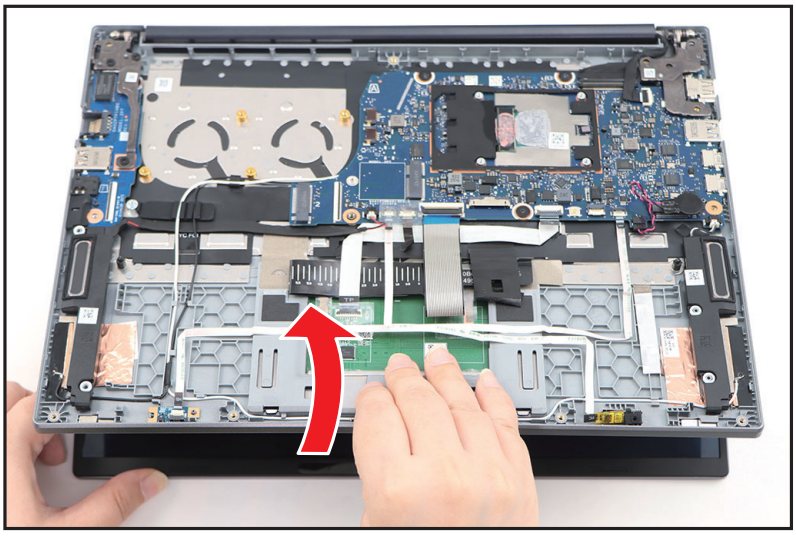


Figure 1-36. Mainboard Removal

3. Close the top assembly and lift the right LCD hinge until it is fully extended (Figure 1-37).

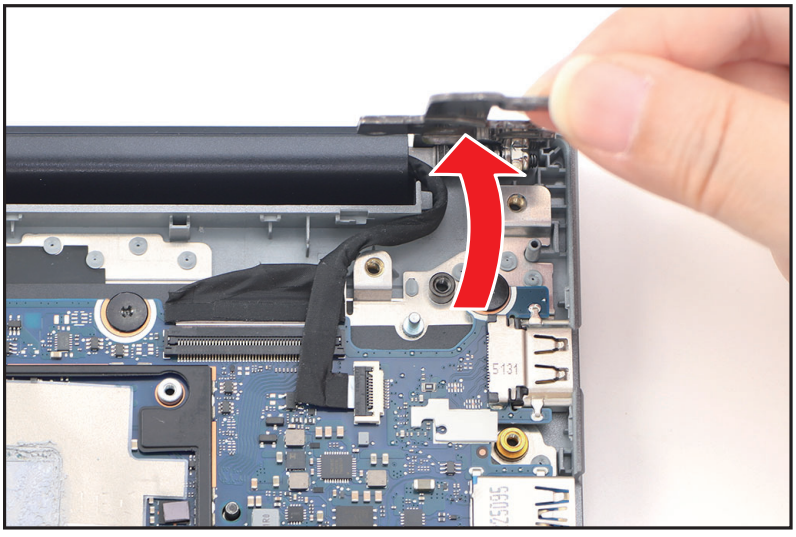


Figure 1-37. Mainboard Removal

4. Detach the mylar tape (A) from the keyboard backlight FFC and microphone board FFC connectors (Figure 1-38).
5. Disconnect the LCD cable from the mainboard connector (B) (Figure 1-38).

⚠ CAUTION:

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

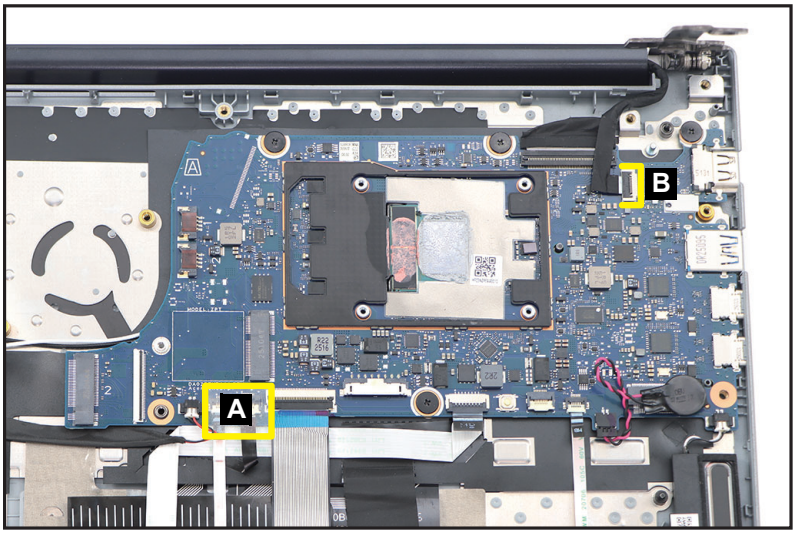


Figure 1-38. Mainboard Removal

6. Disconnect the right speaker cable from the mainboard connector (C) (Figure 1-39).
7. Disconnect the microphone board cable from the mainboard connector (D) (Figure 1-39).
8. Disconnect the keyboard backlight FFC from the mainboard connector (E) (Figure 1-39).
9. Disconnect the keyboard FPC from the mainboard connector (F) (Figure 1-39).
10. Disconnect the touchpad FFC from the mainboard connector (G) (Figure 1-39).
11. Disconnect the hall sensor board FFC from the mainboard connector (H) (Figure 1-39).
12. Disconnect the left speaker cable from the mainboard connector (I) (Figure 1-39).
13. Disconnect the LCD cable from the mainboard connector (J) and unroute the cable from the cable guide (Figure 1-39).

⚠ CAUTION:

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

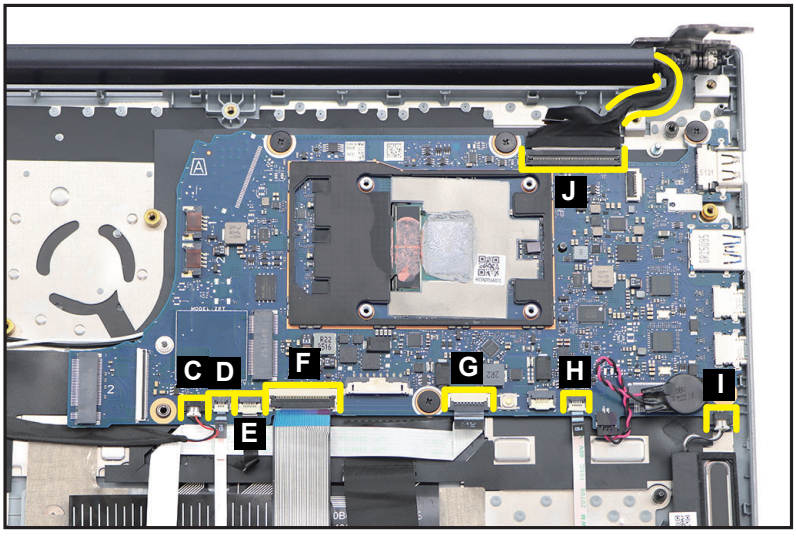


Figure 1-39. Mainboard Removal

14. Remove four (4) screws securing the mainboard in place (Figure 1-40).

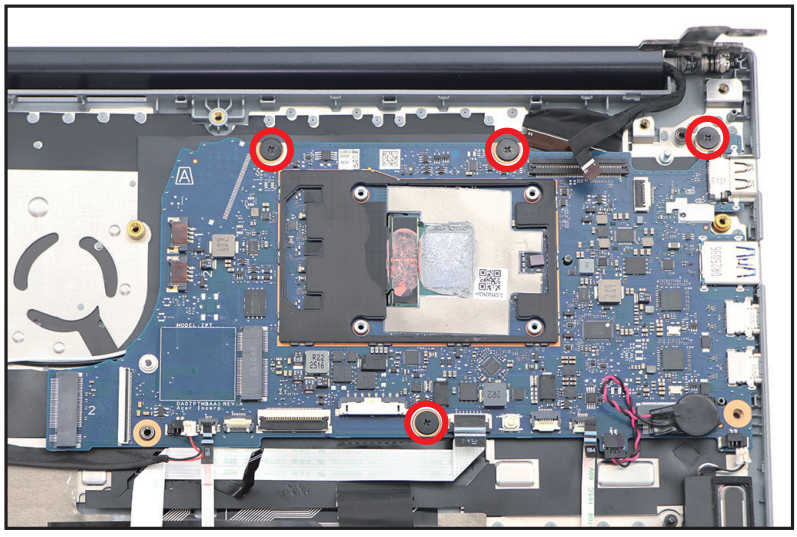


Figure 1-40. Mainboard Removal

15. Release the mainboard (K) from the I/O ports slots (highlighted with the green line) and guide pins (highlighted with the green circles) on the top assembly (Figure 1-41). Then, remove the mainboard.

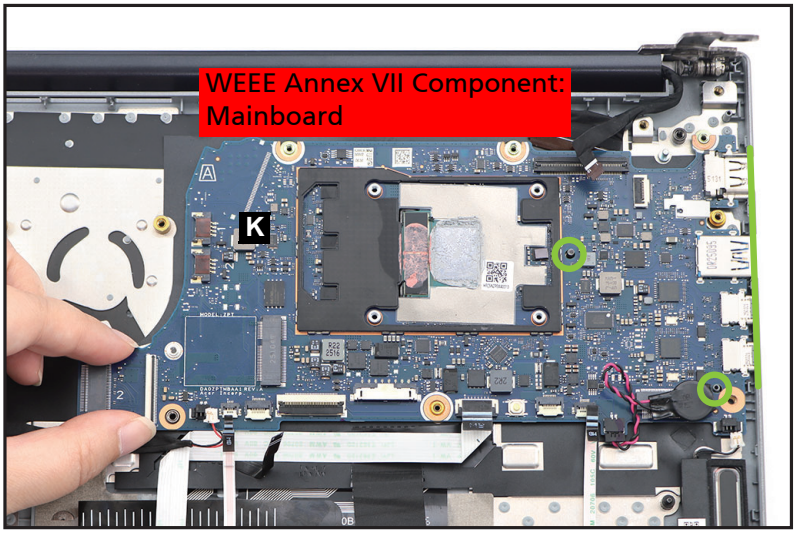


Figure 1-41. Mainboard Removal

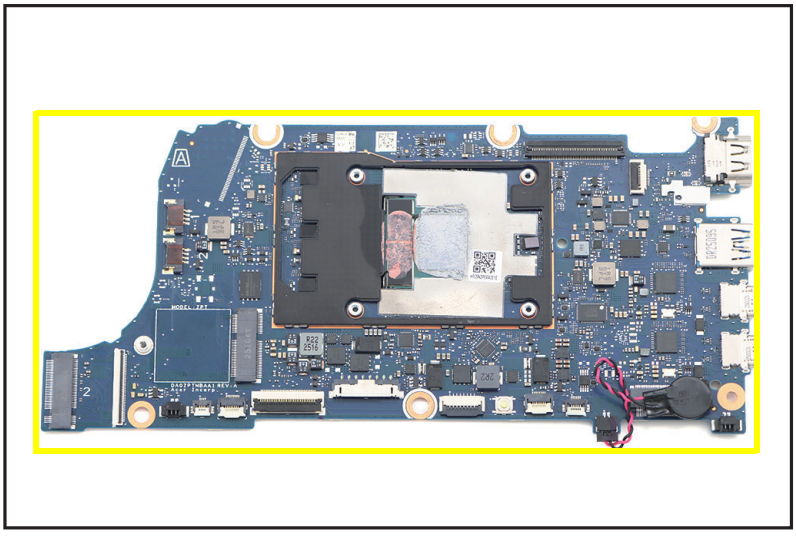


Figure 1-42. Mainboard

IMPORTANT:

Circuit boards >10 cm² have been highlighted with a yellow rectangle as shown in Figure 1-42. Remove the circuit board and follow local regulations for disposal.

LCD Bezel Removal

Prerequisite:

LCD Module Removal

1. Flatten both hinges (Figure 1-43).



Figure 1-43. LCD Bezel Removal

2. Hold the hinge cap (A) firmly, and then push the hinge cap to the left to unlock the latches as shown in Figure 1-44.

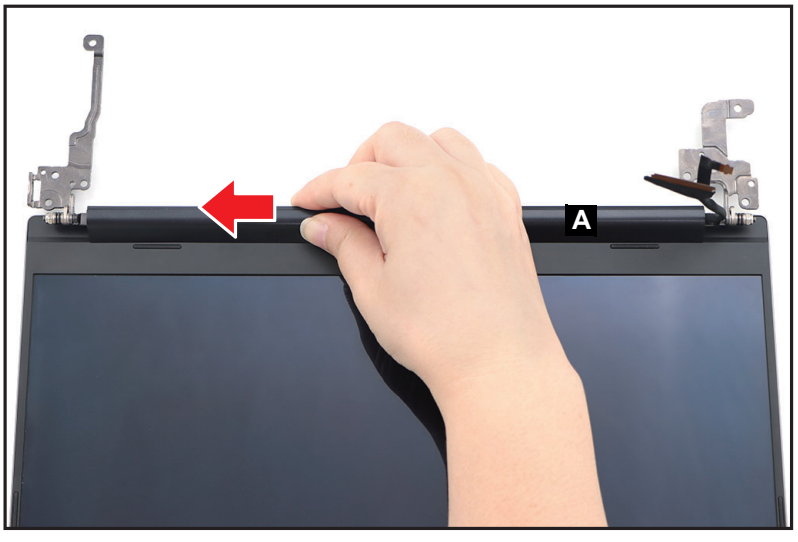


Figure 1-44. LCD Bezel Removal

3. Remove the hinge cap (Figure 1-45).



Figure 1-45. LCD Bezel Removal

4. Unroute and detach the LCD cable (B) from the LCD cover as shown in Figure 1-46.

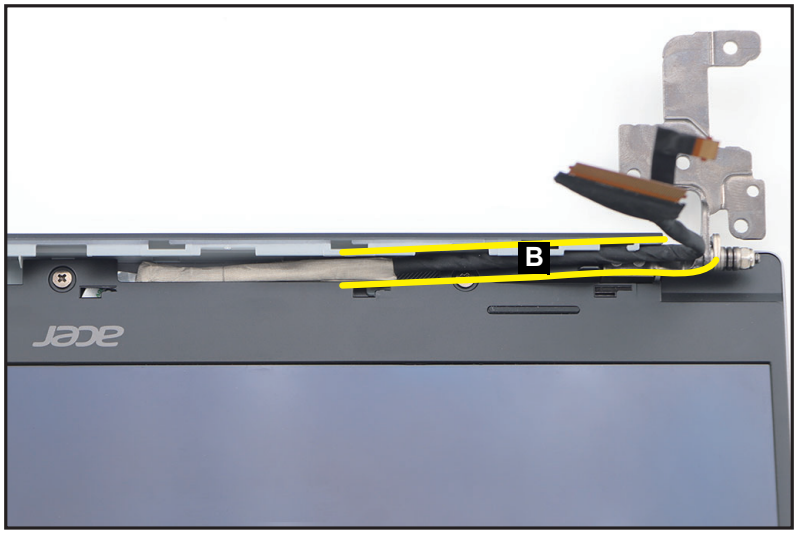


Figure 1-46. LCD Bezel Removal

5. Remove two (2) screws securing the LCD bezel (Figure 1-47).

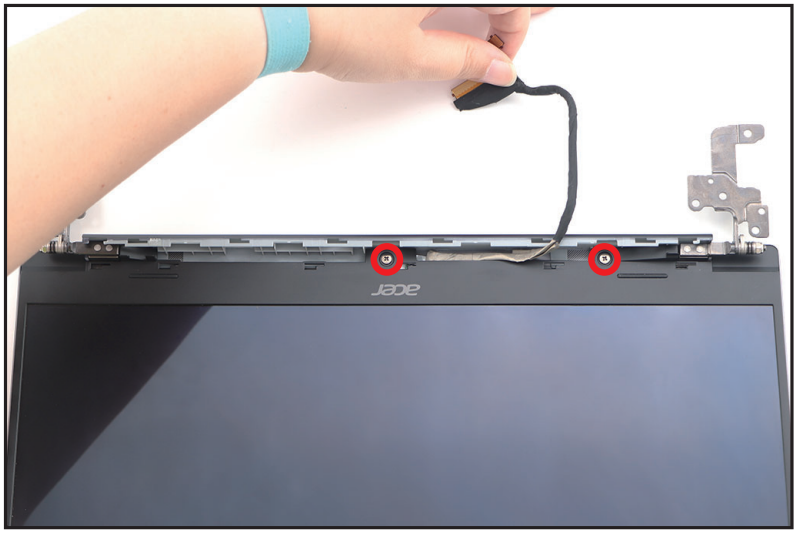


Figure 1-47. LCD Bezel Removal

6. Pry the LCD bezel from the upper side to release the latches (Figure 1-48).



Figure 1-48. LCD Bezel Removal

7. Continue prying along the left and right sides of the LCD bezel to disengage the latches as shown in Figure 1-49.



Figure 1-49. LCD Bezel Removal

8. Continue prying along the bottom side of the LCD bezel to disengage the latches as shown in Figure 1-50.



Figure 1-50. LCD Bezel Removal

9. There is a tape behind the lower edge of the LCD bezel. Use a pry tool to slowly detach the LCD bezel away from the LCD panel as shown in Figure 1-51. While detaching the LCD bezel, ensure to follow the direction from right to left as shown in Figure 1-52.

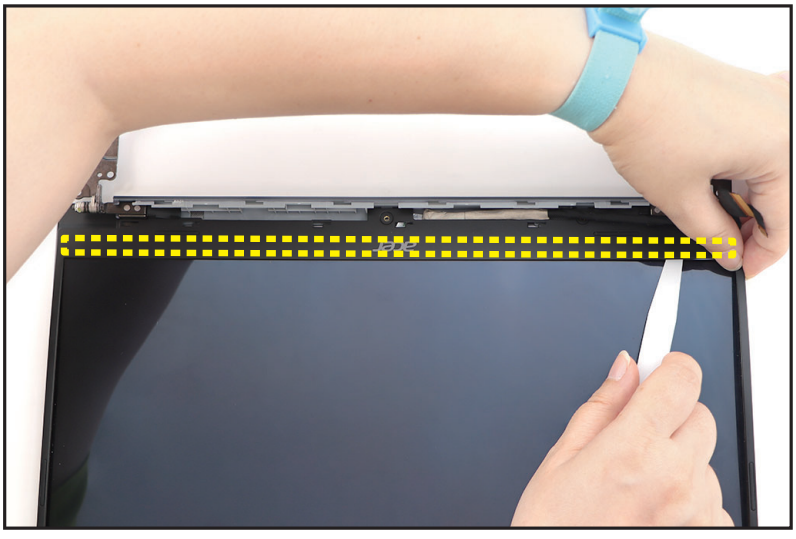


Figure 1-51. LCD Bezel Removal

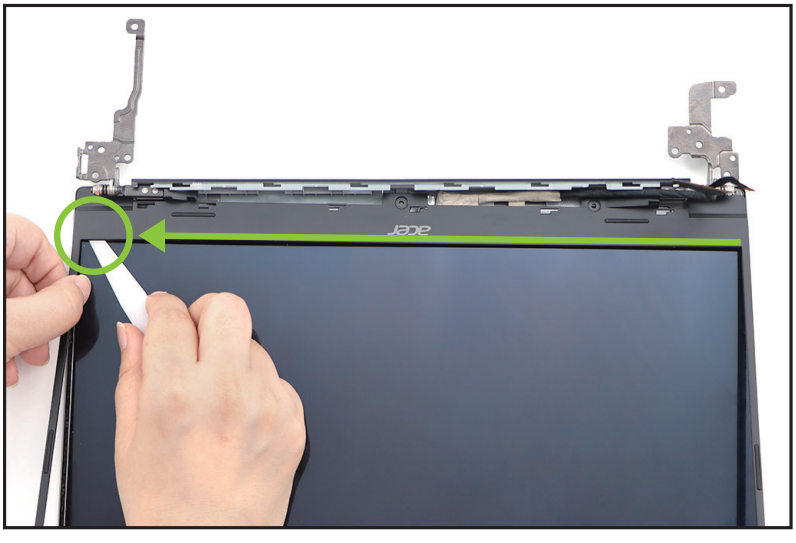


Figure 1-52. LCD Bezel Removal

10. Remove the LCD bezel from the LCD cover (Figure 1-53).

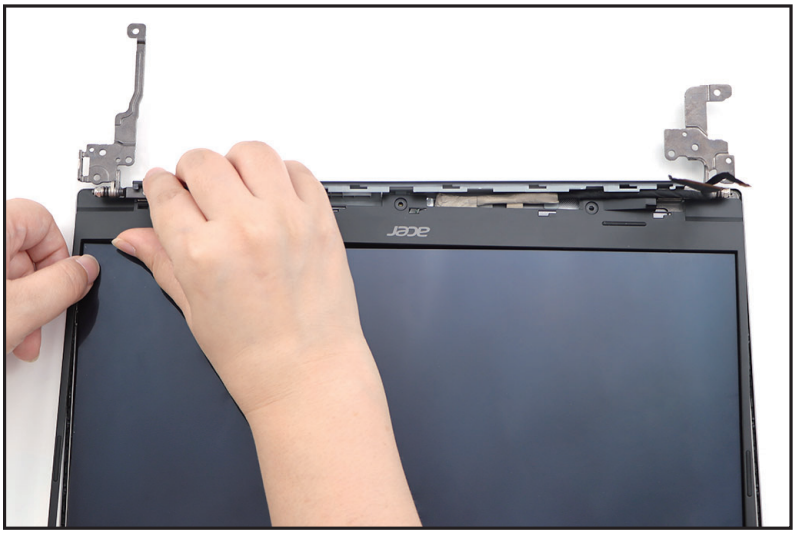


Figure 1-53. LCD Bezel Removal

LCD Panel Removal

Prerequisite:

LCD Bezel Removal

1. Release and detach the LCD cable from the LCD cover (Figure 1-54).

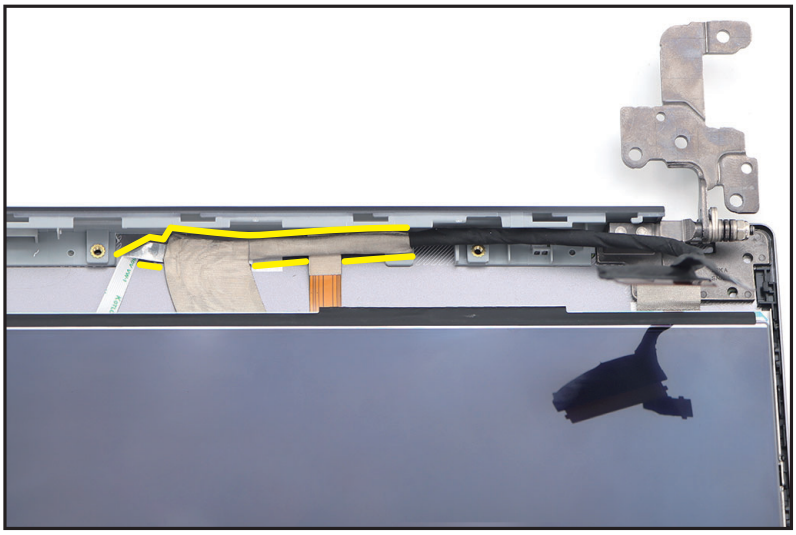


Figure 1-54. LCD Panel Removal

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 1-55).

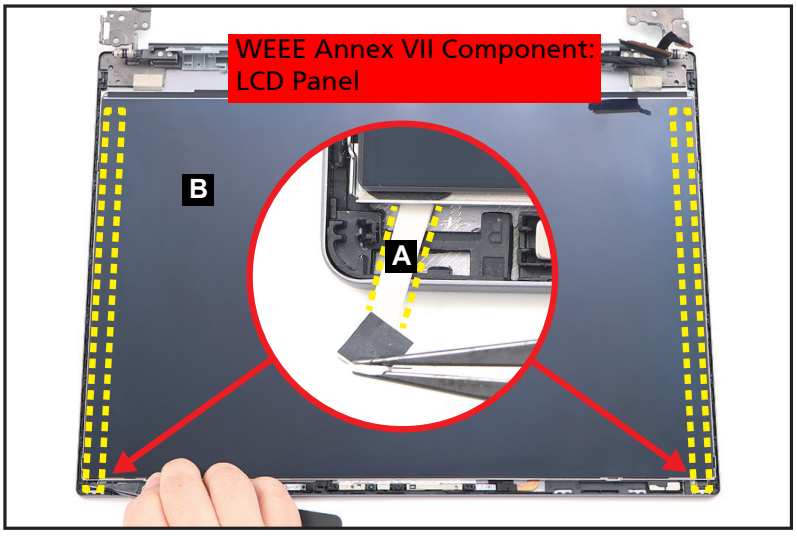


Figure 1-55. LCD Panel Removal

3. Carefully turn the LCD panel over so that the display panel is facing down on a flat surface (Figure 1-56).
4. Detach the mylar tape (C) securing the LCD cable to the LCD panel (Figure 1-56).

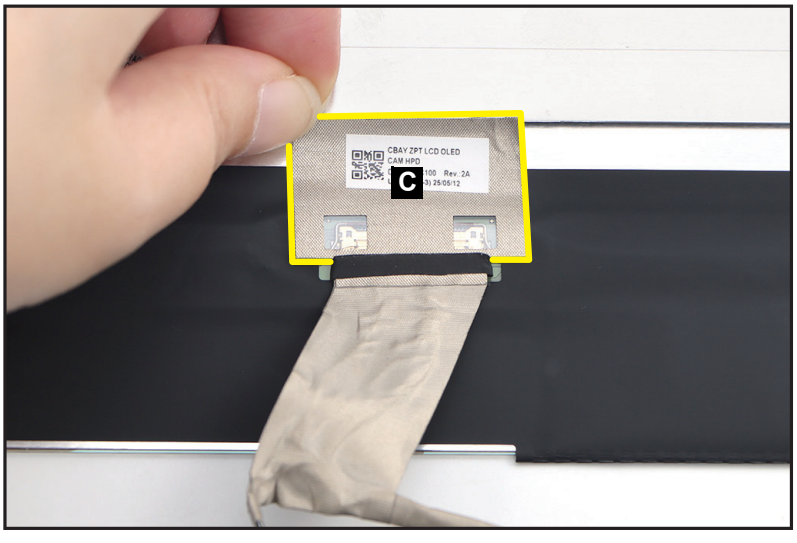


Figure 1-56. LCD Panel Removal

5. Release the LCD cable latch (D) (Figure 1-57).

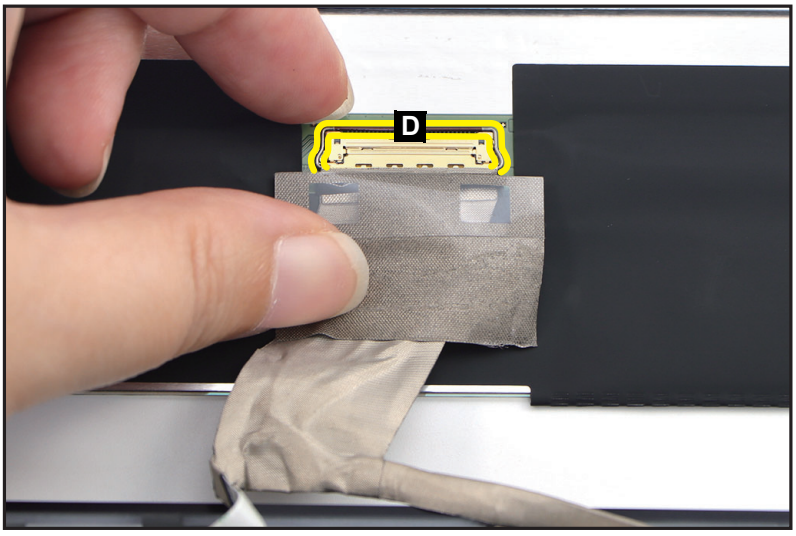


Figure 1-57. LCD Panel Removal

6. Disconnect the LCD cable from the LCD panel connector (E) (Figure 1-58).

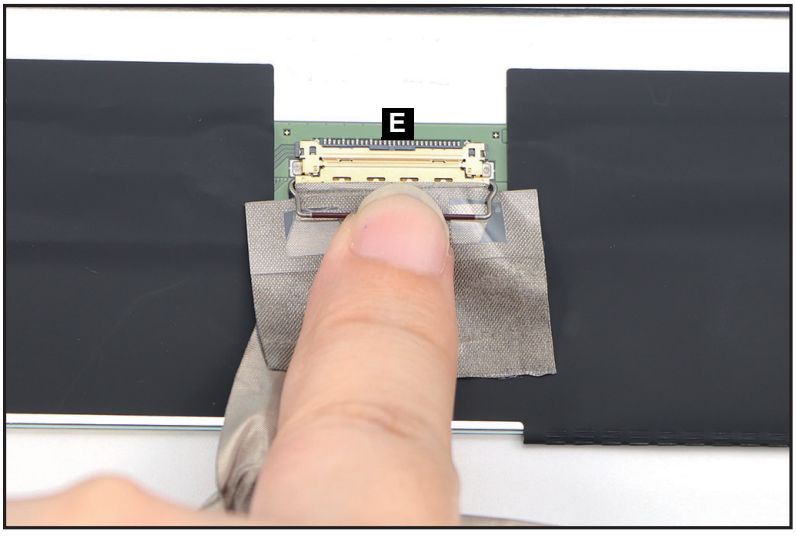


Figure 1-58. LCD Panel Removal

7. Remove the LCD panel.

⚠ CAUTION:

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

Top Assembly Removal (Keyboard Removal)

Prerequisite:

Ensure that the **Right Speaker**, **Touchpad Module**, **Mainboard**, **LCD Module**, **USB Board**, **Left Speaker**, **Hall Sensor Board**, and **3rd Microphone Board** 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.

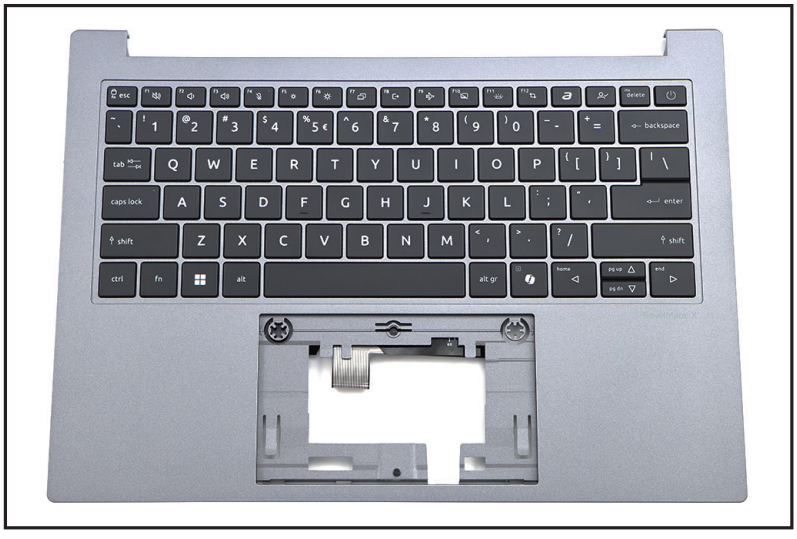
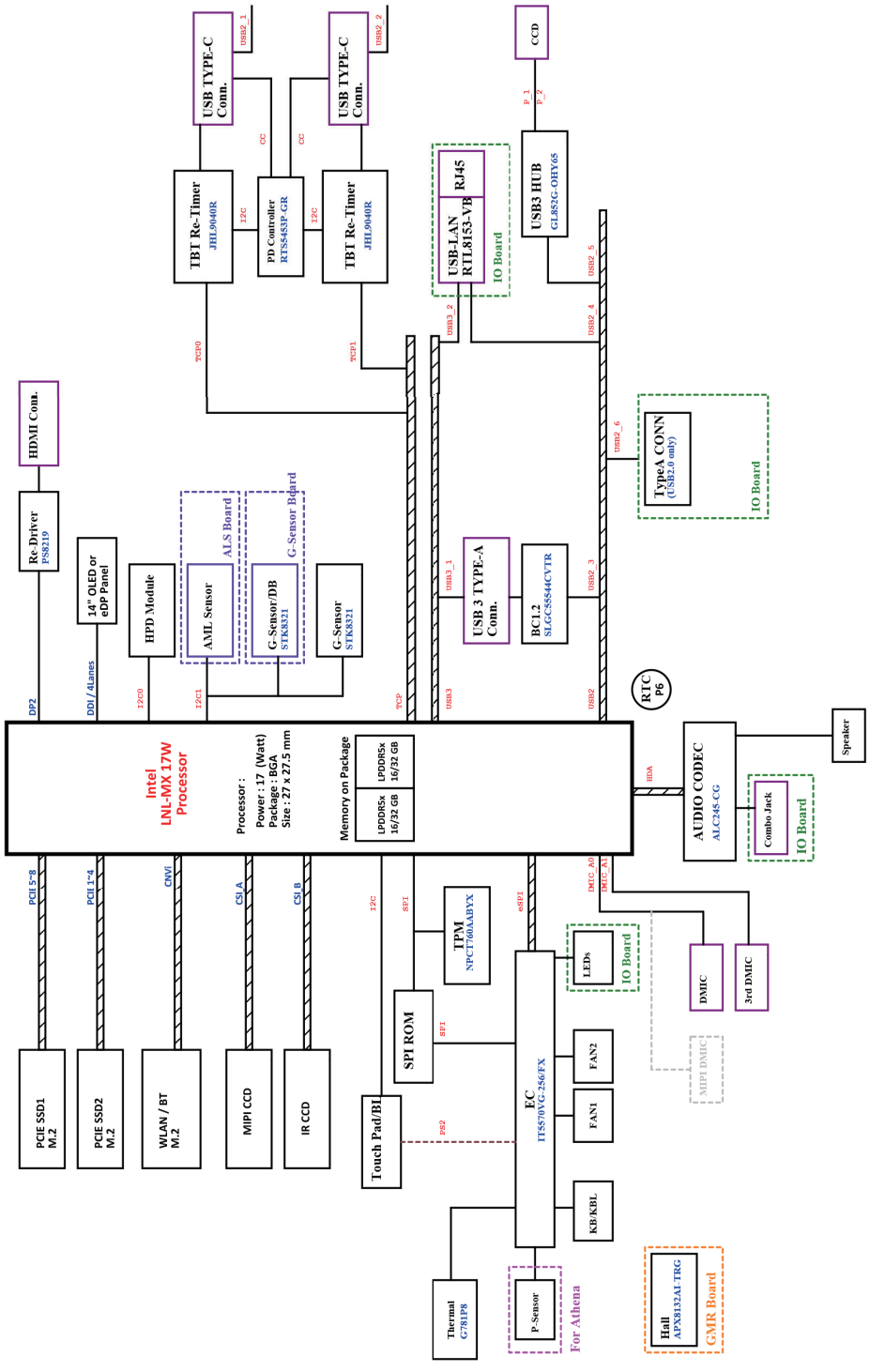


Figure 1-59. Top Assembly (Keyboard)

Electronic Boards Diagrams



BIOS Setup Utility

This utility is a hardware configuration program built into a computer's BIOS (Basic Input/Output System).

The utility is pre-configured and optimized so most users do not need to run it. If configuration problems occur, the setup utility may need to be run. Refer to *Troubleshooting* when a problem arises.

To activate the utility, press ***F2*** during POST (power-on self-test) when prompted at the bottom of screen.

The default parameter of `F12 Boot Menu` is set to `Disabled`. To change the boot device without entering *BIOS Setup Utility*, set the parameter to `Enabled`.

To change the boot device without entering the BIOS SETUP, press ***F12*** during POST to enter the multi-boot menu.

Navigating the BIOS Utility

Six menu options are:

- Information
- Main
- Advanced
- Security
- Boot
- Exit

To navigate on the non-touchscreen models through the following:

- Menu or item- use the up and down arrow keys
- Expand selected item- press **Enter** or right arrow key.
- To switch item status or change the value of a parameter- press **Enter** or right arrow key.
- Exit - Press ***Esc***
- Load default settings - press ***F9***.
- Save changes and exit BIOS Setup Utility - press ***F10***.

To navigate on the touchscreen panel models through the following:

- Menu - click or tab on the option with the fingertip
- Item - scroll through the screen by moving one finger in a vertical direction or swiping two fingers up-and-down
- Change parameter value - use the on-screen keyboard or tab on the option.

NOTE:

Parameter values can be changed if enclosed in square brackets open the DIMM door open the DIMM door[ ]. Navigation keys appear at the bottom of the screen. Read parameter help carefully when making changes to parameter values. Parameter help is found in the Item Specific Help area of the screen.

IMPORTANT:

Be careful when changing any settings in the BIOS. Incorrect settings can cause your PC to malfunction or crash. Please make sure all important data is backed up before changing anything in the BIOS.

NOTE:

System information is subject to specific models.

BIOS

The following is a description of the tabs found on the InsydeH20 *BIOS Setup Utility* screen:

NOTE:

The screens provided are for reference only. Actual values may differ by model.

Information

The Information tab shows a summary of computer hardware information.



Figure 1-60. BIOS Information (1 of 2)

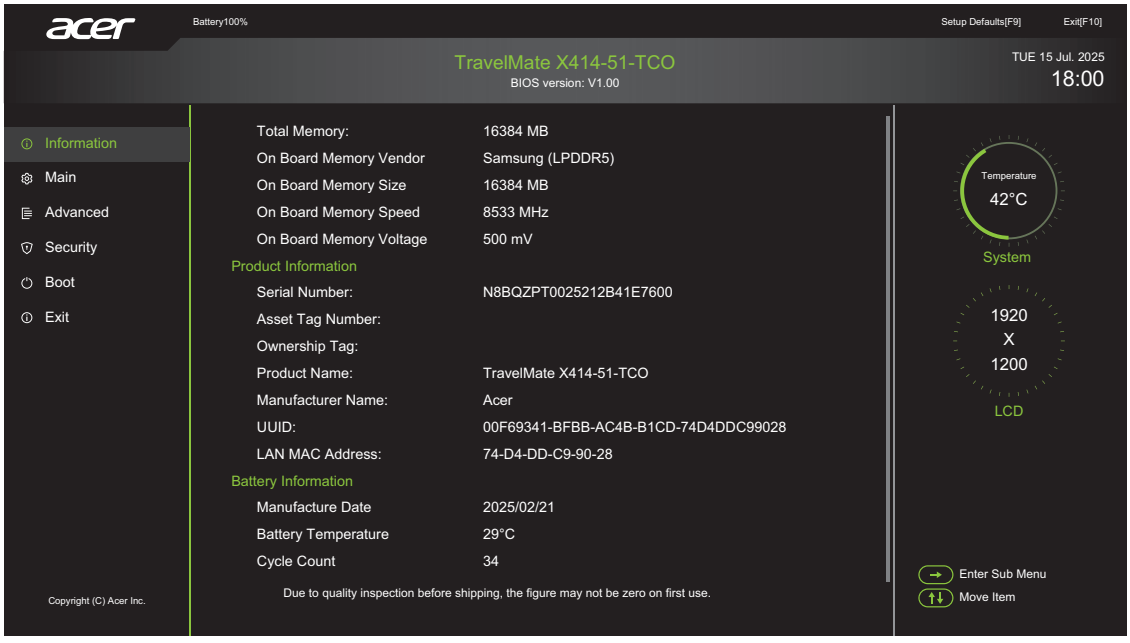


Figure 1-61. BIOS Information (2 of 2)

Table 1-1 describes the parameters shown in Figure 1-60 and Figure 1-61.

Table 1-1. BIOS Information

Parameter	Description
CPU Info	CPU (central processing unit) type and speed of the system
Core Frequency	CPU core frequency
System BIOS Version	System BIOS version
GOP Version	GOP (graphics output protocol) firmware version of the system
HDD(OPAL) Model Name	Model name of HDD (hard disk drive) installed on the primary IDE master
HDD(OPAL) Serial Number	Serial number of HDD installed on the primary IDE master
SATA Mode	SATA controller mode
Total Memory	Total memory installed
On Board Memory Vendor	Manufacturer of the installed memory
On Board Memory Size	Size of the installed memory
On Board Memory Speed	Configured speed of the installed memory
On Board Memory Voltage	Voltage of the installed memory

Table 1-1. BIOS Information (Continued)

Parameter	Description
Serial Number	Serial number of the unit
Asset Tag Number	Asset tag number of the system
Ownership Tag	Ownership tag of the system
Product Name	Product name of the system
Manufacturer Name	Manufacturer of the system
UUID	Universally Unique Identifier
Manufacture Date	Battery manufacture date
Battery Temperature	Battery current temperature
Cycle Count	Number of times your device has used the battery capacity

Main

The Main tab allows the user to set system time and date, enable or disable boot option and enable or disable recovery.



Figure 1-62. BIOS Main

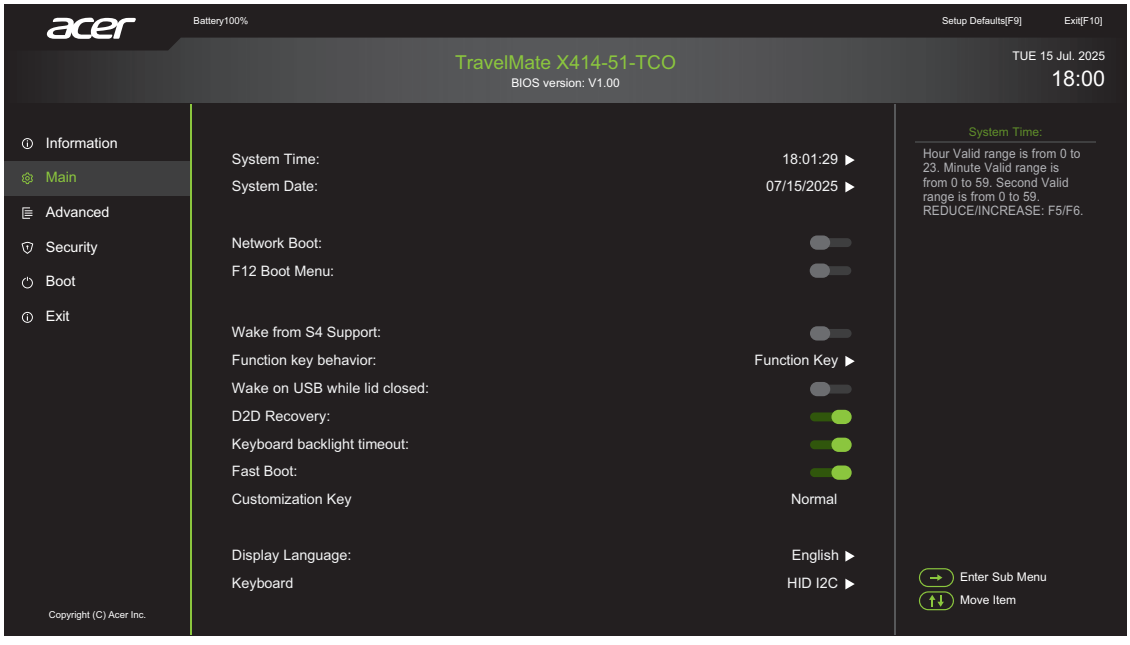


Figure 1-63. BIOS Main (All Options)

Table 1-2 describes the parameters shown in Figure 1-62 and Figure 1-63.

Table 1-2. BIOS Main

Parameter	Description	Format/Option
System Time	BIOS system time in 24-hour format	Format: HH:MM:SS (hour:minute:second)
System Date	BIOS system date	Format MM/DD/YYYY (month/day/year)
Network Boot	Option to boot system from LAN (local area network)	Option: Enabled or Disabled
F12 Boot Menu	Option to use boot menu during POST	Option: Enabled or Disabled
Wake from S4 Support	Option to enable/disable wake from S4	Option: Enabled or Disabled
Function key behavior	Option to specify the *F1* to *F12* key behavior	Option: Function Key or Media Key
Wake on USB while lid closed	Option to enable/disable the USB devices can wake the system, even if the lid is closed	Option: Enabled or Disabled
D2D Recovery	Option to use D2D Recovery feature	Option: Enabled or Disabled
Keyboard backlight timeout	Option to enable/disable the keyboard backlight timeout function	Option: Enabled or Disabled
Fast Boot	Option to enable/disable Fast boot	Option: Enabled or Disabled
Customization Key (hidden option)	Keyboard type status	
Display Language	Select the display language	
Keyboard (hidden option)	Option to switch HID I2C and PS2 interface	Option: HID I2C or PS2

NOTE:

To show the hidden options:

- Press *Ctrl* +**D** keys to show the “Customization Key” and “Keyboard” options.

Advanced

The Advanced tab allows users to set VTX/VTD function switch configurations and other advanced settings.



Figure 1-64. BIOS Advanced

Table 1-3 describes the parameters shown in Figure 1-64.

Table 1-3. BIOS Advanced

Parameter	Description	Option
Intel VTX	Option to use Intel VTX function switch	Enabled or Disabled
Intel VTD	Option to use Intel VTD function switch	Enabled or Disabled
Active Efficient Cores	Option to use active efficient cores	Option: Enabled or Disabled
Power on system by RTC Alarm	Option to enable/disable the RTC wake from S3/S4/S5 function	Enabled or Disabled
Storage Device Configuration	Option to configure storage device port	
Device Configuration	Option to enable/disable the device or function	
Update BIOS	Option to update BIOS via USB storage	

Table 1-3. BIOS Advanced (Continued)

Parameter	Description	Option
Lock BIOS Version	Option to enable/disable the Lock BIOS Version function. If the setting is set to Enabled, the system cannot update/rollback the BIOS, and the BIOS version is fixed	Enabled or Disabled
Rollback Old BIOS Version	Option to enable/disable the Rollback Old BIOS Version function. If the setting is set to Supported, the system can rollback the BIOS to its older version	Supported or Unsupported
Export BIOS Settings to USB Storage	Option to save the current BIOS settings to the USB storage To perform this action: The system will display the available USB storage for users to save the settings file. Users will also have options either to go up or enter the directory If **Yes** is selected, the system will save the current BIOS settings as a file, and exit the dialog box	
Import BIOS Settings from USB Storage	Option to restore the BIOS settings from the USB storage. Only profile with same project name can be imported. Otherwise, a warning message will appear on the screen To perform this action: The system will display the available USB storage for users to select the settings file location. Once selected, it displays all files in the device and allow users to choose the intended file (only supported file can be loaded), and users will have options either to go up or enter the directory If **Yes** is selected, the system will load the file into BIOS, then exit the dialog box	
MAC Address Pass Through	Option to enable/disable the MAC address pass through function. If the setting is set to Enabled, it will clone system MAC address to Dock	
Wake On LAN from Dock	Option to enable/disable the WOL from Dock function. If the setting is set to Enabled, it will allow the WOL event triggered from Dock to wake the system	Enabled or Disabled
System Health Indicator	When an abnormality is detected, the system health indicator will flash the indicator to immediately notify the user and remind the user to properly check the system	

Security

The Security tab shows parameters that safeguard and protect the computer from unauthorized use.

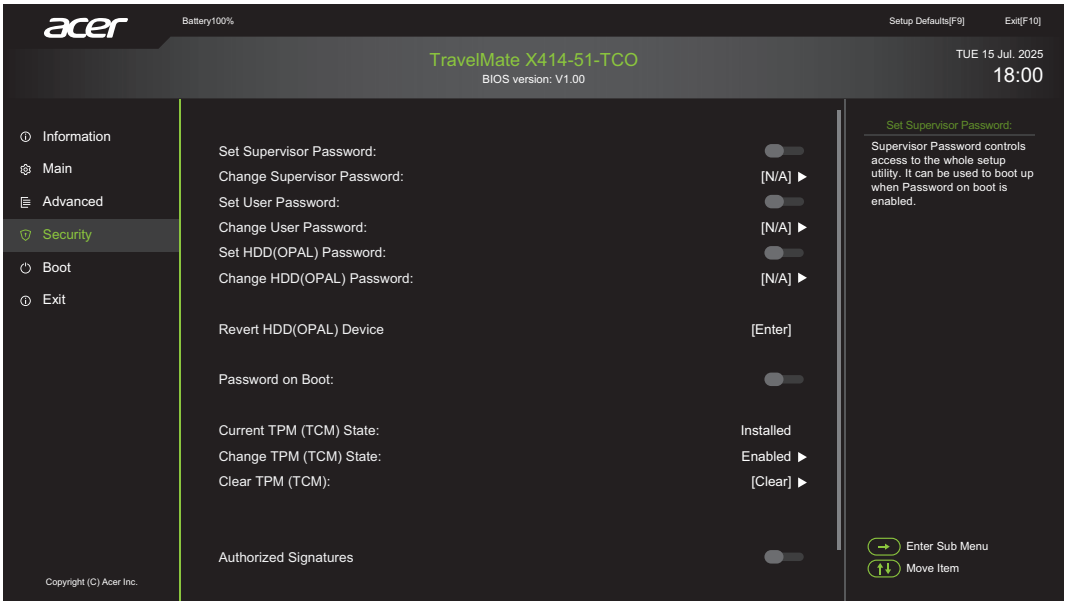


Figure 1-65. BIOS Security (Page 1)



Figure 1-66. BIOS Security (Page 2)

Table 1-4 describes the parameters shown in Figure 1-65 and Figure 1-66.

Table 1-4. BIOS Security

Parameter	Description	Option
Set Supervisor Password	Option to set supervisor password	Disabled or Enabled
Change Supervisor Password	Change supervisor password	N/A
Set User Password	Option to set user password	Disabled or Enabled
Change User Password	Change user password	N/A
Set HDD(OPAL) Password	Option to set HDD password	Disabled or Enabled
Change HDD(OPAL) Password	Change HDD password	N/A
Revert HDD(OPAL) Device	Revert HDD device	Enter
Password on Boot	Shows if password is required during system boot ⚠ **CAUTION:** If Password-on-Boot authentication is enabled, the BIOS password can only be cleared by initiating the Crisis Disk Recovery procedure.	Disabled or Enabled
Current TPM (TCM) State	Display the TPM status	N/A
Change TPM (TCM) State	Option to use the TPM function	Disabled or Enabled
Clear TPM (TCM)	Remove all TPM context associated with a specific owner	N/A
Authorized Signatures	Display the current status of the Authorized Signature Database	
Secure Boot Mode	Display the current Secure Boot Mode status. • **Standard**: Default Option. No manual change has been done to secure boot setting or users have previous restored security boot to factory default. • **Custom**: Contents of the Secure Boot signature database has been modified with “Erase All Secure Boot Setting” or “Select an UEFI File as Trusted Executing”.	Standard or Custom
Erase all Secure Boot Setting	Option to erase all secure boot setting	N/A

Table 1-4. BIOS Security (Continued)

Parameter	Description	Option
Select an UEFI file as trusted for executing	Option to select an UEFI file as trusted for executing	N/A
Restore Secure Boot to Factory Default	Option to restore secure boot to factory default	N/A
Absolute Persistence Module	Option to enable or disable the absolute persistence module	Disabled or Enabled
Reinstall Windows from the cloud	Option to reinstall Windows from the cloud	

NOTE:

When prompted to enter password, three attempts are allowed before system halts. Resetting BIOS password may require computer be returned to dealer.

Setting a Password

Perform the following to set the password:

1. Use the ↑ and ↓ keys to highlight the `Set User Password` or `Set Supervisor Password` parameter and press ***Enter***. The dialog box appears.
2. Enter a new password in the `Enter New Password` field. Passwords are not case sensitive and the length must not exceed 12 alphanumeric characters (A-Z, a-z, 0-9). Enter the password again in the `Confirm New Password` field.

IMPORTANT:

Use care when typing a password. Characters do not appear on the screen.

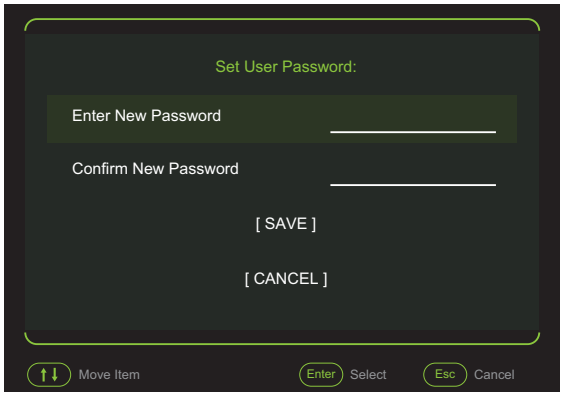


Figure 1-67. Set User Password

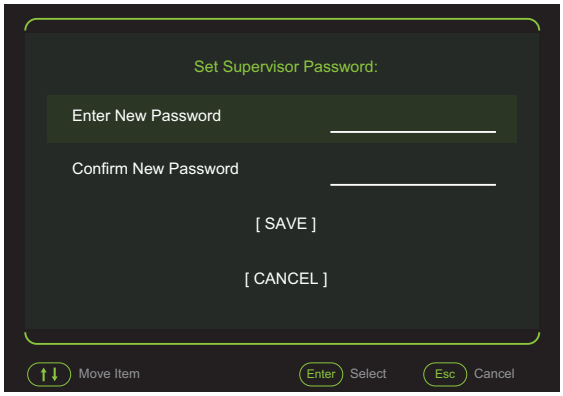


Figure 1-68. Set Supervisor Password

3. Select "SAVE" and press ***Enter***. The Setup Notice dialog box appears.

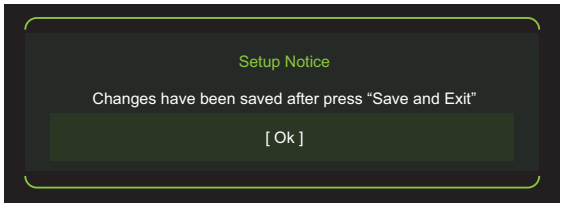


Figure 1-69. Setup Notice

NOTE:

Password on Boot must be set to Enabled to activate password feature.

4. Press ***Enter*** to complete the password setting. After the password has been set, the computer enables to change the password.

NOTE:

To change an existing password, refer to *Changing a Password*.

5. Press ***F10*** and select "SAVE & EXIT". Then press ***Enter*** to save changes and exit *BIOS Setup Utility*.

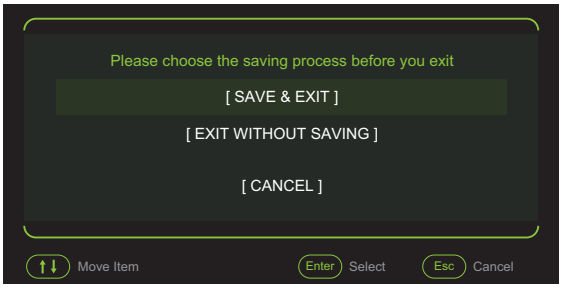


Figure 1-70. Save Configuration Changes and Exit

Changing a Password

Perform the following:

1. Use the ↑ and ↓ keys to highlight `Change User Password` or `Change Supervisor Password` and press ***Enter***. The dialog box appears.
2. Enter the current password in the `Enter current password` field and press ***Enter***.
3. Enter the new password in the `Enter New Password` and `Confirm New Password` fields.

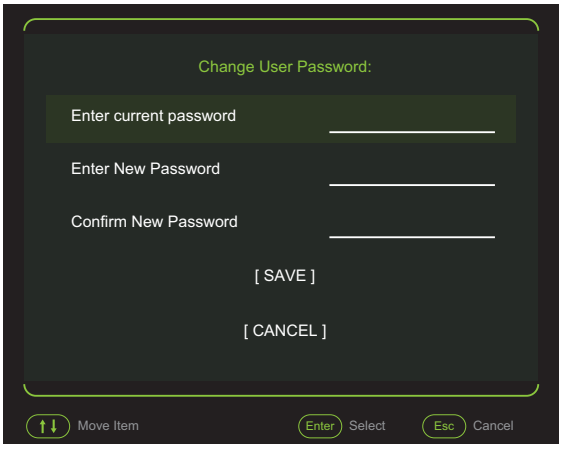


Figure 1-71. Change User Password

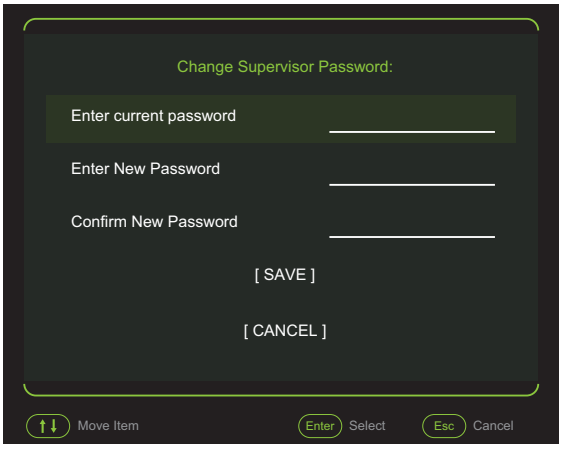


Figure 1-72. Change Supervisor Password

4. Select "SAVE" and press ***Enter***. If passwords match, the Setup Notice dialog box appears.

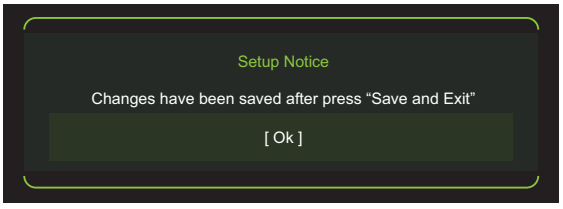


Figure 1-73. Setup Notice

NOTE:
If passwords do not match, the Setup Warning dialog box appears. Retype passwords.

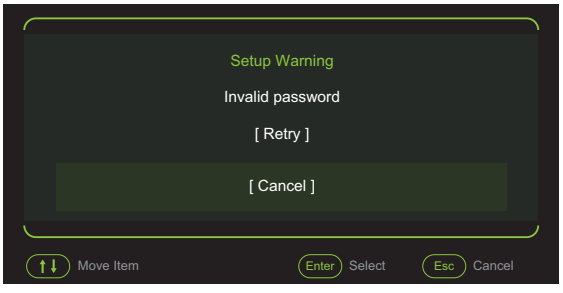


Figure 1-74. Setup Warning

5. Press ***Enter*** to complete the password modification.
6. Press ***F10*** and select "SAVE & EXIT". Then press ***Enter*** to save changes and exit *BIOS Setup Utility*.

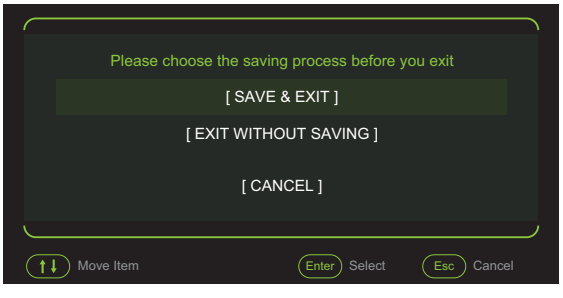


Figure 1-75. Save Configuration Changes and Exit

Removing a Password

1. Use the ↑ and ↓ keys to highlight `Set User Password` or `Set Supervisor Password` and press ***Enter***. The dialog box appears.
2. Enter the current password in the `Enter Old password` field and press ***Enter***.

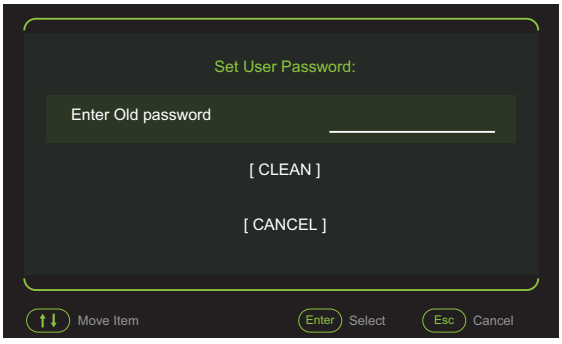


Figure 1-76. Remove User Password

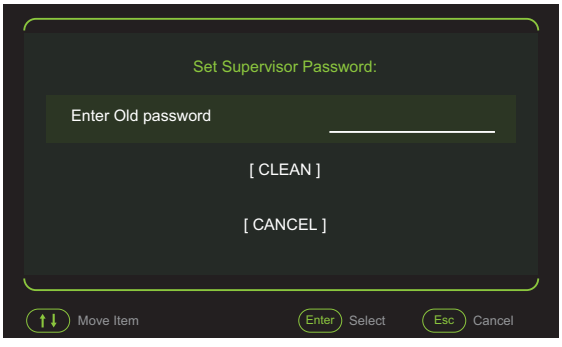


Figure 1-77. Remove Supervisor Password

3. Select "`CLEAN`" and press ***Enter***. The `Setup Notice` dialog box appears.

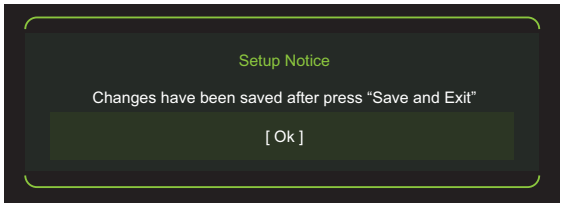


Figure 1-78. Setup Notice

4. Press ***Enter*** to complete the password removal.

5. Press ***F10*** and select "`SAVE & EXIT`". Then press ***Enter*** to save changes and exit *BIOS Setup Utility*.

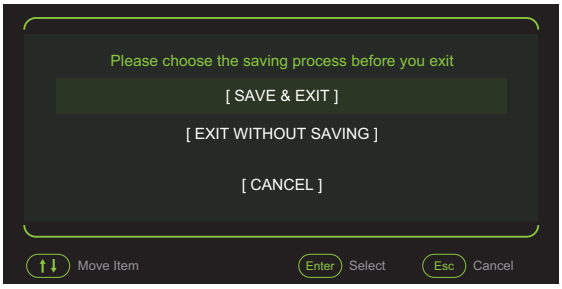


Figure 1-79. Save Configuration Changes and Exit

Boot

The Boot tab allows changes to the order of boot devices used to load the operating system. Bootable device is Windows Boot Manager.

- Windows Boot Manager
- Onboard hard disk drive
- USB diskette drive
- IPv4 network drive
- USB hard disk drive
- USB CD-ROM drive
- IPv6 network drive

Use ↑ and ↓ keys to select a device and press ***F5*** or ***F6*** to change the value.

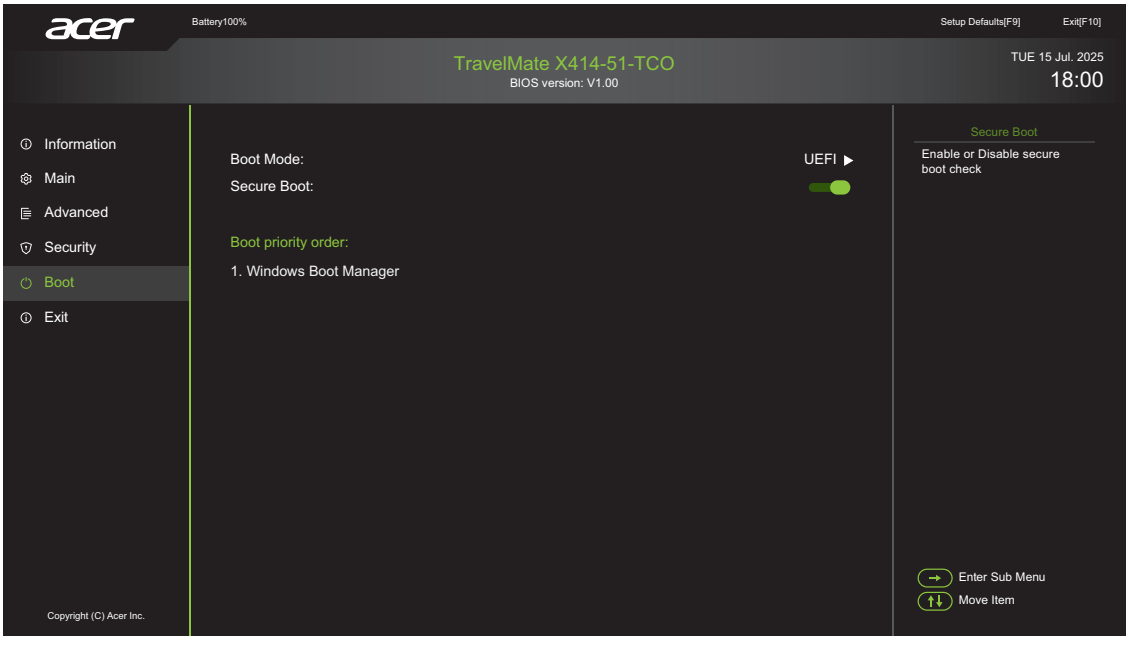


Figure 1-80. BIOS Boot

Table 1-5 describes the parameters in Figure 1-80.

Table 1-5. BIOS Boot

Parameter	Description
Boot Mode	Set the system Boot Mode.
Secure Boot	Enable or Disable Secure Boot check.

Exit

The Exit tab allows users to save or discard changes and quit the *BIOS Setup Utility*.



Figure 1-81. BIOS Exit

Table 1-6 describes the parameters in Figure 1-81.

Table 1-6. BIOS Exit

Parameter	Description
Exit Saving Changes	Exit BIOS utility and save setup item changes to system.
Exit Discarding Changes	Exit BIOS utility without saving setup item changes to system.
Save & Shutdown	Save the changes and shutdown the system.
Load Factory Setup Defaults	Load setup default values for all setup items.
Save Settings to User Setup Defaults	Save the current settings as the user-defined default settings.
Load User Setup Defaults	Load the user-defined default settings.

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. **By performing any of these procedures you acknowledge that any remaining warranty applicable to your computer will be voided if any damage is done to the unit or components during the repair.**

Introduction

This chapter contains information about troubleshooting common problems associated with the notebook.

General Information

The following procedures are a guide for troubleshooting computer problems. The step by step procedures are designed to be performed as described.

NOTE:

The diagnostic tests are intended for Acer products only. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

1. Obtain as much detailed information as possible about the problem.
2. If possible, verify the symptoms by re-creating the failure through diagnostic tests or repeating the operation that led to the problem.
3. Use Table 1-7 with the verified symptom to determine the solution.

Table 1-7. Common Problems

Symptoms (Verified)
Power On Issues
No Display Issues
LCD Picture Failure
Internal Keyboard Failure
Touch Pad Failure
Internal Speaker Failure
Other Functions Failure
Intermittent Problems
Undetermined Problems

4. If the Issue is still not resolved, please contact Acer local service.

NOTE:

Do not replace non-defective FRU parts.

Power On Issues

If the system does not power on, perform the following:

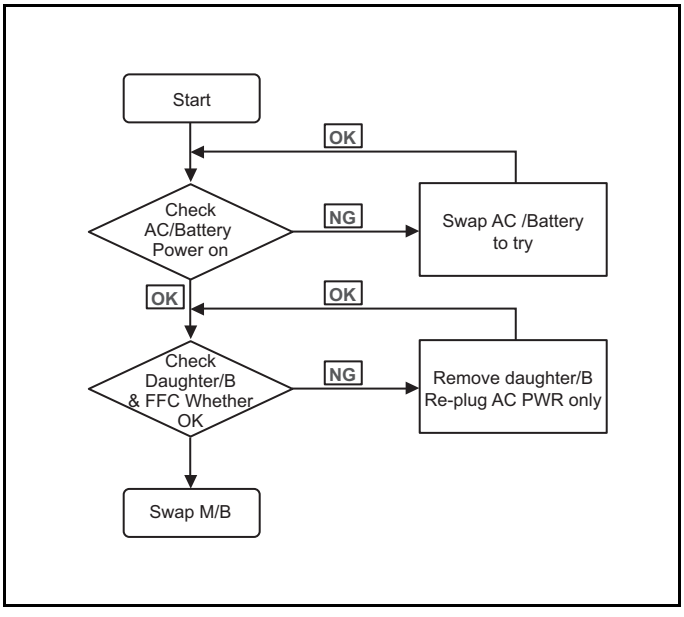


Figure 1-82. Power On Issue

Computer Shuts Down Intermittently

If the system powers off at intervals, perform the following.

1. Makes sure the power cable is properly connected to the computer and the electrical outlet.
2. Remove all extension cables between the computer and the outlet.
3. Remove all surge protectors between the computer and the electrical outlet. Plug the computer directly into a known serviceable electrical outlet.
4. Disconnect the power and open the casing to check the thermal unit and fan airways are free of obstructions.
5. Remove all external and non-essential hardware connected to the computer that are not necessary to boot the computer to the failure point.
6. Remove any recently installed software.
7. If the Issue is still not resolved, please contact Acer local service.

No Display Issues

If the Display does not work, perform the following:

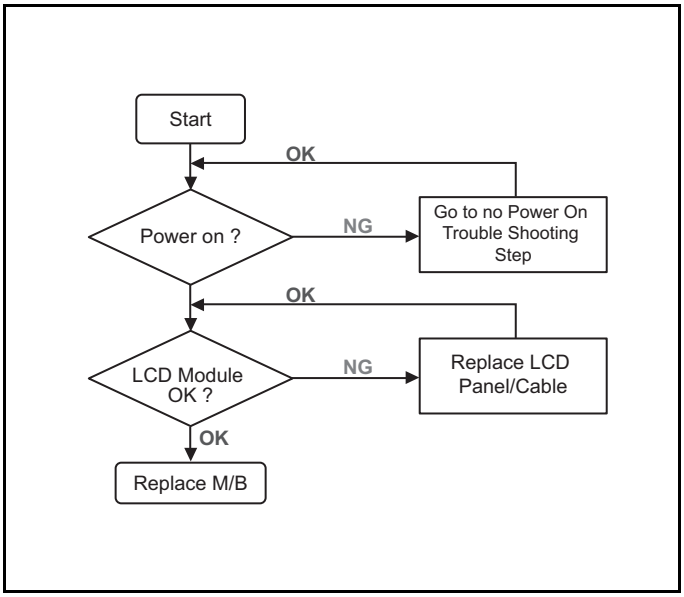


Figure 1-83. No Display Issue

No POST or Video

If the POST or video does not appear, perform the following:

1. Make sure that internal display is selected. Then switch between the internal display and the external display. Reference product pages for specific model procedures.
2. Make sure the computer has power by checking for one of the following:
   - Fans start up
   - Status LEDs illuminate

If no power, refer to *Power On Issues*.

3. Drain stored power by removing the power cable and battery. Hold the power button for 10 seconds.
4. Connect the power and reboot the computer.
5. Connect an external monitor to the computer and switch between the internal display and the external display.
6. If the POST or video appears on the external display only, refer to *LCD Picture Failure*.
7. Disconnect power and all external devices including port replicators or docking stations. Remove any memory cards and CD/DVD discs.
8. Start the computer. If the computer boots correctly, add the devices one by one until the failure point is discovered.
9. Reseat the memory modules.
10. Remove the drives (refer to *Disassembly Procedures*).
11. If the Issue is still not resolved, please contact Acer local service.

Abnormal Video

If the video appears abnormal, perform the following:

1. Boot the computer.
   - If permanent vertical/horizontal lines or dark spots appear in the same location, the LCD is faulty and should be replaced. Refer to *Disassembly Procedures*.
   - If extensive pixel damage is present (different colored spots in the same locations on the screen), the LCD is faulty and should be replaced.

NOTE:

Make sure that the computer is not running on battery alone as this may reduce display brightness.

2. Adjust the brightness to its highest level. Refer to the User Manual for instructions on adjusting the settings. If the display is too dim at the highest brightness setting, the LCD is faulty and should be replaced. Refer to *Disassembly Procedures*.
3. Check the display resolution is correctly configured:
   - Minimize or close all Windows.
   - If display size is only abnormal in an application, check the view settings and control/mouse wheel zoom feature in the application.
   - If desktop display resolution is not normal, right-click on the desktop and select `Personalize Display Settings`.
   - Click and drag the Resolution slider to the desired resolution.
   - Click ***Apply*** and check the display. Readjust if necessary.
4. Roll back the video driver to the previous version if updated.
5. Remove and reinstall the video driver.
6. Check the Device Manager to determine that:
   - The device is properly installed. There are no red Xs or yellow exclamation marks
   - There are no device conflicts
   - No hardware is listed under `Other Devices`
7. If the Issue is still not resolved, please contact Acer local service.
8. Run the *Windows Memory Diagnostic* from the operating system DVD and follow the on-screen prompts.
9. If the issue is still not resolved, please contact Acer local service.

LCD Picture Failure

If the LCD fails, perform the following:

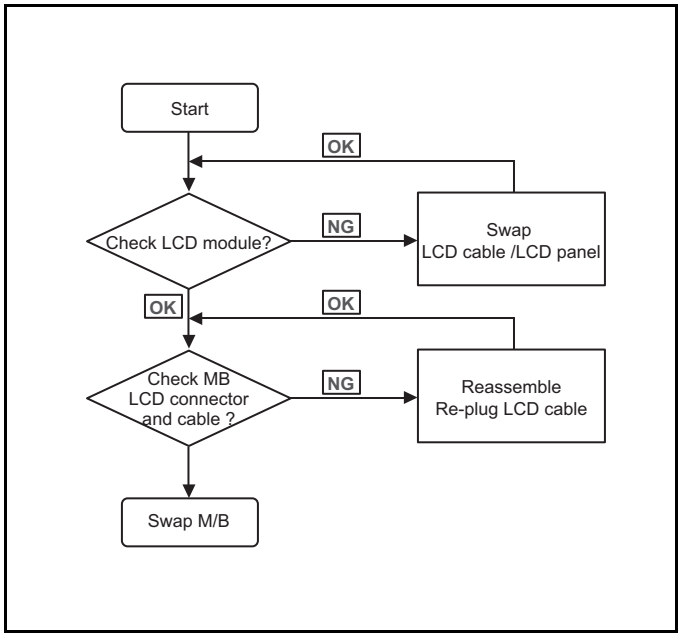


Figure 1-84. LCD Failure

Internal Keyboard Failure

If the internal keyboard fails, perform the following:

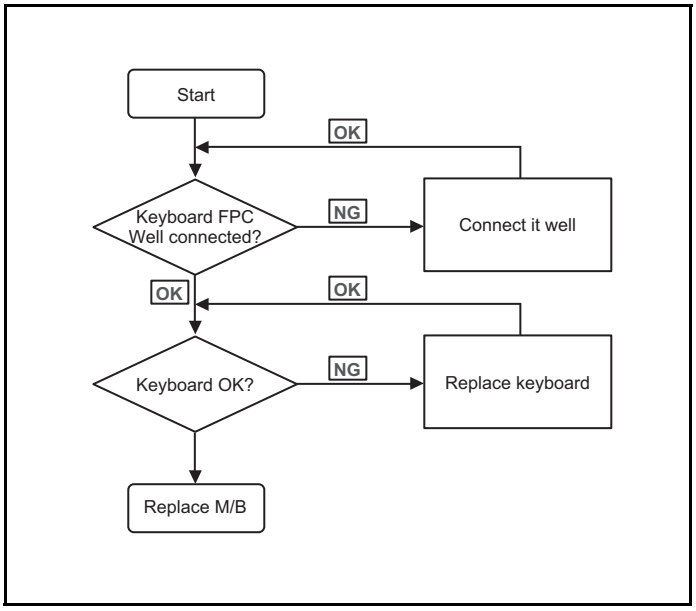


Figure 1-85. Internal Keyboard Failure

Touch Pad Failure

If the touch pad fails, perform the following:

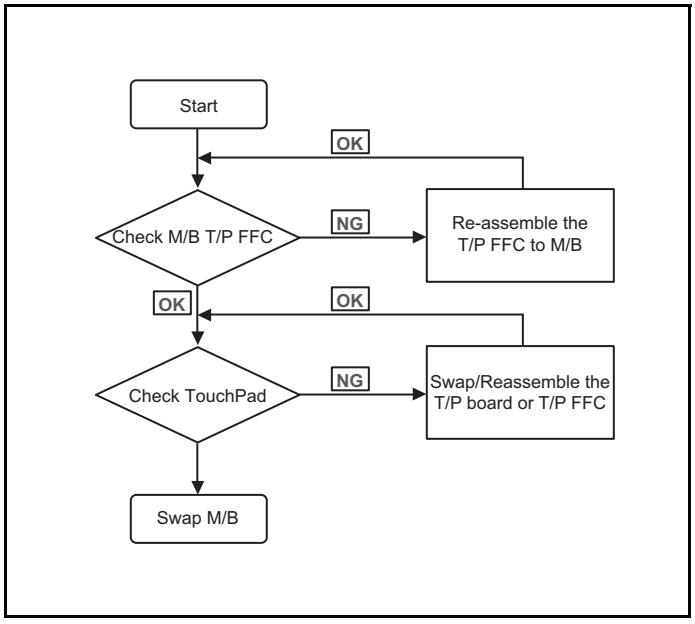


Figure 1-86. Touch Pad Failure

Internal Speaker Failure

If internal speakers fail, perform the following:

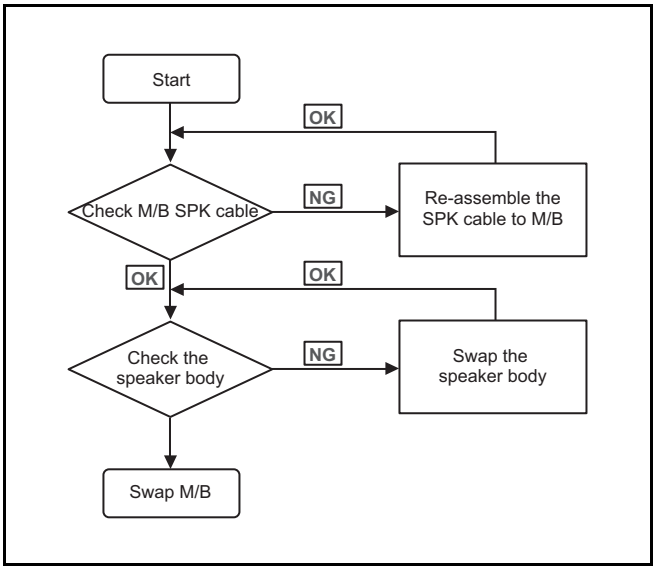


Figure 1-87. Internal Speaker Failure

Sound Problems

Perform the following, one at a time.

1. Boot the computer.
2. If updated recently, roll back the audio driver to the previous version. Remove and reinstall the audio driver.
3. Make sure that all volume controls are set mid range:
   - Click the volume icon on the taskbar
   - Drag the slider to 50. Confirm that the volume is not muted.
   - Click Mixer to verify that other audio applications are set to 50 and not muted.
4. Remove any recently installed hardware or software.
5. Restore system and file settings from a known good date using `System Restore`.
6. Reinstall the operating system.
7. If the issue is still not resolved, please contact Acer local service.

Other Functions Failure

1. Check if the drives are functioning correctly.
2. Check if the test fixtures are functioning correctly.
3. Change the mainboard to check if the current one is defective.

Intermittent Problems

Intermittent system hang problems can be caused by a variety of reasons that have nothing to do with a hardware defect, such as: cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a recurring problem exists.

When analyzing an intermittent problem, perform the following:

1. Run the advanced diagnostic test for the system board in loop mode at least 10 times.
2. If no error is detected, do not replace any FRU.
3. If an error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

Undetermined Problems

The diagnostic problems do not identify which adapter or device failed, which installed devices are incorrect, whether a short circuit is suspected, or whether the system is inoperative.

Perform the following procedures to isolate the failing FRU (do not isolate non-defective FRU).

NOTE:
Verify that all attached devices are supported by the computer.

NOTE:
Verify that the power supply being used at the time of the failure is operating correctly. (Refer to *Power On Issues*).

1. Remove power from the computer.
2. Visually check components for damage. If any problems are found, replace the FRU.
3. Remove or disconnect all of the following devices:
   - Non-Acer devices
   - Printer, mouse, and other external devices
   - Battery pack
   - Hard disk drive
   - DIMM
   - BD/CD-ROM/Diskette drive Module
   - PC Cards
4. Apply power to the computer.
5. Determine if the problem has changed.
6. If the problem does not recur, connect the removed devices one at a time until failing FRU is found.
7. If the problem remains, replace the following FRUs:
   - System board
   - LCD assembly

Exploded Diagrams

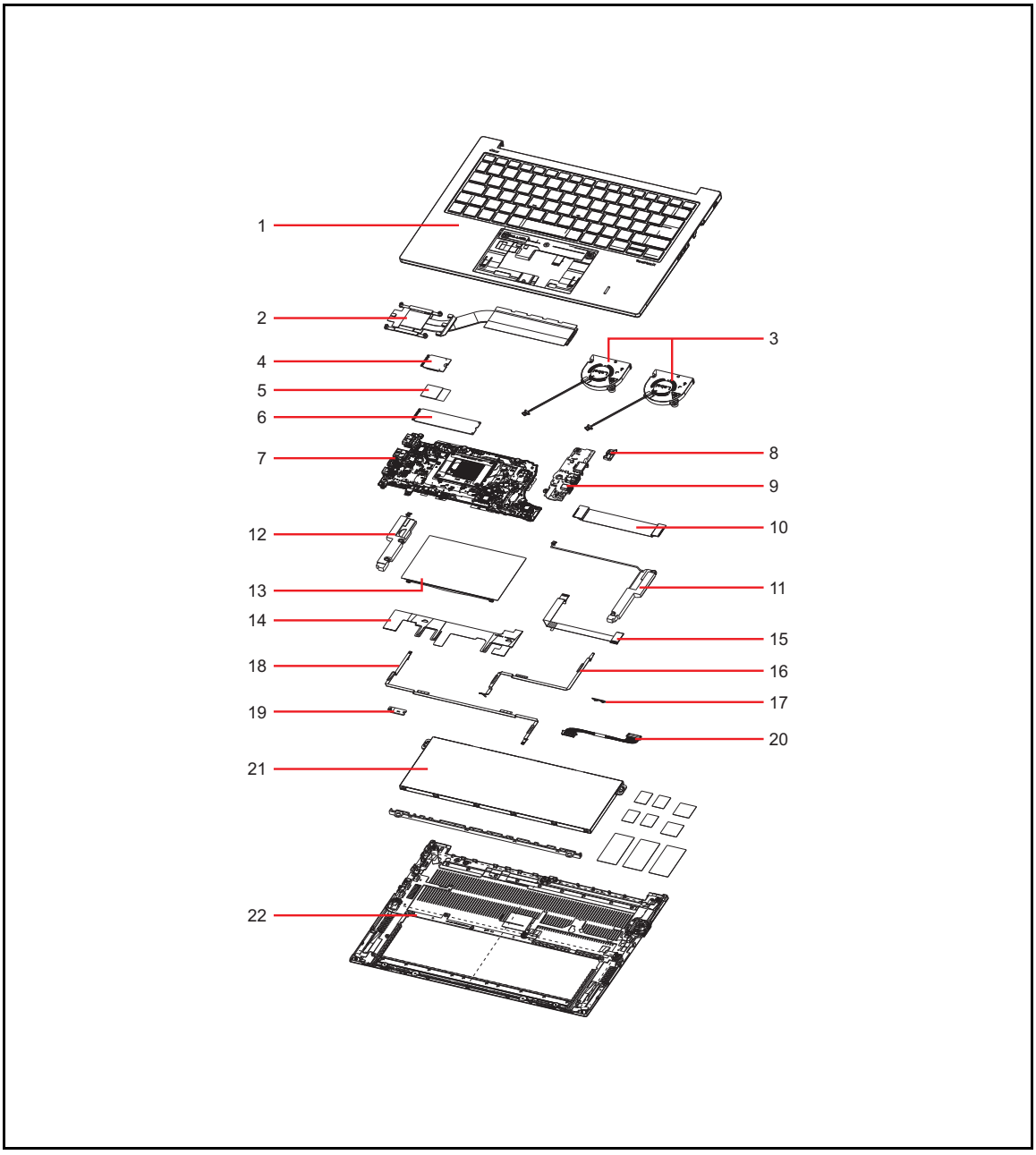


Figure 1-88. System Exploded Diagram

Table 1-8. System Exploded Diagram

No.	Description
1	KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Arabic NK.I131S.12T/NK.I1313.3ZE/NK.I131B.0M7

Table 1-8. System Exploded Diagram (Continued)

No.	Description
2	HEAT SINK
3	FAN
4	Wireless LAN Intel Wi-Fi 7 BT5.4 BE201.NGWG.NV Intel 2x2 M.2 2230 CNVi
5	THERMAL PAD FOR MB
6	Flash Disk KINGSTON SSD NAND 512GB OM8PGP4512Q-AA LF+HF
7	Mainboard TMX414-51-TCO CU5226V 16GB UMA dTPM,HPD,OLED_CN
8	RUBBER SI FOR POWER LED
9	BOARD IO
10	CABLE IO BOARD
11	SPEAKER R
12	SPEAKER L
13	TOUCHPAD MODULE NC.24611.0CW
14	COND FABRIC W/INS MYLAR
15	CABLE TOUCHPAD
16	CABLE MICROPHONE
17	MICROPHONE
18	CABLE HALLSEN BOARD
19	BOARD HALL SENSOR
20	CABLE BATTERY
21	Battery CosMx Typ.65Wh 5570mAh 3S1P AP22ABN 248x90x5.5(mm) AP22A 11.67V 75W Li-Ion
22	LOWER CASE

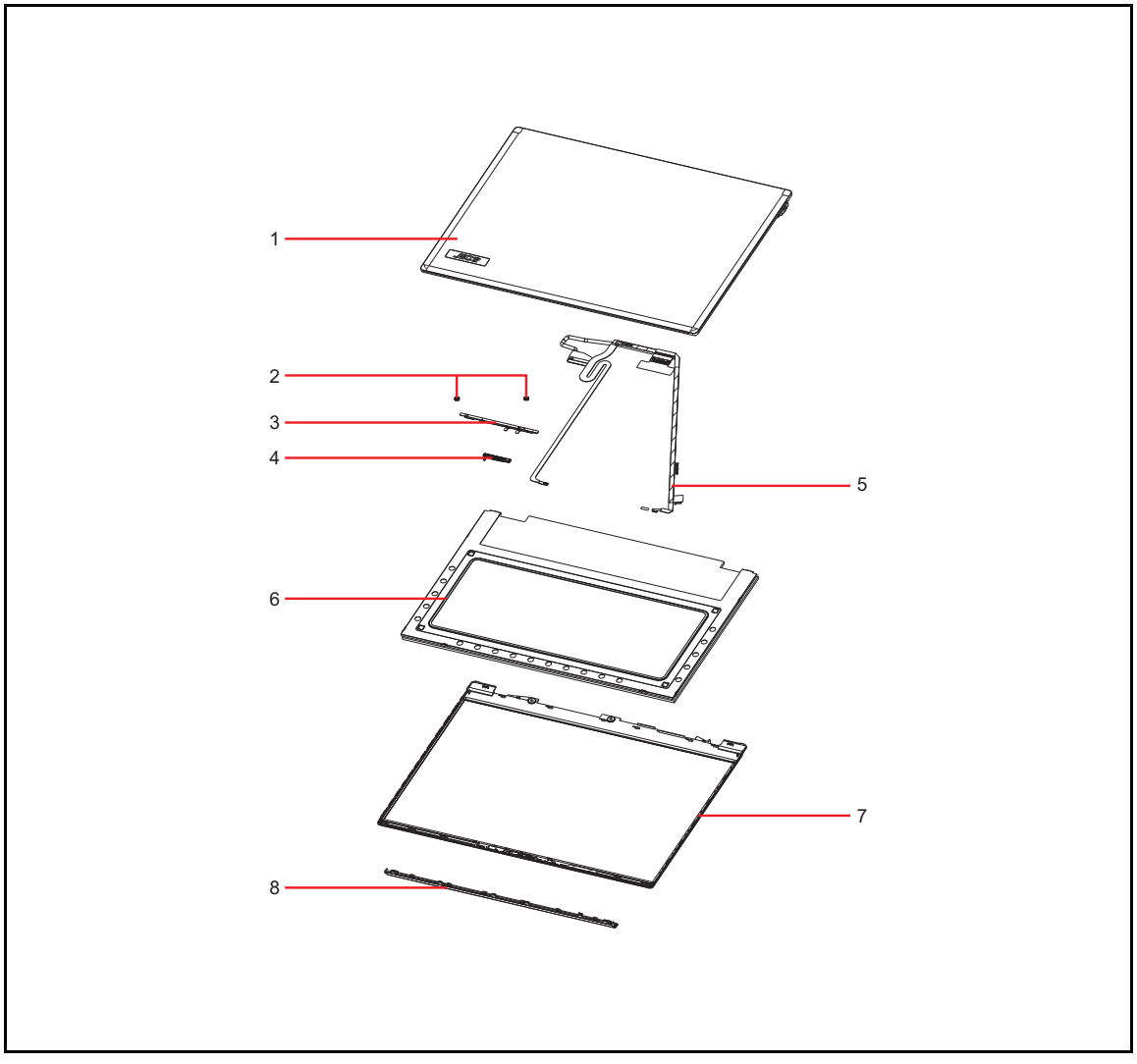


Figure 1-89. LCD Assembly Exploded Diagram

Table 1-9. LCD Assembly Exploded Diagram

No.	Description
1	LCD COVER ASSY W/HINGE OLED HPD
2	RUBBER SI FOR MIC
3	Camera Tech-Front FHD FF YHWU OV02E SPCV6202A 1L4C173A3 (BG) SPG01R8HT4H-1 TNR USB IR-HM1092(940nm) (3.2mm) ,sHDR
4	Vision Sensor - Egis Vision EK006B-1A
5	CABLE LCD/CAMERA OLED HPD
6	LCD MODULE W/ BRACKET, OLED Panel SAMSUNG 14" WUXGA OLED Glare ATNA40CT05 -0 400nit DCI-P3 100% 60Hz KL.14006.004

Table 1-9. LCD Assembly Exploded Diagram (Continued)

No.	Description
7	LCD BEZEL HPD
8	CAP FOR HINGE UP

FRU List

This list is for reference only, please contact Acer local service to order the correct replacement part and availability.

Table 1-10. FRU List

Category	Picture	Description
ADAPTER		Adapter Chicony Power A065RPB5P 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black TCO10, PCR50%,with LOGO and paper sleeve
		Adapter LITE-ON PA-1650-58A8 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black TCO10, PCR50%,with LOGO and paper sleeve
		Adapter DELTA ADP-100XB BN 100W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V/5A Black TCO10, PCR50%,with LOGO and paper sleeve
BATTERY		Battery CosMx Typ.65Wh 5570mAh 3S1P AP22ABN 248x90x5.5(mm) AP22A 11.67V 75W Li-Ion
		Battery LGES Typ.65Wh 4180mAh 4S1P AP22A8N 248x90x5.5(mm) AP22A 11.52V 75W Li-Ion
		Battery CosMx Typ.53Wh 4661mAh 3S1P AP23ABL 248x84.4x5.5(mm) AP23A 11.37V 65W Li-Ion TI BQ40Z555 FW5.12
		Battery ATL Typ.53Wh 4700mAh 3S1P AP24CAL 248x84.4x5.5(mm) AP24C 11.25V 70W Li-Ion FW5.09
BOARD		BOARD HALL SENSOR
		BOARD IO
CABLE		CABLE BATTERY

Table 1-10. FRU List (Continued)

Category	Picture	Description
CABLE		CABLE TOUCHPAD
		CABLE IO BOARD
		CABLE HALLSEN BOARD
		CABLE MICROPHONE
		CABLE LCD/CAMERA
		CABLE LCD/CAMERA HPD
		CABLE LCD/CAMERA OLED HPD
CAMERA		Vision Sensor - Egis Vision EK006B-1A
		Vision Sensor- Egis Vision- BNVGF3079-B
		Camera Tech-Front FHD FF YHWU OV02E SPCV6202A 1L4C173A3 (BG) SPG01R8HT4H-1 TNR USB IR-HM1092(940nm) (3.2mm) ,sHDR
		Camera CHICONY FHD FF CKFOE24 GC2607 SPCV6202A DS-41161A (BG) ZTS6534SAC TNR USB IR-HM1092(940nm) (3.2mm) ,sHDR
		Camera Tech-Front FHD FF YHWU OV02E SPCV6202A 1L4C173A3 (BG) SPG01R8HT4H-1 TNR USB IR-HM1092(940nm) (3.2mm) ,sHDR

Table 1-10. FRU List (Continued)

Category	Picture	Description
CAMERA		Camera CHICONY FHD FF CKFOE24 GC2607 SPCV6202A DS-41161A (BG) ZTS6534SAC TNR USB IR-HM1092(940nm) (3.2mm) ,sHDR
FAN		FAN
HDD		Flash Disk KINGSTON SSD NAND 512GB OM8PGP4512Q-AA LF+HF
		Flash Disk KINGSTON SSD NAND 1024GB OM8PGP41024Q-AA LF+HF
		Flash Disk MICRON SSD NAND 512GB Micron 2500 QLC 512GB MTFDKBA512QGN-1BN15ABYY LF+HF
KB ASSEMBLY		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Arabic NK.I131S.12T/NK.I1313.3ZE/NK.I131B.0M7
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS FR/Arabic NK.I131S.13A/NK.I1313.3ZX/NK.I131B.0MQ
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Belgium NK.I131S.136/NK.I1313.3ZT/NK.I131B.0ML
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Brazilian Portuguese NK.I131S.137/NK.I1313.3ZU/NK.I131B.0MM
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS US International w/ Bulgaria NK.I131S.134/NK.I1313.3ZR/NK.I131B.0MJ
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS US International w/ Canadian French NK.I131S.133/NK.I1313.3ZQ/NK.I131B.0MH

Table 1-10. FRU List (Continued)

Category	Picture	Description
KB ASSEMBLY		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS SLO/CRO NK.I131S.13J/NK.I1313.405/NK.I131B.0MY
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS CZ/SK NK.I131S.138/NK.I1313.3ZV/NK.I131B.0MN
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Danish NK.I131S.139/NK.I1313.3ZW/NK.I131B.0MP
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS French NK.I131S.13B/NK.I1313.3ZY/NK.I131B.0MR
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS German NK.I131S.13C/NK.I1313.3ZZ/NK.I131B.0MS
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Greek NK.I131S.12V/NK.I1313.3ZG/NK.I131B.0M9
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS US International w/ Hebrew NK.I131S.132/NK.I1313.3ZP/NK.I131B.0MG
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Hungarian NK.I131S.13D/NK.I1313.400/NK.I131B.0MT
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Persian NK.I131S.12Z/NK.I1313.3ZL/NK.I131B.0MD
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Italian NK.I131S.13E/NK.I1313.401/NK.I131B.0MU
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 85KS Japanese NK.I131S.13Q

Table 1-10. FRU List (Continued)

Category	Picture	Description
KB ASSEMBLY		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Korean NK.I131S.12W/NK.I1313.3ZH/NK.I131B.0MA
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS ALA-Spanish NK.I131S.135/NK.I1313.3ZS/NK.I131B.0MK
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Norwegian NK.I131S.13G/NK.I1313.403/NK.I131B.0MW
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Portuguese NK.I131S.13H/NK.I1313.404/NK.I131B.0MX
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Russian NK.I131S.12X/NK.I1313.3ZJ/NK.I131B.0MB
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Nordic NK.I131S.13F/NK.I1313.402/NK.I131B.0MV
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Spanish NK.I131S.13K/NK.I1313.406/NK.I131B.0MZ
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Sweden NK.I131S.13L/NK.I1313.407/NK.I131B.0N0
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Swiss/G NK.I131S.13M/NK.I1313.408/NK.I131B.0N1
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Thailand NK.I131S.130/NK.I1313.3ZM/NK.I131B.0ME

Table 1-10. FRU List (Continued)

Category	Picture	Description
KB ASSEMBLY		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS Turkish NK.I131S.13N/NK.I1313.409/NK.I131B.0N2
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Traditional Chinese NK.I131S.12U/NK.I1313.3ZF/NK.I131B.0M8
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS US International NK.I131S.131/NK.I1313.3ZN/NK.I131B.0MF
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 82KS UK NK.I131S.13P/NK.I1313.40A/NK.I131B.0N3
		KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard SR03P_A50BWL 81KS Ukrainian NK.I131S.12Y/NK.I1313.3ZK/NK.I131B.0MC
LCD		LED LCD Panel CSOT 14" WUXGA IPS None Glare MNE007QS3-8 350nit sRGB 100% 120Hz 20ms 1200:1 (Narrow, Flat 2.4)
		LED LCD Panel BOE 14" WUXGA IPS None Glare NE140WUM-N6S V00 350nit sRGB 100% 120Hz 20ms 1200:1
LCD BEZEL		LCD BEZEL
		LCD BEZEL HPD
LCD COVER		LCD COVER ASSY W/HINGE
		LCD COVER ASSY W/HINGE HPD
		LCD COVER ASSY W/HINGE OLED HPD
LCD MODULE		LCD MODULE W/ BRACKET, OLED Panel SAMSUNG 14" WUXGA OLED Glare ATNA40CT05 -0 400nit DCI-P3 100% 60Hz KL.14006.004

Table 1-10. FRU List (Continued)

Category	Picture	Description
LOWER CASE		LOWER CASE
MAINBOARD	 	Mainboard TMX414-51-TCO CU5226V 16GB UMA dTPM,HPD,OLED_CN
		Mainboard TMX414-51-TCO CU7258V 32GB UMA dTPM,HPD,OLED_CN
		Mainboard TMX414-51-TCO CU5226V 16GB UMA dTPM
		Mainboard TMX414-51-TCO CU7258V 32GB UMA dTPM
		Mainboard TMX414-51-TCO CU5226V 16GB UMA dTPM,HPD
		Mainboard TMX414-51-TCO CU7258V 32GB UMA dTPM,HPD
PLASTICS		HOLDER BATTERY
		CAP FOR HINGE UP
POWER CORD		POWER CORD 1M 125V TAIWAN BLACK TCO10
		POWER CORD 1M 250V KOR BLACK TCO10
		POWER CORD 1M 250V EUR BLACK TCO10
		POWER CORD 1M 250V AUS BLACK TCO10
		POWER CORD 1M 125V JAP BLACK TCO10
		POWER CORD 1M 250V CHINA BLACK TCO10
		POWER CORD 1M 250V ITL BLACK TCO10
		POWER CORD 1M 250V S.AFRICA BLACK TCO10
		POWER CORD 1M 250V INDIA BLACK TCO10
		POWER CORD 1M 250V BRAZIL BLACK TCO10
		POWER CORD 1M 250V UK BLACK TCO10

Table 1-10. FRU List (Continued)

Category	Picture	Description
POWER CORD		POWER CORD 1M 250V ARG BLACK TCO10
		POWER CORD 1M 250V DENMARK BLACK TCO10
		POWER CORD 1M 250V SWISS BLACK TCO10
		POWER CORD 1M 250V ISRAEL BLACK TCO10
		POWER CORD 1M 125V US BLACK TCO10
		POWER CORD 1M 250V EUR+KOR BLACK TCO10
SPEAKER/ MICROPHONE		SPEAKER L
		SPEAKER R
		MICROPHONE
THERMAL		HEAT SINK
TOUCHPAD		TOUCHPAD MODULE NC.24611.0CW
		TOUCHPAD MODULE NC.24611.0CT
WIRELESS LAN		Wireless LAN Intel Wi-Fi 7 BT5.4 BE201.NGWG.NV Intel 2x2 M.2 2230 CNVi
MISCELLANEOUS		LCD ADHESIVE W/MYLAR ASSY 190*5*0.2MM
		LCD ADHESIVE W/MYLAR ASSY 190*5*0.2MM
		LCD ADHESIVE W/MYLAR ASSY 190*5*0.2MM

Table 1-10. FRU List (Continued)

Category	Picture	Description
MISCELLANEOUS		COND FABRIC W/INS MYLAR
		RUBBER SI FOR POWER LED
		ADHE TAPE FOR HINGECAP
		RUBBER SI FOR MIC
		RUBBER SI FOR TOP MIC
		TAPE KAPTON TOP MIC
		INSULATOR MYLAR ON BATTERY CABLE
		MYLAR FFC COONECTOR
		ACETATE TAPE FOR BATTERY(21*21mm)
		THERMAL PAD FOR MB
		LCD ALIGNMENT MYLAR
SCREW		SCREW M2.5 W/WASHER
		SCREW M2.0 W/WASHER
		SCREW M2.5*4.5-I(BZN)(NYLOK)IRON
		SCREW M2.0*2.5-IBZNNYLOKD7.0 IRON

Table 1-10. FRU List (Continued)

Category	Picture	Description
SCREW		SCREW M2.0*2.0-I(NI,NYLOK)STL
		SCREW M2*3.0 I (BNI,NYLOK)IRON
		SCREW M2.0*4.0-IBNINYLOKD5.0T0.8)STL
		SCREWM2.0*1.8-IBNINYLOKD7.0,T0.4STLSP

Software Update

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.

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**.