

TravelMate  
TMP414-55 / TMP414-55-TCO  
TMP414RN-55 / TMP414RN-55-TCO

Cello\_ARU

# LIFECYCLE EXTENSION GUIDE

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# Self-Repair

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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

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## Safety Guidelines

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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

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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

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These components are classified as requiring selective treatment:

- Battery pack
- LED board
- RTC battery
- WLAN module
- USB board
- Memory
- SSD module
- Touchpad module
- Mainboard
- LCD panel

# Pre-disassembly Instructions

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Do the following prior to starting any maintenance procedures:

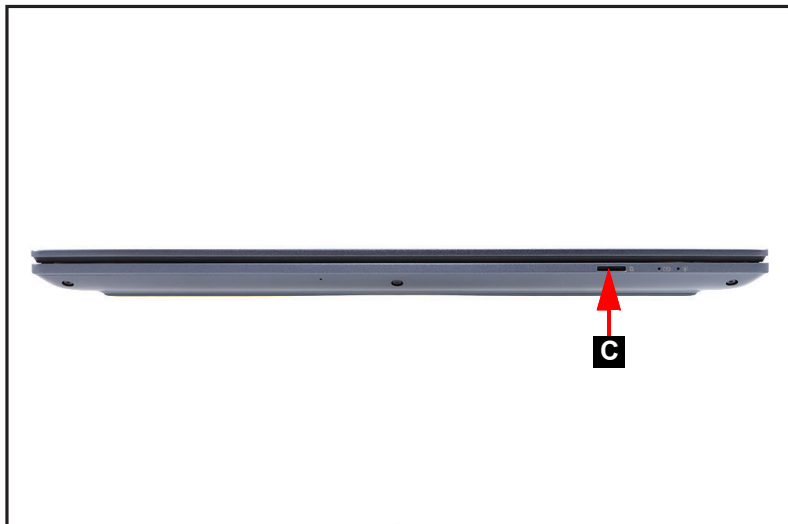
1. Place the system on a stable work surface.
2. Remove the power adapter from the USB-C port (A or B) as shown in [Figure 1-1](#).
3. Remove all cables from system.



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**Figure 1-1. AC Adapter Outlet**

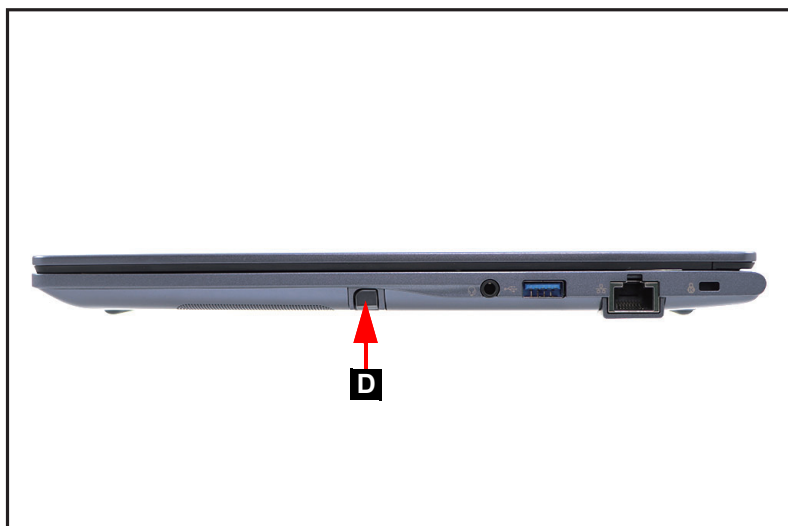
4. Remove the microSD card from the SD card slot (C) as shown in [Figure 1-2](#).



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**Figure 1-2. SD Card Removal**

5. Remove the stylus (D) (optional) as shown in [Figure 1-3](#).



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**Figure 1-3. Stylus Card Removal**

**⇒ NOTE:**

Make sure the system is completely powered off.

## Base Cover Removal

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1. Remove nine (9) screws from the base cover ([Figure 1-4](#)).



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**Figure 1-4. Base Cover Removal**

2. Starting from the bottom left and right sides, pry to release the latches. Continue releasing the remaining latches on the left, right, bottom, and top side ([Figure 1-5](#)).



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**Figure 1-5. Base Cover Removal**

3. Grasp and remove the base cover from the system ([Figure 1-6](#)).



**Figure 1-6. Base Cover Removal**

# Battery Removal

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## Prerequisite:

### Base Cover Removal

1. Find the battery pack (A) on the top assembly (Figure 1-7).
2. Detach the acetate tape (B) securing the battery cable and connector (Figure 1-7).

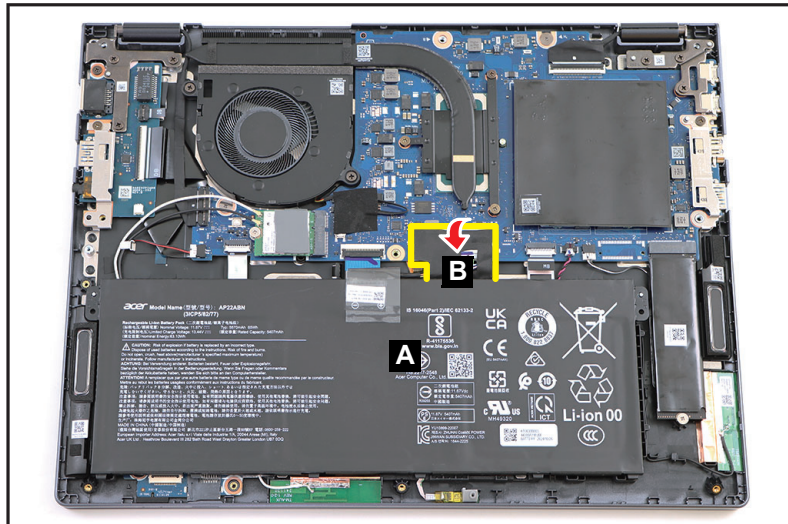


Figure 1-7. Battery Pack Removal

3. Disconnect the battery cable from the mainboard connector (C) (Figure 1-8).

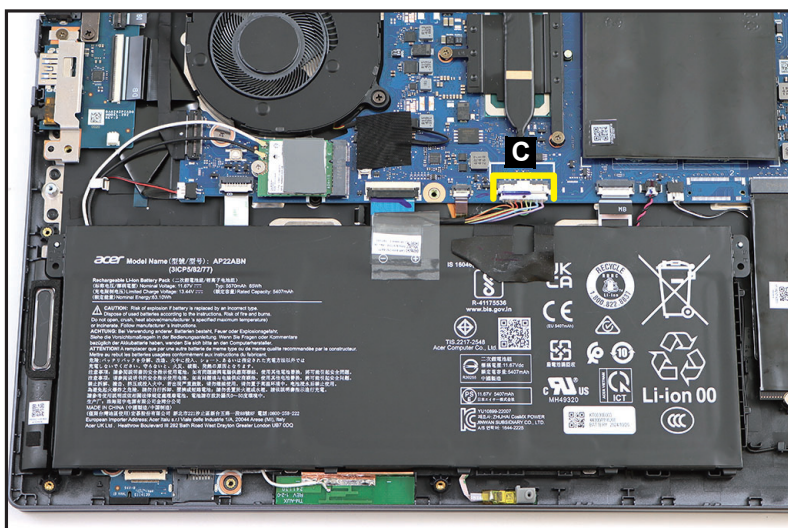
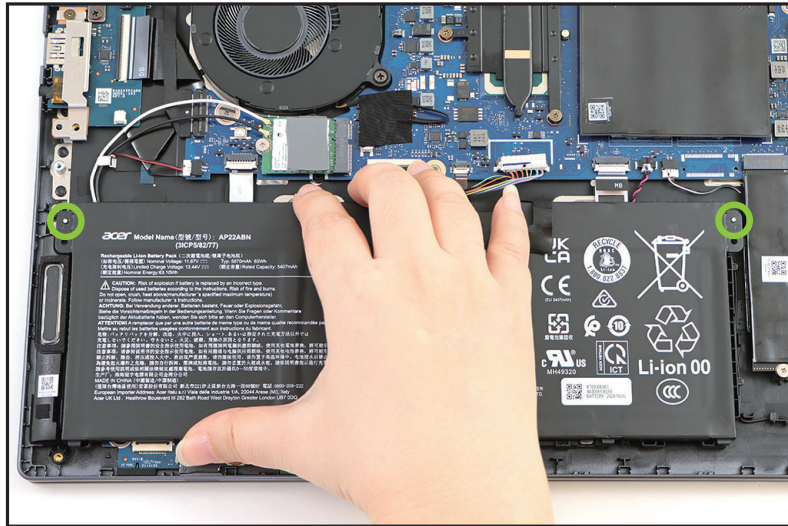


Figure 1-8. Battery Pack Removal

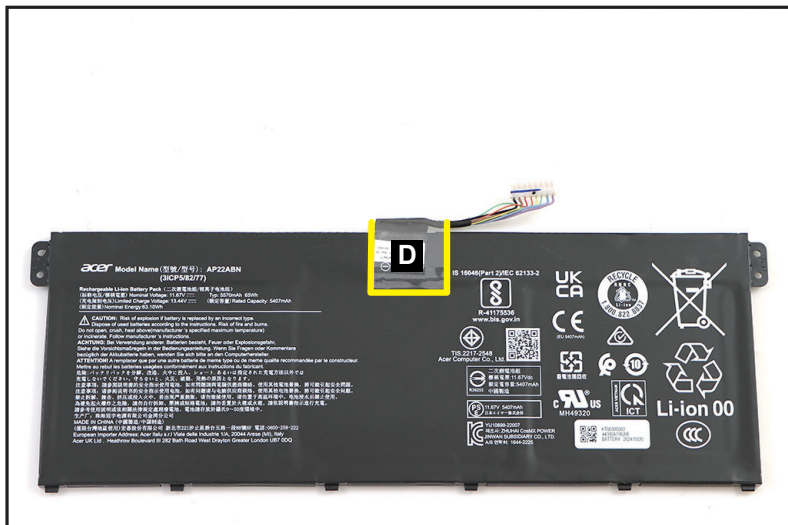


4. Lift to release the battery pack from the guide pins (marked with the green circles). Then remove the battery pack from the top assembly ([Figure 1-9](#)).



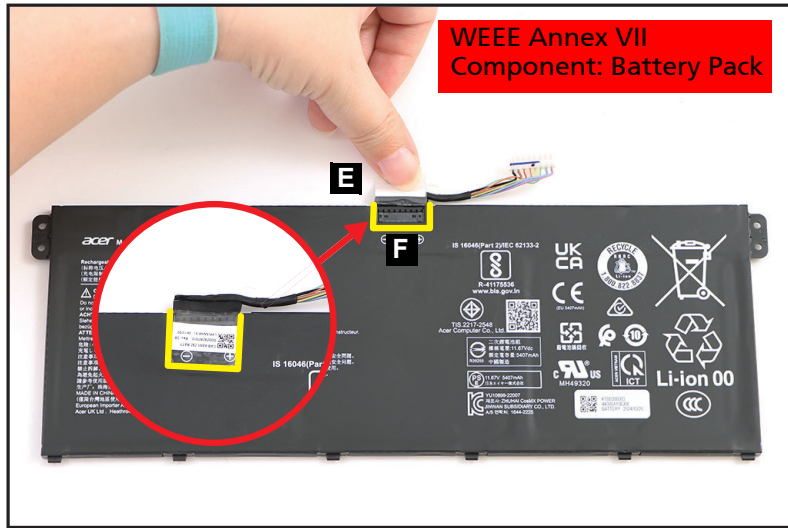
**Figure 1-9. Battery Pack Removal**

5. Detach the mylar (D) from the battery cable connector ([Figure 1-10](#)).



**Figure 1-10. Battery Pack Removal**

6. Detach the mylar (E) tab and then disconnect the battery cable from the battery pack (F) (Figure 1-11).



**Figure 1-11. Battery Pack Removal**

**+ IMPORTANT:**

Follow local regulations for battery disposal.



# LED Board Removal

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## Prerequisite:

### Battery Removal

1. Disconnect the LED board FFC (A) from the mainboard and LED board connectors. Then carefully detach the FFC from its underneath adhesive (highlighted with the yellow lines) and remove the LED board FFC (Figure 1-12).

### ⚠ CAUTION:

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

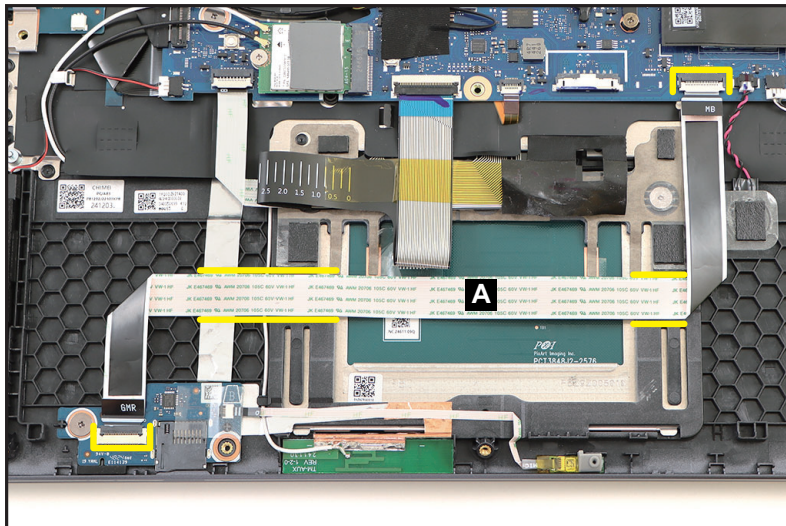


Figure 1-12. LED Board Removal

2. Detach the mylar (B) from the LED board (Figure 1-13).

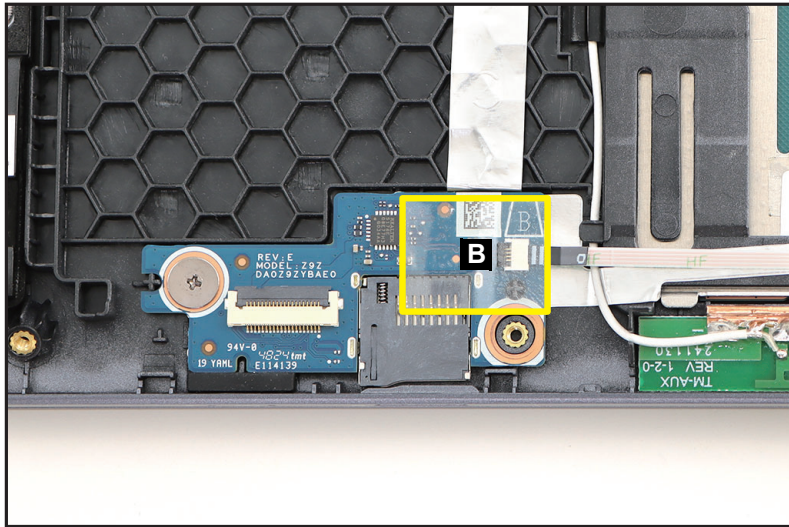


Figure 1-13. LED Board Removal

1. Disconnect the 3rd microphone board FFC (C) from the LED board connector (Figure 1-14).

**⚠ CAUTION:**

3rd microphone board FFC (Flexible Flat Circuit) can be damaged if removed while the LED board connector is locked.

2. Remove one (1) screw from the LED board (Figure 1-14).

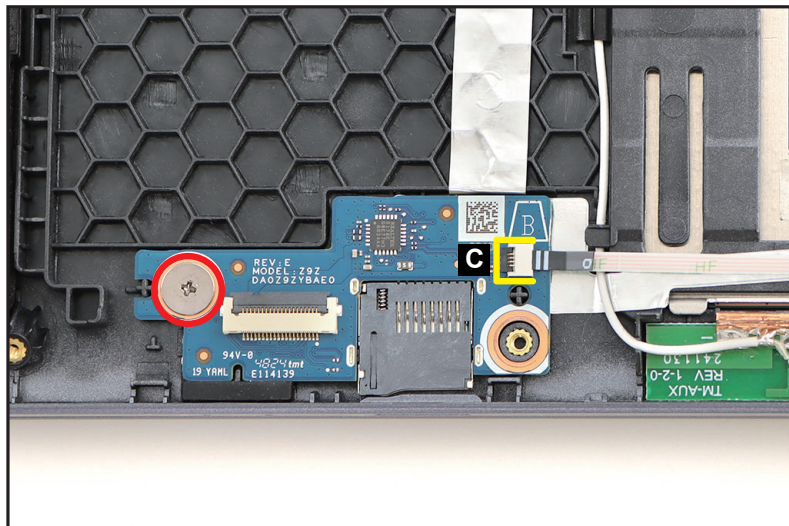


Figure 1-14. LED Board Removal

3. Release the LED board (D) from the guide pins (marked with the green circles). Then remove the LED board from the top assembly ([Figure 1-15](#)).



**Figure 1-15. LED Board Removal**

# RTC Battery Removal

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## Prerequisite:

### Battery Removal

1. Detach the mylar tab (A) from the RTC battery (Figure 1-16).

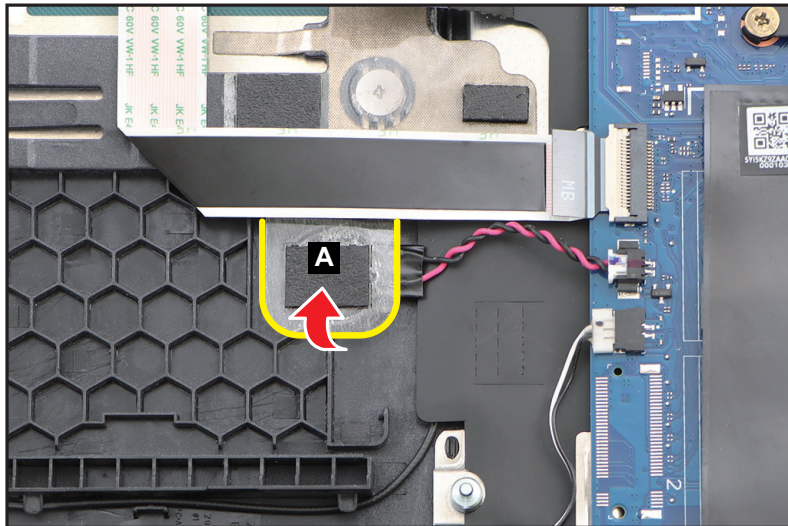


Figure 1-16. RTC Battery Removal

2. Disconnect the RTC battery cable from the mainboard connector (B) (Figure 1-17).
3. Using plastic tweezers, carefully pry to detach the adhesive tape underneath the RTC battery (C) (Figure 1-17). Then remove the RTC battery.

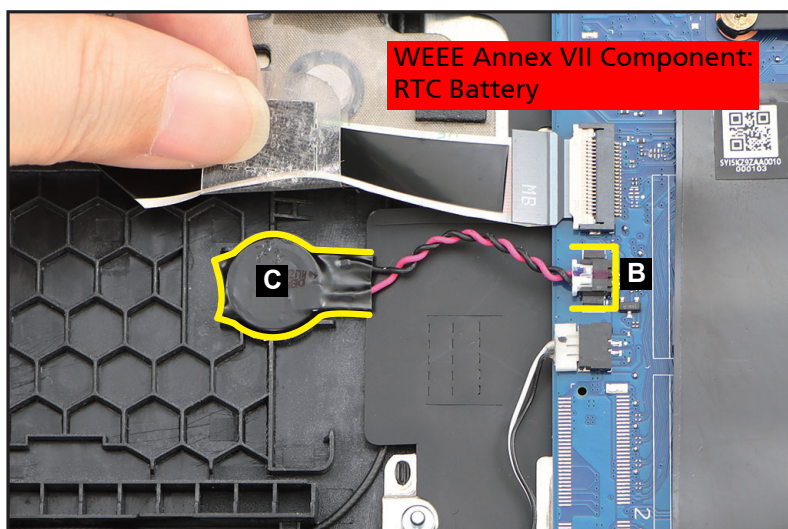


Figure 1-17. RTC Battery Removal

+ **IMPORTANT:**

Follow local regulations for battery disposal.



# WLAN Module Removal

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## Prerequisite:

### Battery Removal

1. Locate the WLAN module (A) on the mainboard (Figure 1-18).

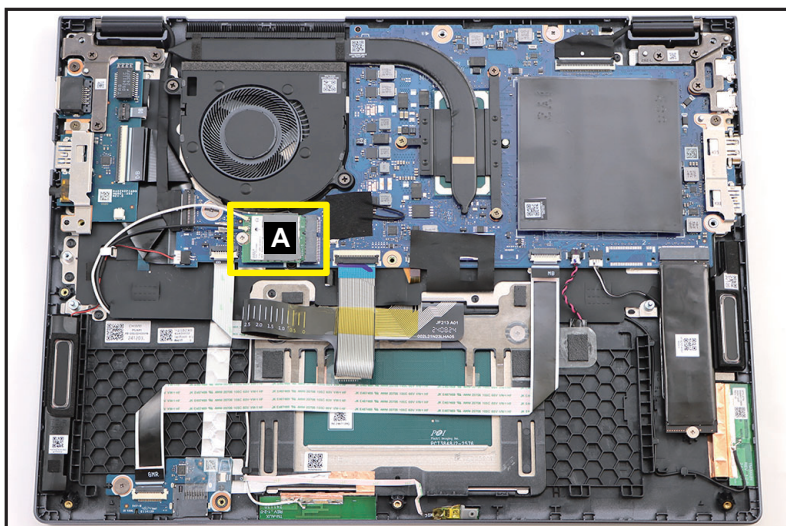


Figure 1-18. WLAN Module Location

2. Remove the thermal pad (B) from the WLAN module (Figure 1-19).

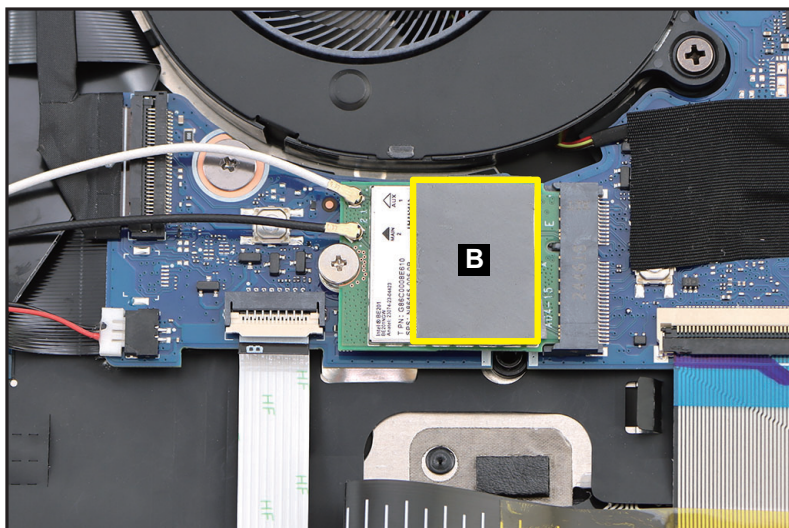
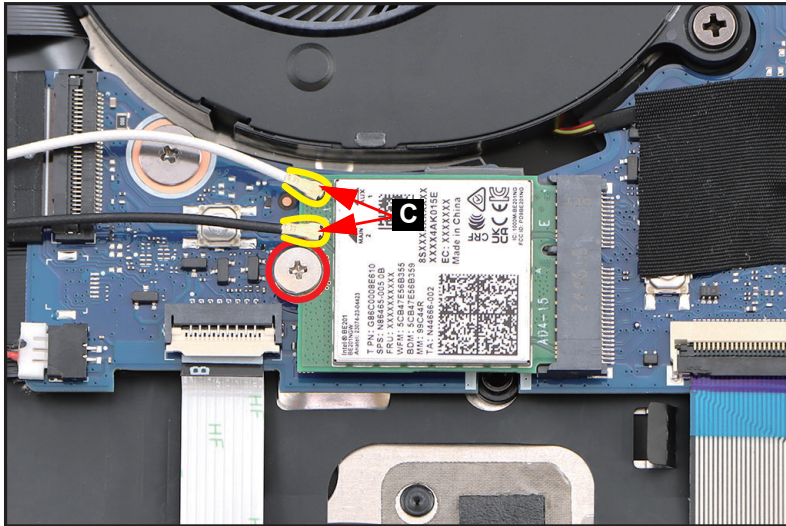


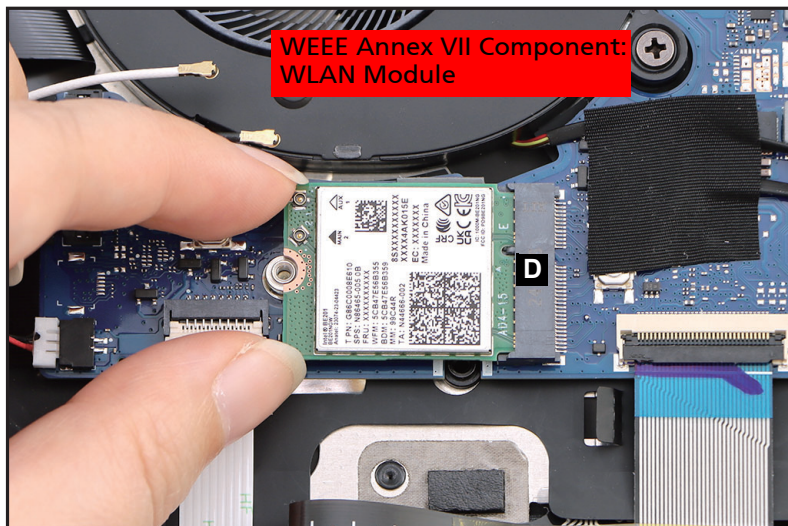
Figure 1-19. WLAN Module Removal

3. Disconnect the WLAN antennas cables from the WLAN module connectors (C) (Figure 1-20).
4. Remove one (1) screw securing the WLAN module in place (Figure 1-20).



**Figure 1-20. WLAN Module Removal**

5. Disconnect the WLAN module from the mainboard connector (D) and remove it from the top assembly (Figure 1-21).



**Figure 1-21. WLAN Module Removal**

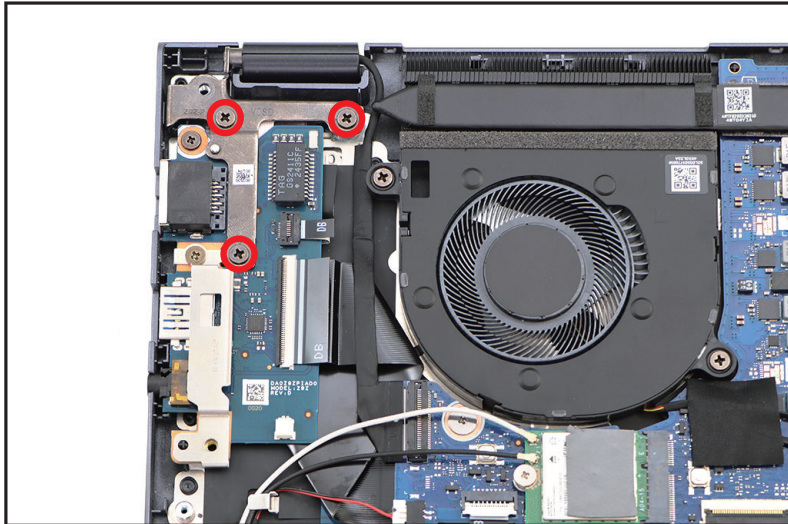
## USB Board Removal

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### Prerequisite:

#### Battery Removal

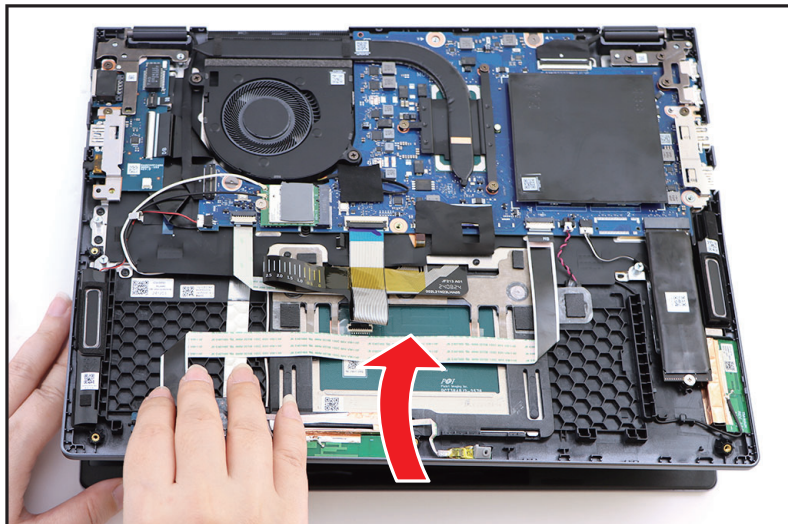
1. Remove three (3) screws securing the left LCD hinge (Figure 1-22).



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**Figure 1-22. USB Board Removal**

2. Lift the top assembly until it is fully open (Figure 1-23).

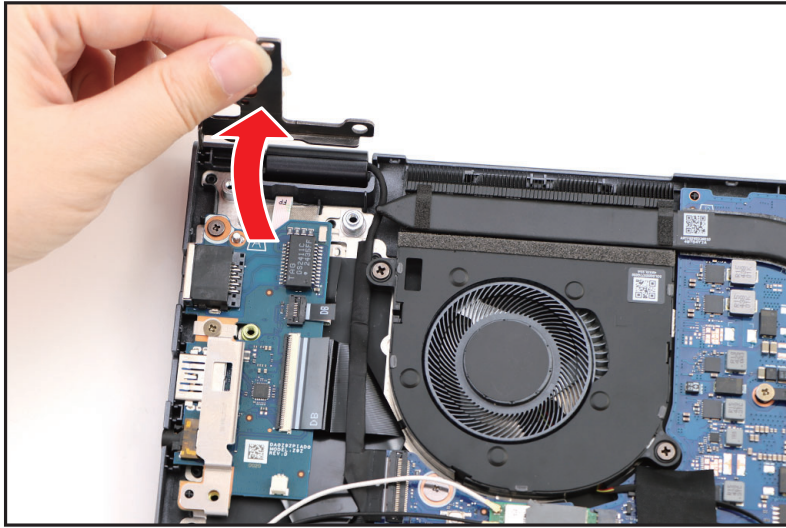


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**Figure 1-23. USB Board Removal**

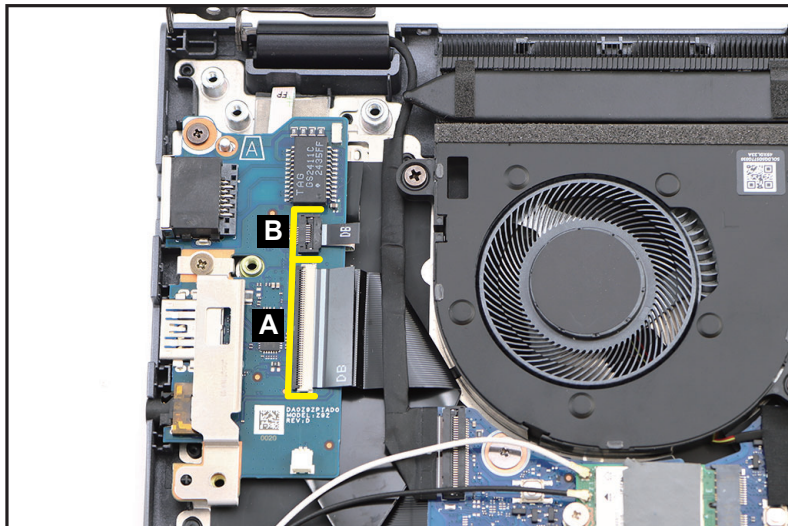


3. Close the top assembly and lift the left LCD hinge until it is fully extended (Figure 1-24).



**Figure 1-24. USB Board Removal**

4. Disconnect the USB board FFC (A) from the USB board connectors (Figure 1-25).
5. Disconnect the fingerprint FFC from the USB board connector (B) (Figure 1-25).

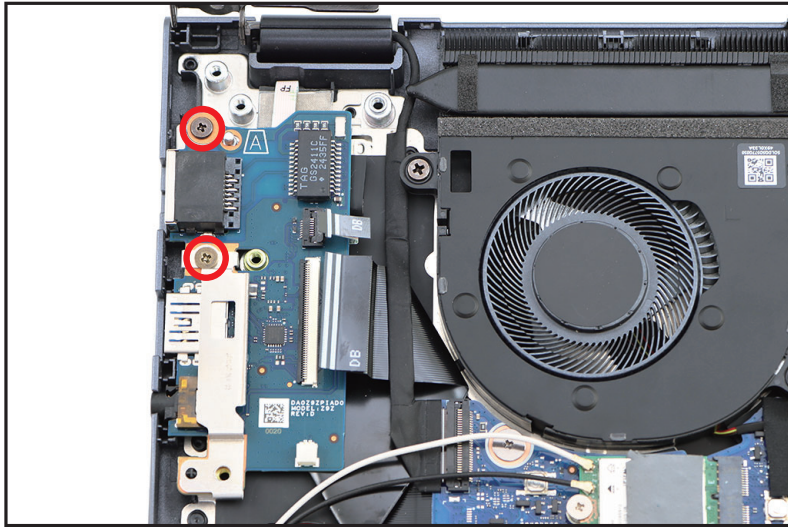


**Figure 1-25. USB Board Removal**

**⚠ CAUTION:**

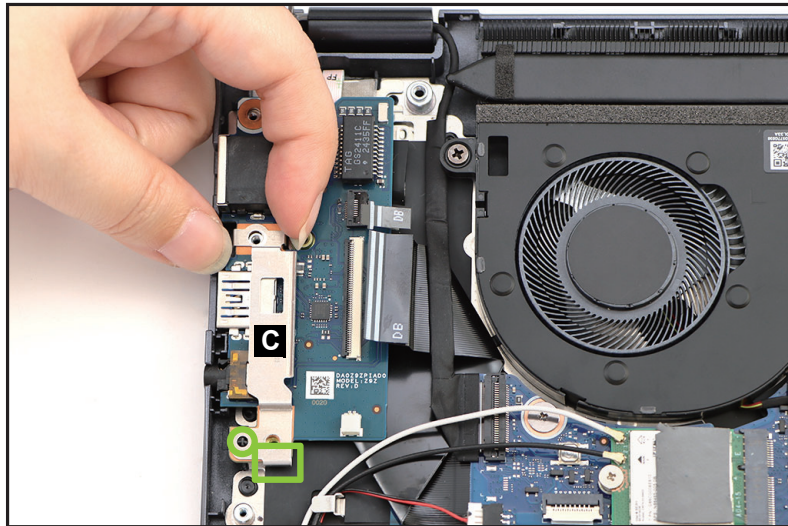
USB board FFC (Flexible Flat Circuit) and fingerprint FFC can be damaged if removed while the USB board connectors are locked.

6. Remove two (2) screws securing the USB board and I/O bracket (Figure 1-26).



**Figure 1-26. USB Board Removal**

7. Release the I/O bracket (C) from the guide tab (marked with the green lines) and guide pin (marked with the green circle). Then remove it from the top assembly (Figure 1-27).



**Figure 1-27. USB Board Removal**

8. Release the USB board (D) from the I/O port slots (marked with the green line) and guide pins (marked with the green circles) on the top assembly (Figure 1-28). Then remove the USB board.



**Figure 1-28. USB Board Removal**

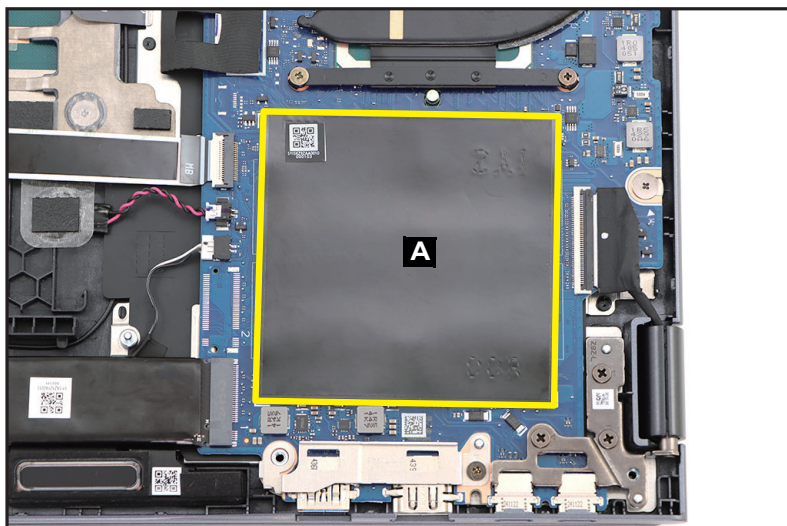
# DIMM (Dual In-line Memory Module) Removal

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## Prerequisite:

### Battery Removal

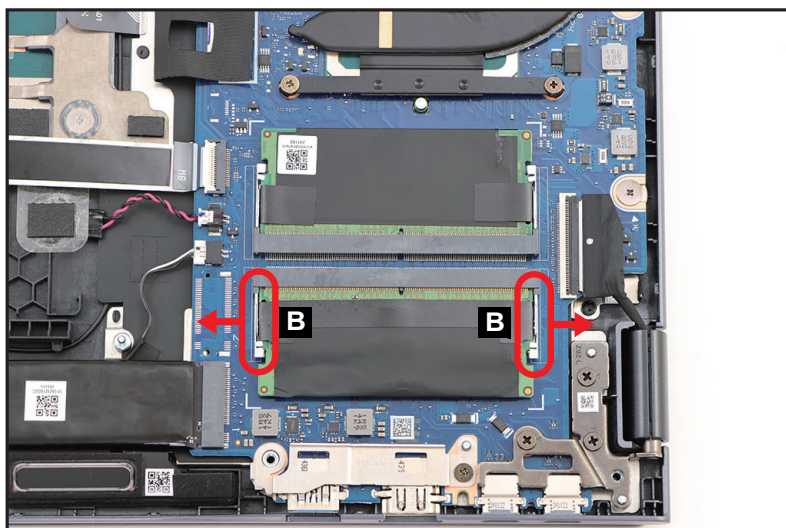
1. Remove the absorber with aluminum foil from the memory modules ([Figure 1-29](#)).



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**Figure 1-29. DIMM Module Removal**

2. Push the DIMM module clips (B) outwards ([Figure 1-30](#)).

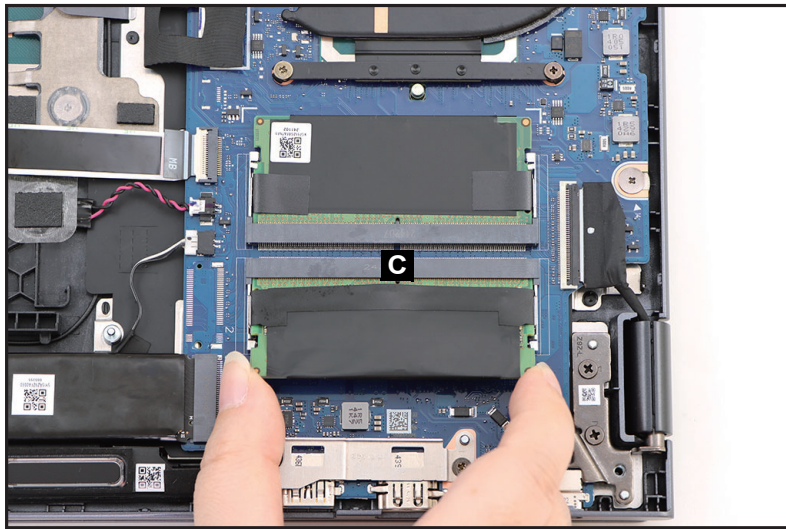


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**Figure 1-30. DIMM Module Removal**

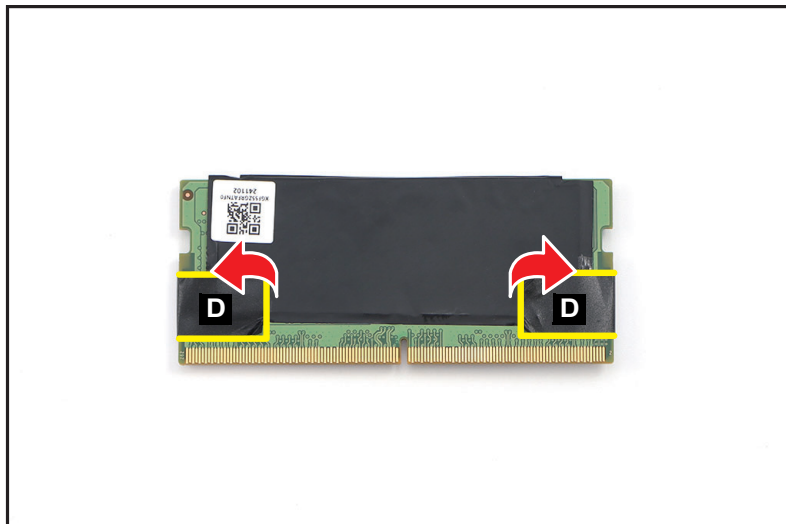


3. Remove the DIMM module from the mainboard connector (C) (Figure 1-31).



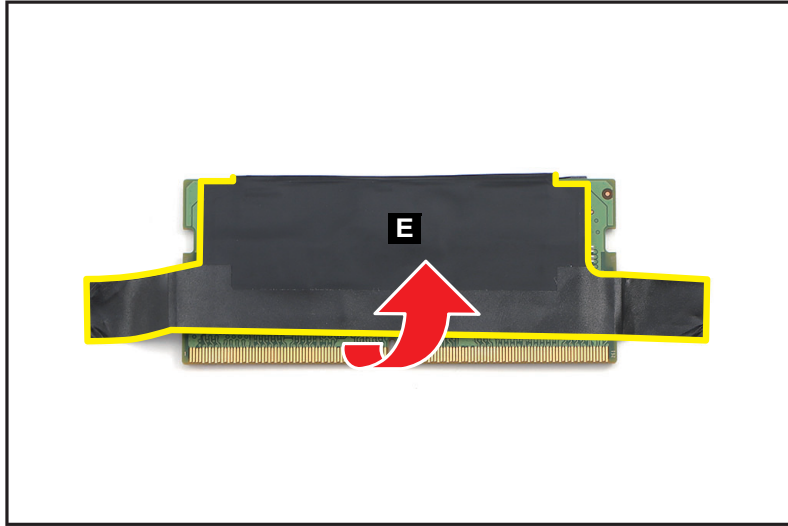
**Figure 1-31. DIMM Module Removal**

4. Detach the mylar tabs (D) from the DIMM module as shown in Figure 1-32.



**Figure 1-32. DIMM Module Removal**

5. By holding the edge of the composite foil with thermal pad (E), unfold and detach it from the DIMM module as shown in [Figure 1-33](#).



**Figure 1-33. DIMM Module Removal**

6. Detach the DIMM module from the thermal pad (marked with the yellow dashed lines) as shown in [Figure 1-34](#).



**Figure 1-34. DIMM Module Removal**

7. Repeat steps 2 to 6 to remove another DIMM module (if necessary).



# LCD Module Removal

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## Prerequisite:

### Battery Removal

1. Disconnect the sensor cable from the mainboard connector (A) and unroute it from the top assembly (Figure 1-35).

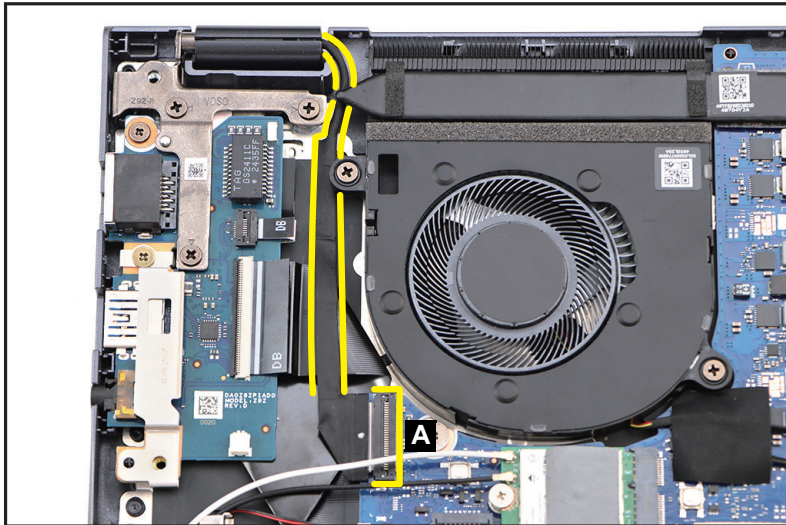


Figure 1-35. LCD Module Removal

### **⚠ CAUTION:**

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

2. Disconnect the LCD cable from the mainboard connector (B) (Figure 1-36).

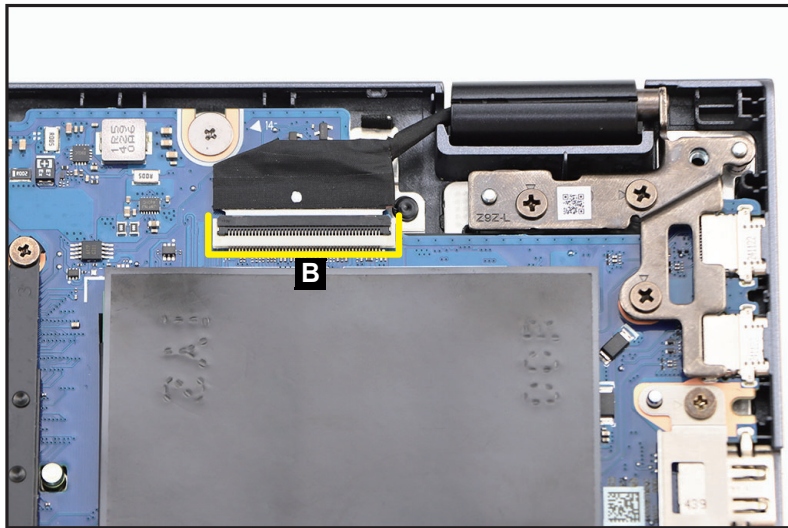


Figure 1-36. LCD Module Removal

**⚠ CAUTION:**

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

3. Remove six (6) screws securing the LCD hinges in place (Figure 1-37).

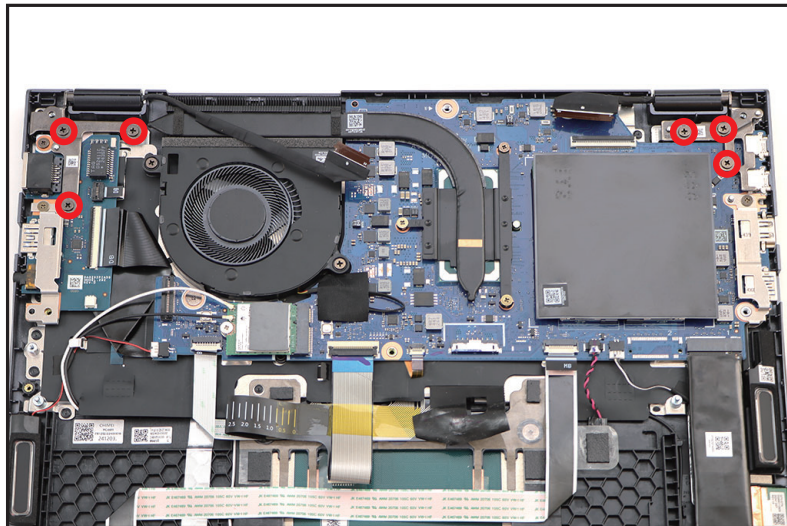
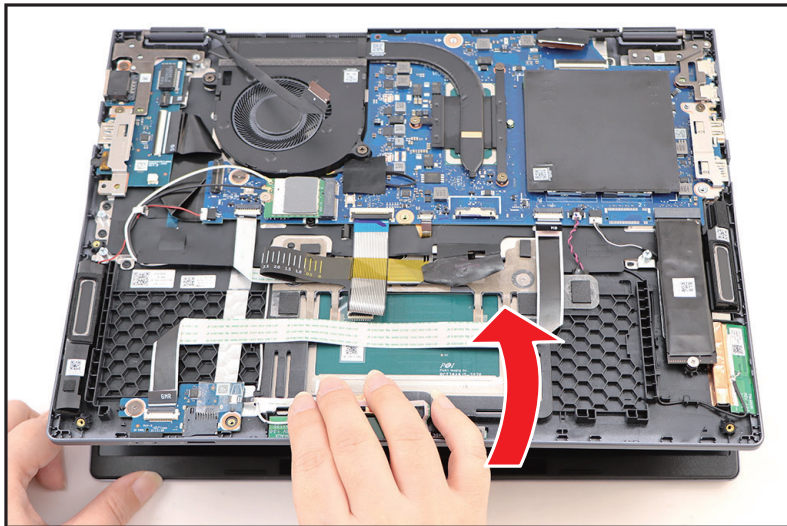


Figure 1-37. LCD Module Removal

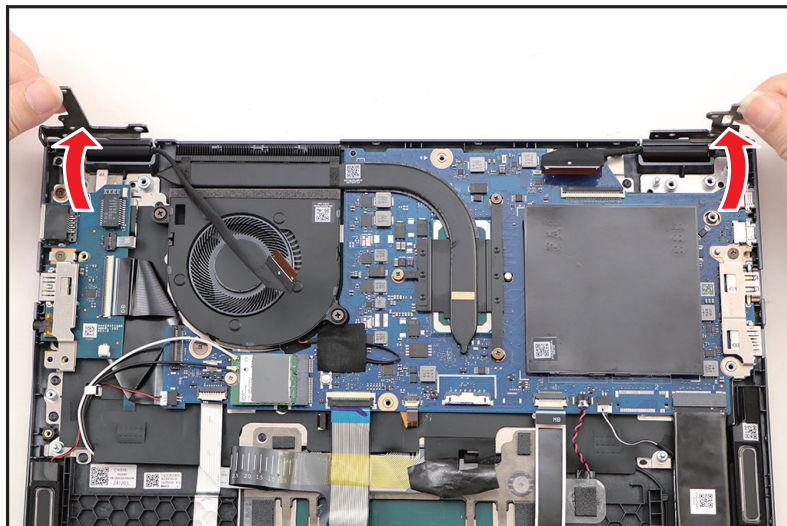
4. Lift the top assembly until it is fully open ([Figure 1-38](#)).



---

**Figure 1-38. LCD Module Removal**

5. Close the top assembly and lift both LCD hinges until they are fully extended ([Figure 1-39](#)).



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**Figure 1-39. LCD Module Removal**

6. Open the top assembly again and lift to remove the top assembly (Figure 1-40).



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**Figure 1-40. LCD Module Removal**

**⚠ CAUTION:**

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



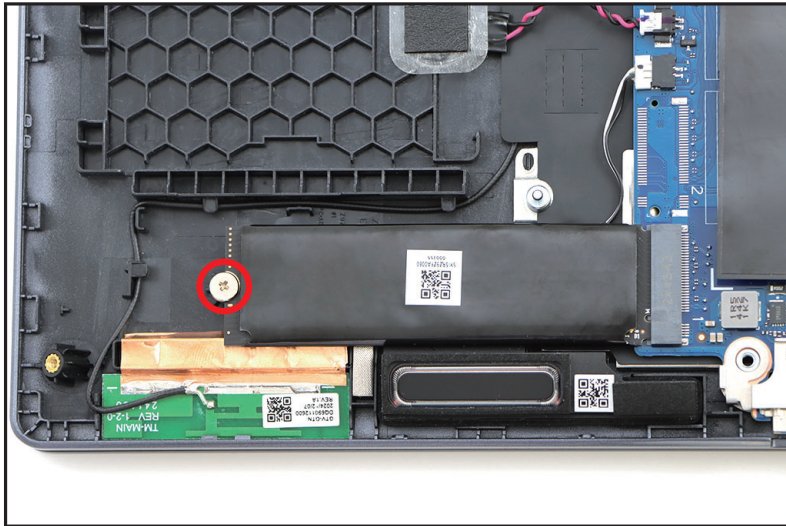
# SSD Module Removal

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## Prerequisite:

### Battery Removal

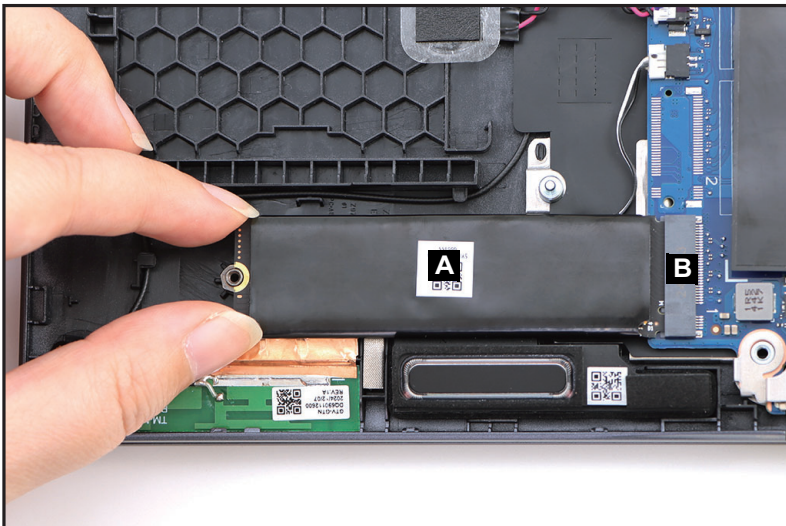
1. Remove one (1) screw securing the SSD assembly in place ([Figure 1-41](#)).



---

**Figure 1-41. SSD Module Removal**

2. Disconnect the SSD assembly (A) from the mainboard connector (B) ([Figure 1-42](#)).



---

**Figure 1-42. SSD Module Removal**



3. By holding the upper edge of the copper foil with mylar (C), unfold and detach it from the SSD module as shown in [Figure 1-43](#) and [Figure 1-44](#) but DO NOT remove yet!

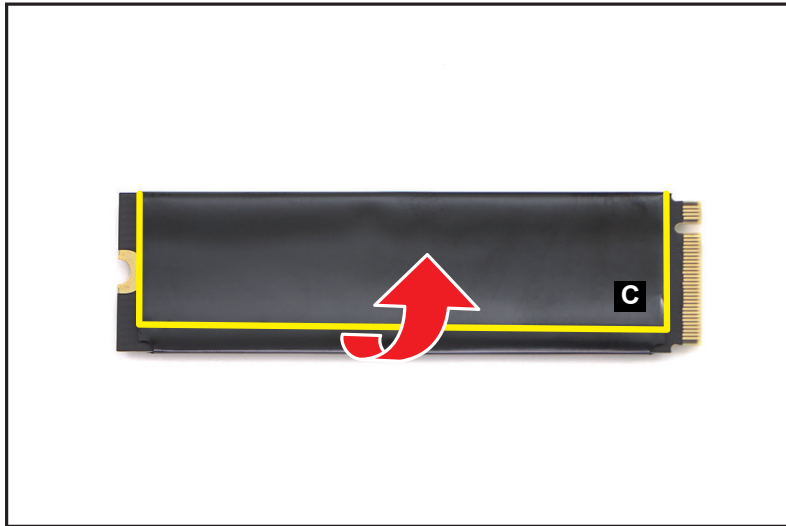


Figure 1-43. SSD Module Removal

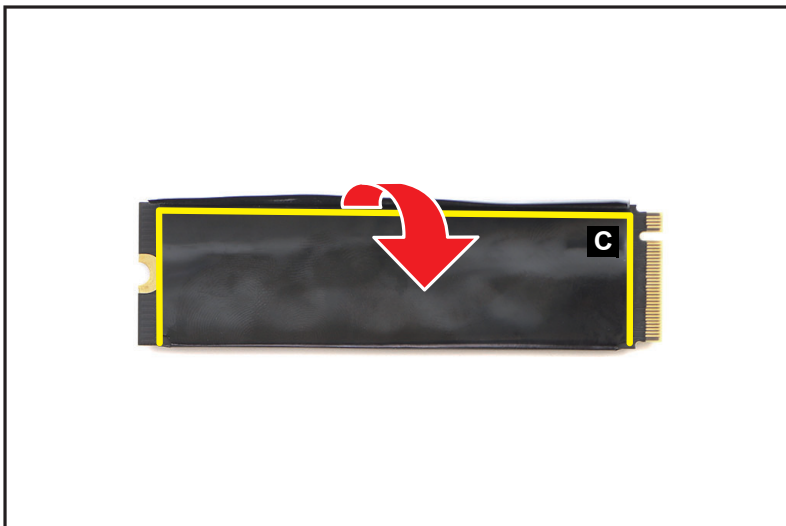


Figure 1-44. SSD Module Removal

4. Detach the SSD module from the adhesive graphite strip (marked with the yellow dashed line) as shown in [Figure 1-45](#).



**Figure 1-45. SSD Module Removal**

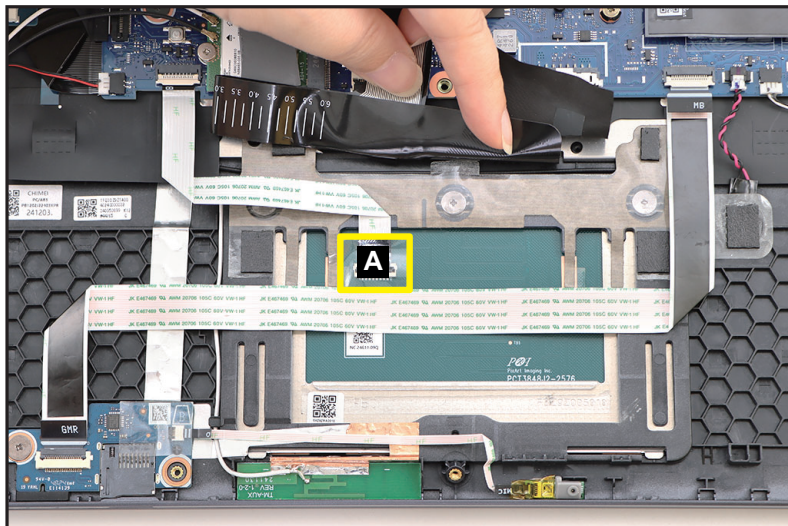
# Touchpad Module Removal

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## Prerequisite:

Ensure that the **Stylus Holder (Optional)** has been disassembled prior removing the touchpad module.

1. Detach the mylar (A) securing the touchpad module FFC connection as shown in [Figure 1-46](#).



---

**Figure 1-46. Touchpad Module Removal**

2. Disconnect the touchpad module FFC (B) from the mainboard and touchpad connectors (Figure 1-47).
3. Disconnect the LED board FFC from the mainboard connector (C). Then carefully detach the FFC from its underneath adhesives (highlighted with the yellow lines) as shown in Figure 1-47.

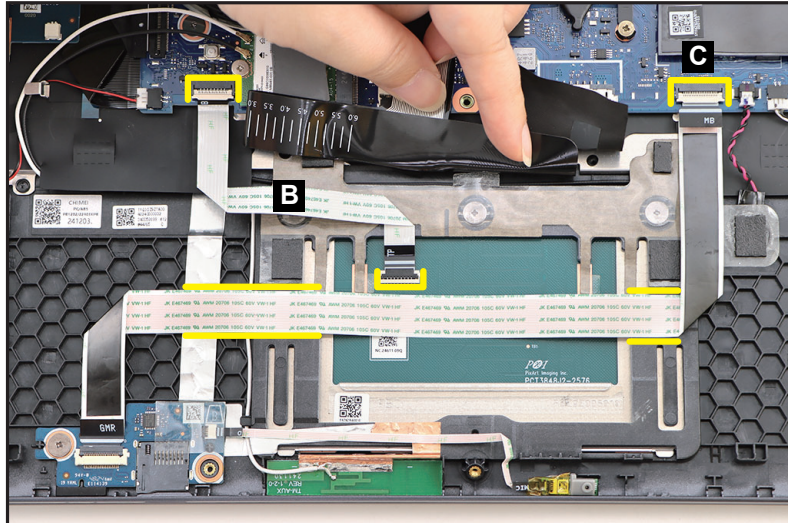
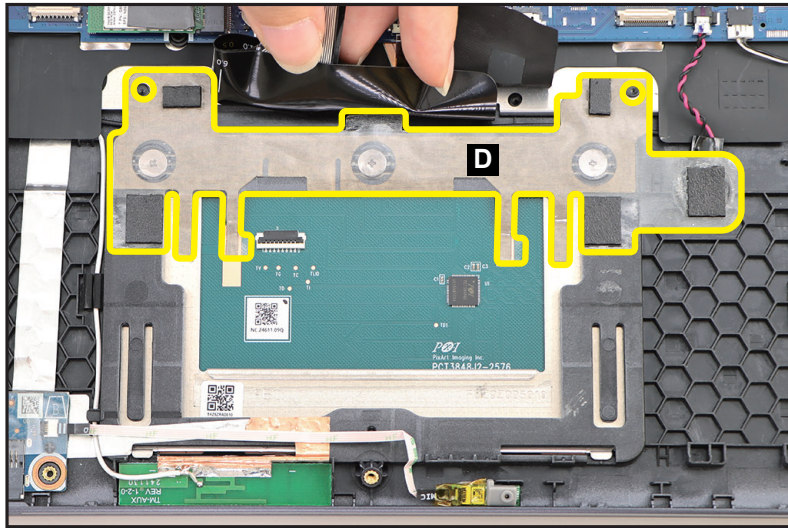


Figure 1-47. Touchpad Module Removal

**⚠ CAUTION:**

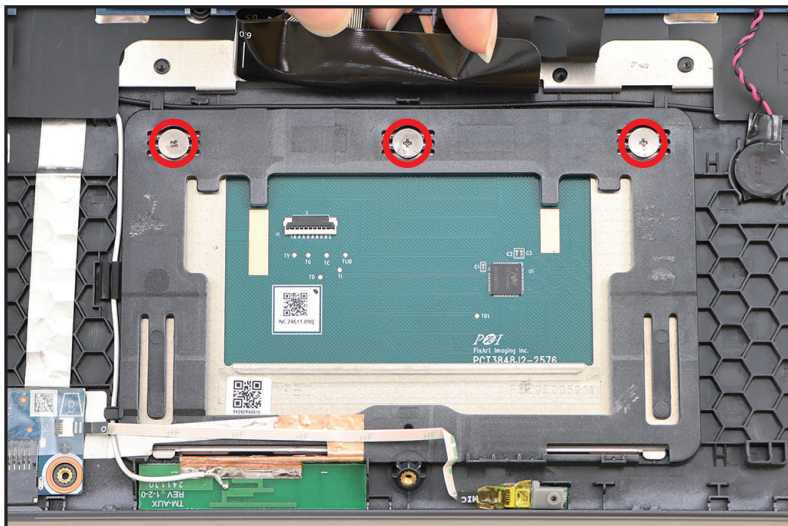
Touchpad module FFC (Flexible Flat Circuit) and LED board FFC can be damaged if removed while the mainboard and touchpad module connectors are locked.

4. Slightly lift the mylar. Then detach the conductive tape (D) from the touchpad module and top assembly ([Figure 1-48](#)).



**Figure 1-48. Touchpad Module Removal**

5. Remove three (3) screws securing the touchpad module ([Figure 1-49](#)).



**Figure 1-49. Touchpad Module Removal**



6. Push the upper part of the touchpad module (E) to release it from the screw hole studs (F) (Figure 1-50).
7. Slide the touchpad module slightly to disengage it from the bottom latches (G) (Figure 1-50). Then remove the touchpad module from the top assembly.

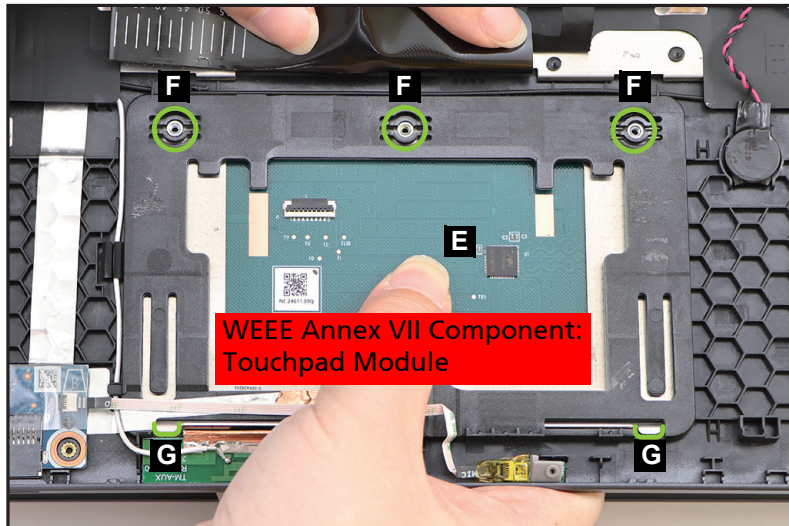


Figure 1-50. Touchpad Module Removal

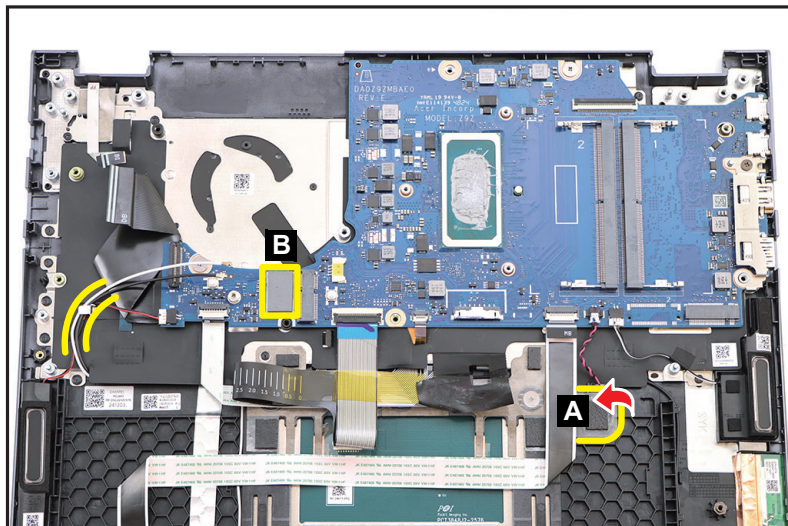
# Mainboard Removal

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## Prerequisite:

Ensure that the **WLAN Module**, **USB Board**, **Fan Module**, **Heatsink**, **DIMM (Dual In-line Memory Module)**, **LCD Module**, and **SSD Module** have been disassembled prior removing the mainboard.

1. Detach the mylar tab (A) from the RTC battery (Figure 1-51).
2. Detach the thermal pad (B) (Figure 1-51).
3. Unroute the WLAN antenna cables from the cable guide (Figure 1-51).



---

Figure 1-51. Mainboard Removal

4. Disconnect the right speaker cable from the mainboard connector (C) (Figure 1-52).
5. Disconnect the touchpad module FFC from the mainboard connector (D) (Figure 1-52).
6. Disconnect the keyboard FPC from the mainboard connector (E) (Figure 1-52).
7. Disconnect the keyboard backlight FFC from the mainboard connector (F) (Figure 1-52).
8. Disconnect the LED board FFC from the mainboard connector (G) (Figure 1-52).
9. Disconnect the left speaker cable from the mainboard connector (H) (Figure 1-52).
10. Using plastic tweezers, carefully pry to detach the adhesive tape underneath the RTC battery (I) but DO NOT remove it (Figure 1-52).

**⚠ CAUTION:**

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

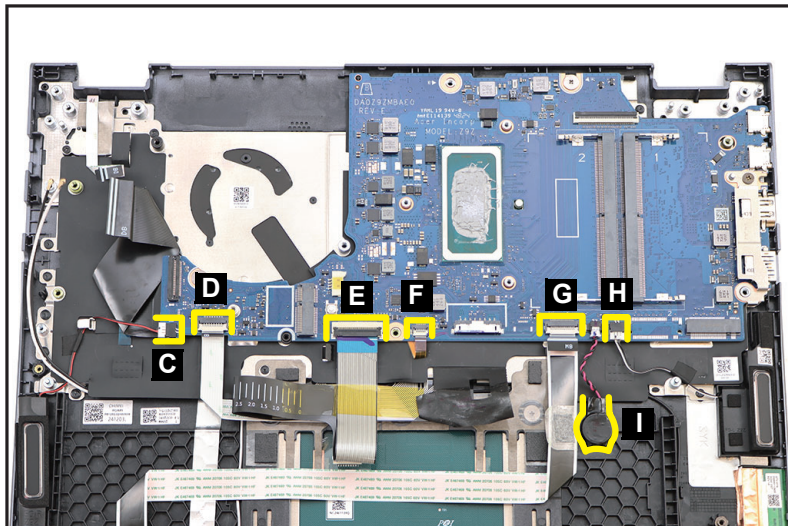
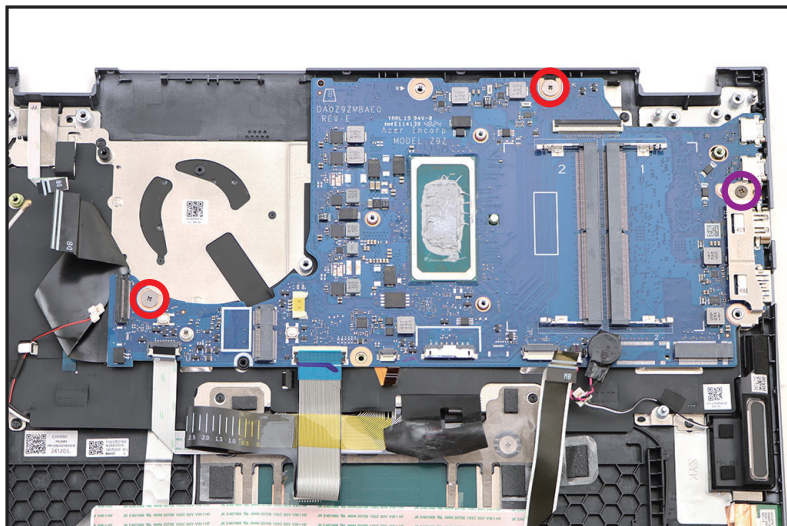


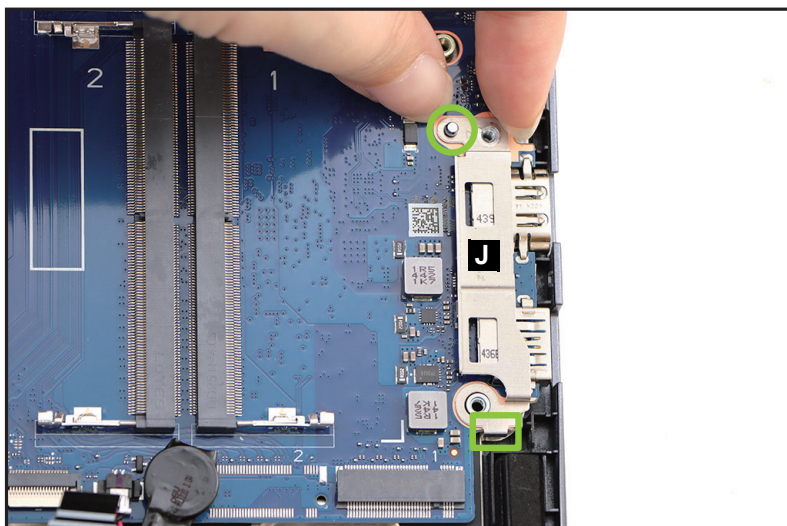
Figure 1-52. Mainboard Removal

11. Remove three (3) screws securing the mainboard and I/O bracket in place (Figure 1-53).



**Figure 1-53. Mainboard Removal**

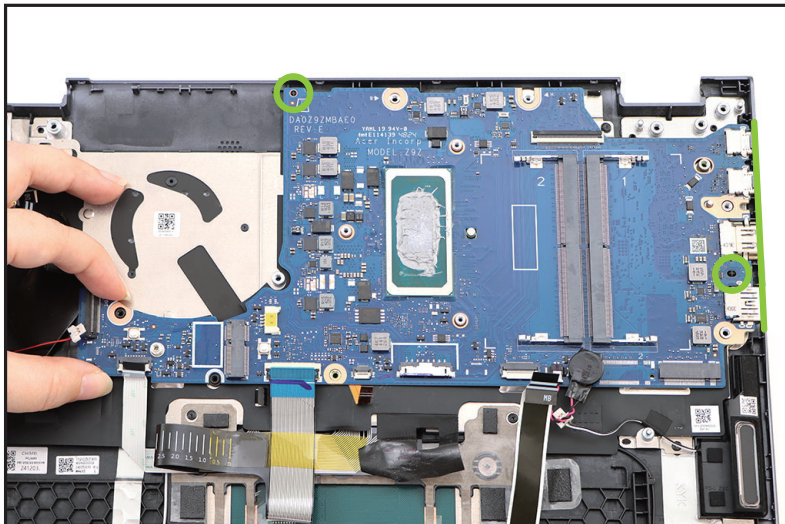
12. Release the I/O bracket (J) from the guide pin (marked with the green circle) and guide tab (marked with the green lines). Then remove the bracket from the top assembly (Figure 1-54).



**Figure 1-54. Mainboard Removal**

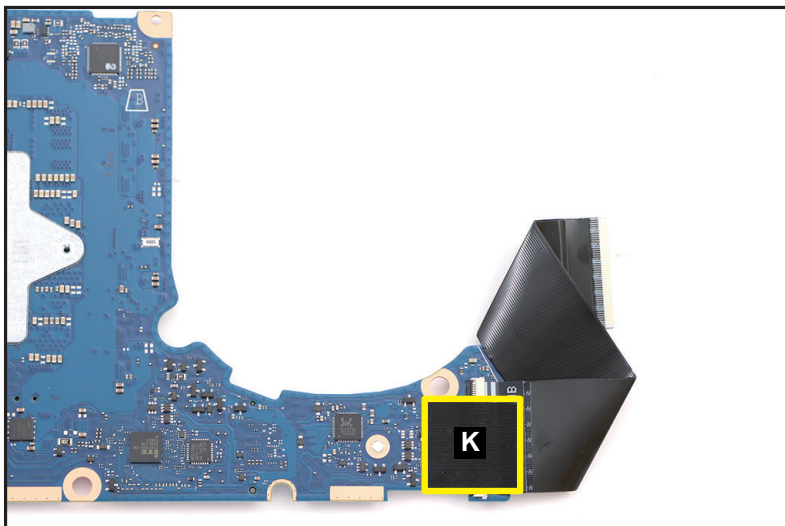


13. Slightly lift to release the mainboard from the guides (marked with the green circles) and then release its I/O ports from the I/O slots (marked with the green line) on the top assembly (Figure 1-55).



**Figure 1-55. Mainboard Removal**

14. Detach the acetate tape (K) from the USB board FFC (Figure 1-56).



**Figure 1-56. Mainboard Removal**



15. Disconnect the UBS board FFC from the mainboard connector (L) (Figure 1-57).

**⚠ CAUTION:**

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

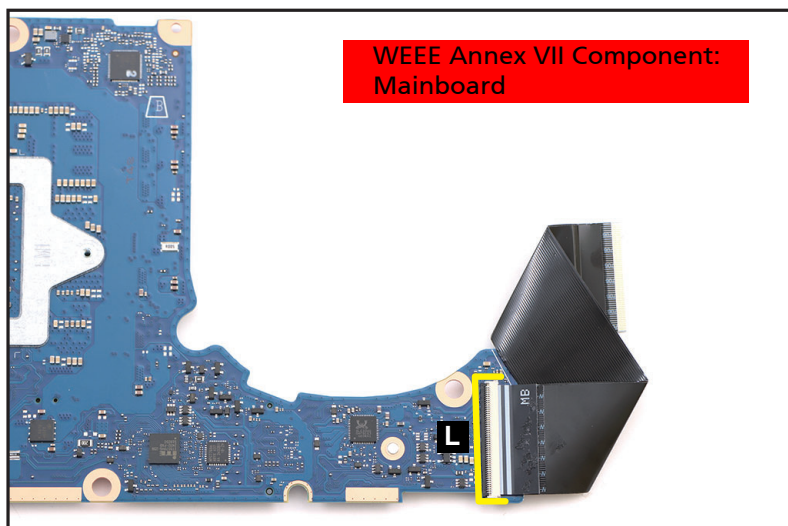


Figure 1-57. Mainboard Removal

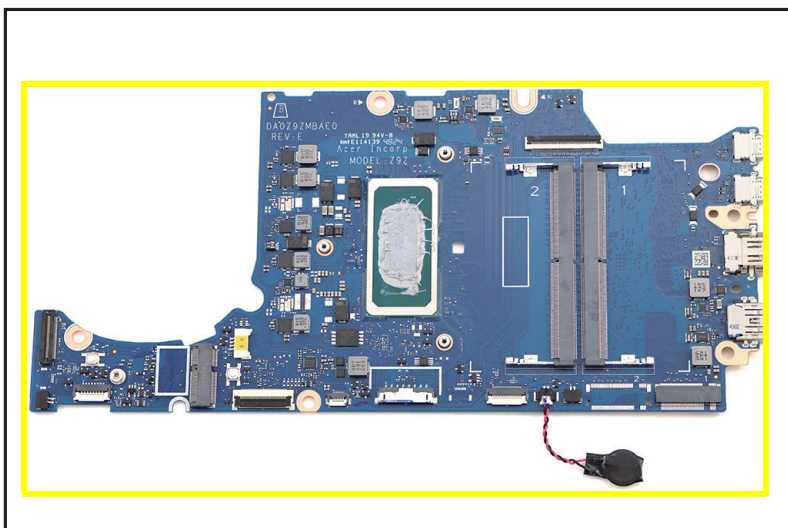


Figure 1-58. Mainboard

**+ IMPORTANT:**

Circuit boards >10 cm<sup>2</sup> have been highlighted with a yellow rectangle as shown in Figure 1-58. Remove the circuit board and follow local regulations for disposal.

## LCD Bezel Removal (Clamshell Model)

---

### Prerequisite:

[LCD Module Removal](#)

1. Pry the LCD bezel from the upper side to release latches ([Figure 1-59](#)).



---

**Figure 1-59. LCD Bezel Removal**

2. Continue prying along the left and right sides of the bezel ([Figure 1-60](#)).



---

**Figure 1-60. LCD Bezel Removal**

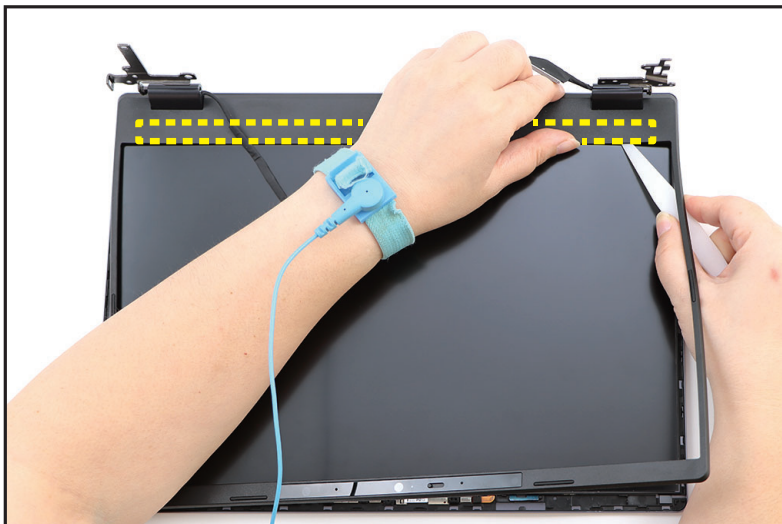
3. Continue prying the bottom left side of the LCD bezel near the bezel cap (Figure 1-61).



---

**Figure 1-61. LCD Bezel Removal**

4. 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 1-62. While detaching the LCD bezel, ensure to follow the direction from left to right as shown in Figure 1-63.



---

**Figure 1-62. LCD Bezel Removal**



---

**Figure 1-63. LCD Bezel Removal**

5. Release the right side hinge cap and remove the LCD bezel from the LCD cover ([Figure 1-64](#)).



---

**Figure 1-64. LCD Bezel Removal**

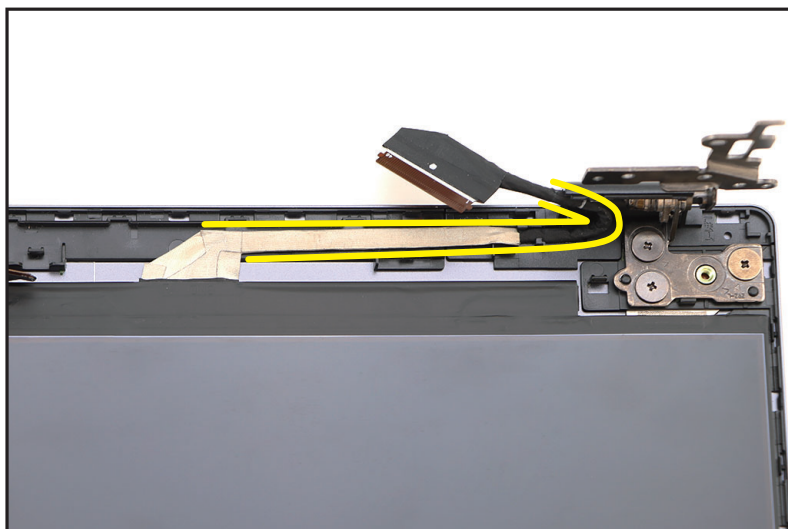
## LCD Panel Removal (Clamshell Model)

---

### Prerequisite:

[LCD Bezel Removal \(Clamshell Model\)](#)

1. Release the LCD cable from the LCD hinge and from the bottom cable guides on the LCD cover ([Figure 1-65](#)).

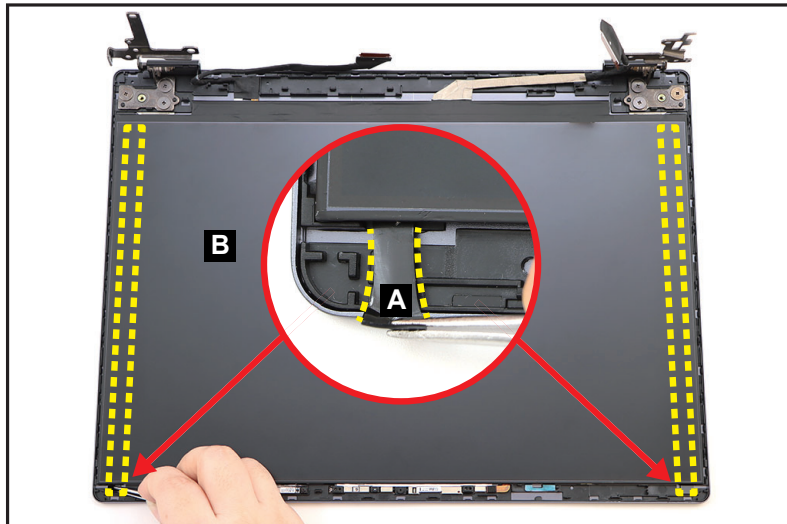


---

Figure 1-65. LCD Panel Removal

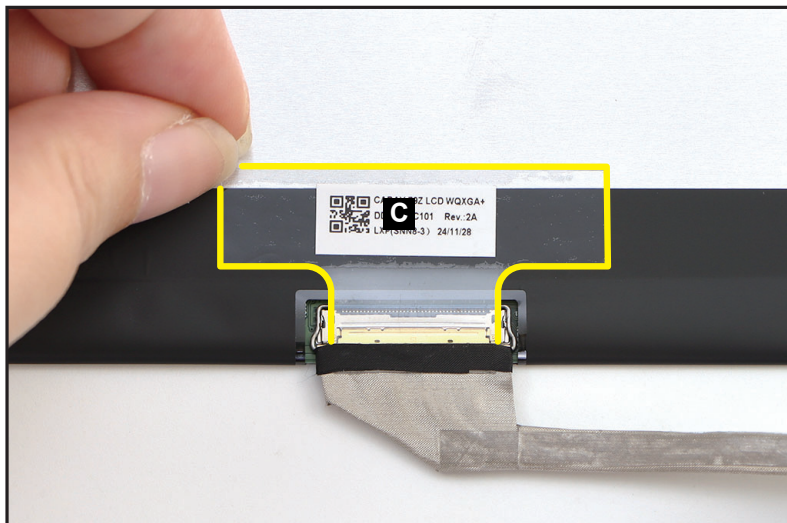


2. Pry slightly to access the double-sided mounting tape (A) underneath the LCD panel (B). Then pull to detach the double-sided mounting tape from the LCD cover. Repeat the same procedure to remove the double-sided mounting tape on another side of the LCD panel (Figure 1-66).



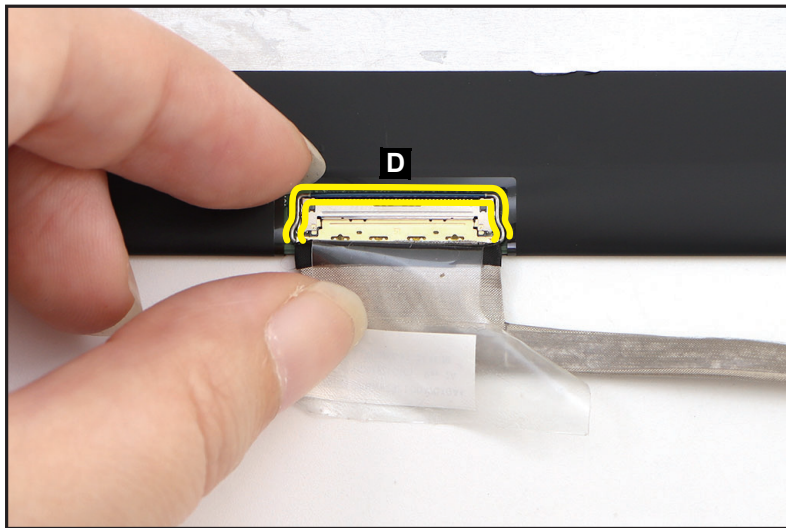
**Figure 1-66. LCD Panel Removal**

3. Carefully turn the LCD panel over so that the display panel is facing down on a flat surface (Figure 1-67).
4. Detach the mylar tape (C) securing the LCD cable to the LCD panel (Figure 1-67).



**Figure 1-67. LCD Panel Removal**

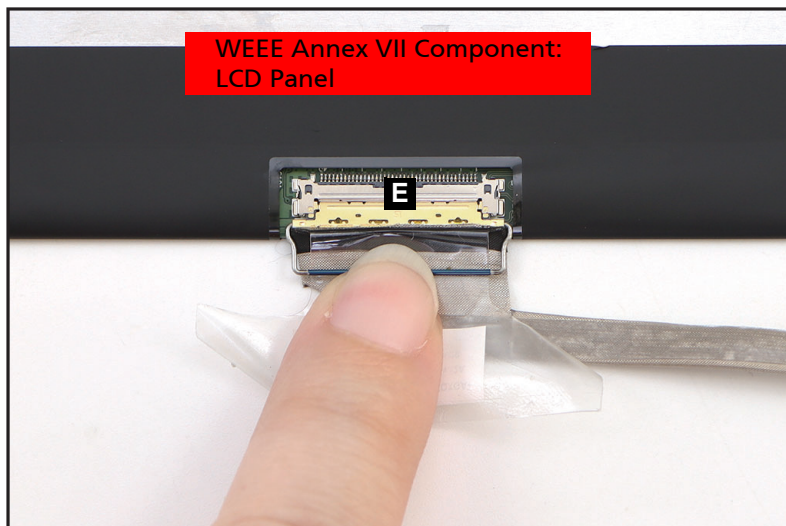
5. Release the LCD cable latch (D) (Figure 1-68).



---

**Figure 1-68. LCD Panel Removal**

6. Disconnect the LCD cable from the LCD panel connector (E) (Figure 1-69).



---

**Figure 1-69. 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.

## LCD Panel Removal (Convertible Model)

---

### Prerequisite:

Ensure that the **G-Sensor Board** has been disassembled prior removing the LCD panel.

### ⇒ NOTE:

Please take note that the LCD cable includes the LCD panel cable, camera cable, HDD sensor cable, touch control board cable, and G-sensor cable.

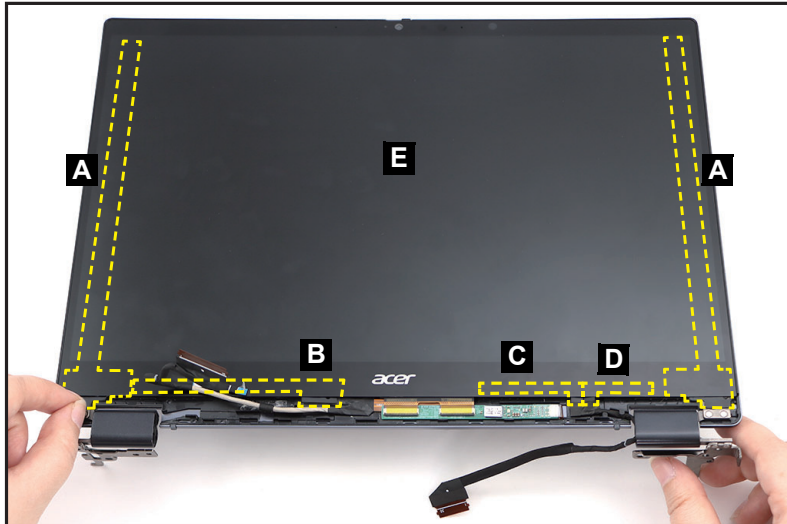
1. Release the LCD cable from the LCD hinge cap and from the bottom side cable guides on the LCD cover ([Figure 1-70](#)).



---

**Figure 1-70. LCD Panel Removal**

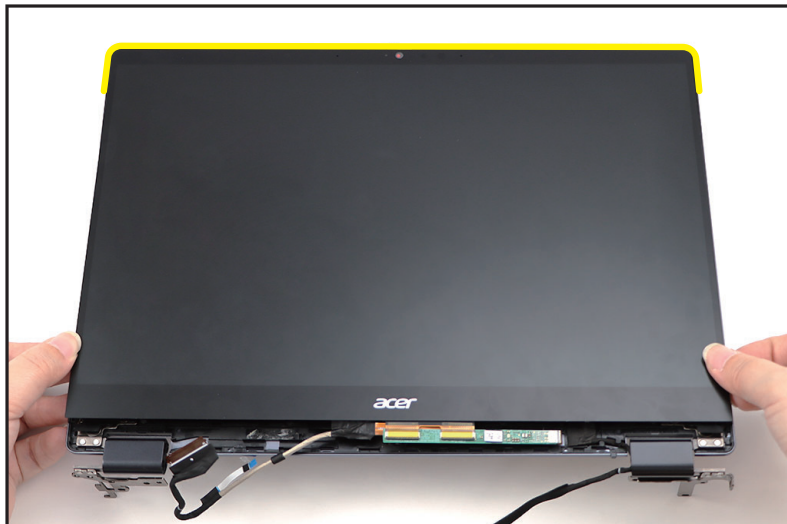
2. Pry slightly to access the double-sided mounting tape (A), (B), (C), and (D) underneath the LCD panel (E). Then pull to detach the double-sided mounting tapes from the LCD cover. Repeat the same procedure to remove the double-sided mounting tapes on another side of the LCD panel (Figure 1-71).



---

**Figure 1-71. LCD Panel Removal**

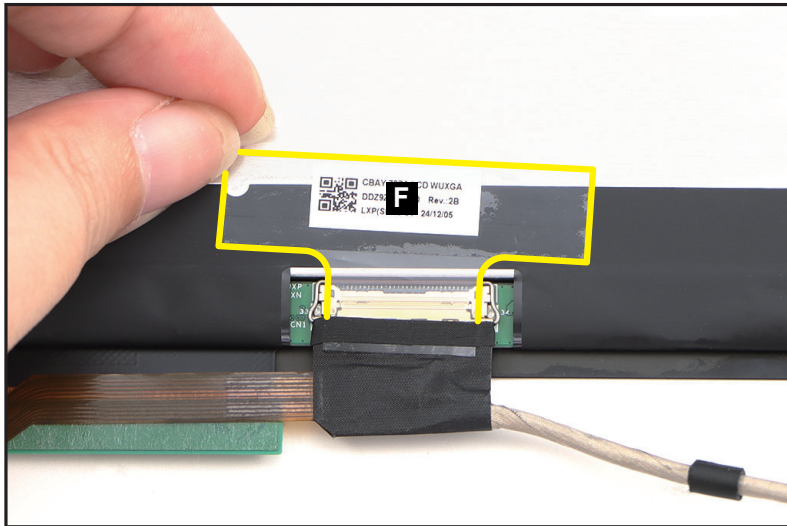
3. Slightly lift the bottom side of the LCD panel and then release it from the upper side (marked with the yellow line) of the LCD cover (Figure 1-72).



---

**Figure 1-72. LCD Panel Removal**

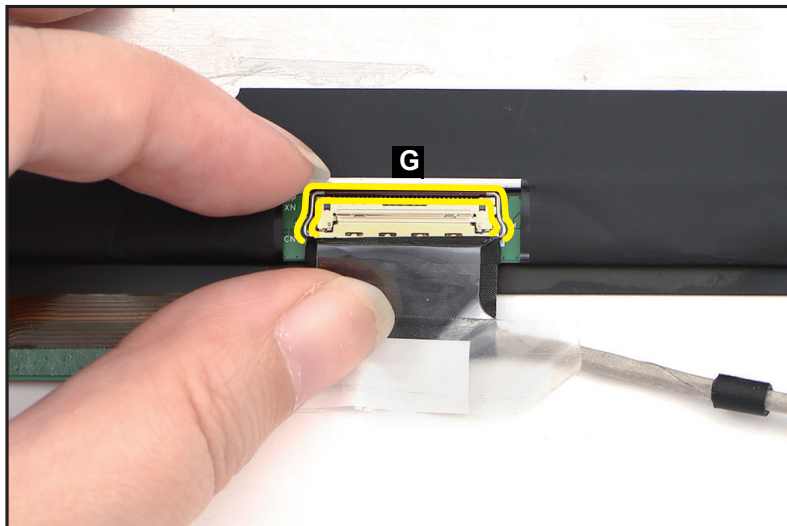
4. Carefully turn the LCD panel over so that the display panel is facing down on a flat surface ([Figure 1-73](#)).
5. Detach the mylar tape (F) securing the LCD cable to the LCD panel ([Figure 1-73](#)).



---

**Figure 1-73. LCD Panel Removal**

6. Release the LCD cable latch (G) ([Figure 1-74](#)).

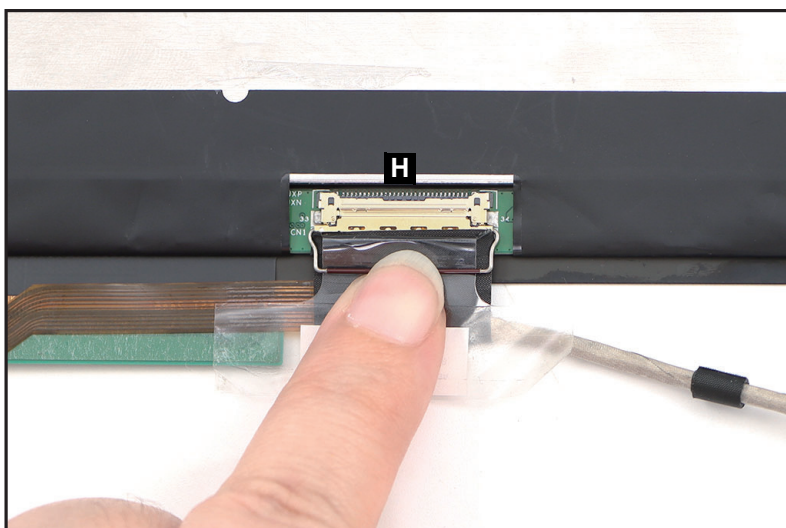


---

**Figure 1-74. LCD Panel Removal**



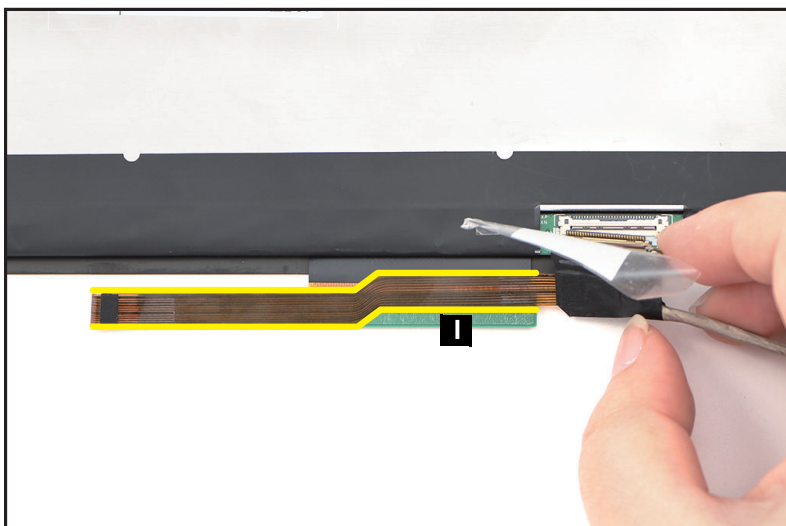
7. Disconnect the LCD cable from the LCD panel connector (H) ([Figure 1-75](#)).



---

**Figure 1-75. LCD Panel Removal**

8. Detach the LCD cable from the touch control board (I) ([Figure 1-76](#)).



---

**Figure 1-76. LCD Panel Removal**

9. Detach the mylar (J) from the LCD cable connector. Then disconnect the LCD cable from the touch control board (I) (Figure 1-77).

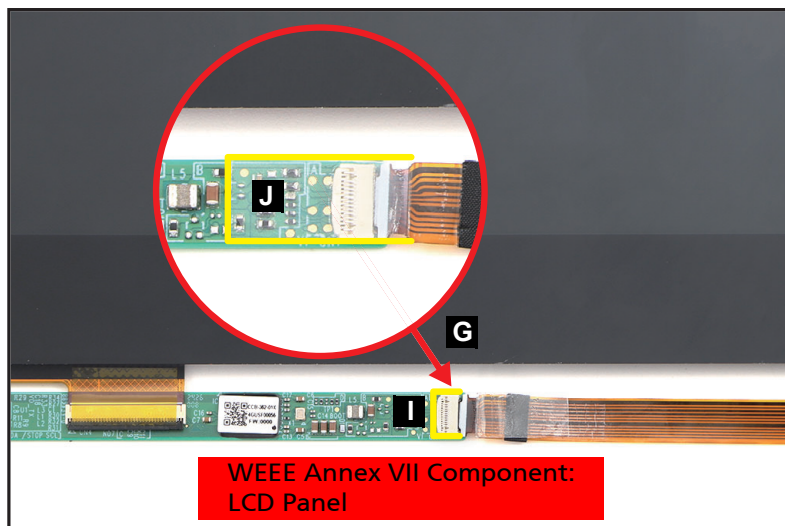


Figure 1-77. LCD Panel Removal

**⚠ CAUTION:**

LCD cable connector can be damaged if removed while the touch control board connector is locked.

10. 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 **LED Board, 3rd Microphone Board, RTC Battery, Touchpad Module, Right Speaker, Fingerprint, Mainboard, and Left Speaker** have been disassembled prior removing the top assembly.

### ⇒ NOTE:

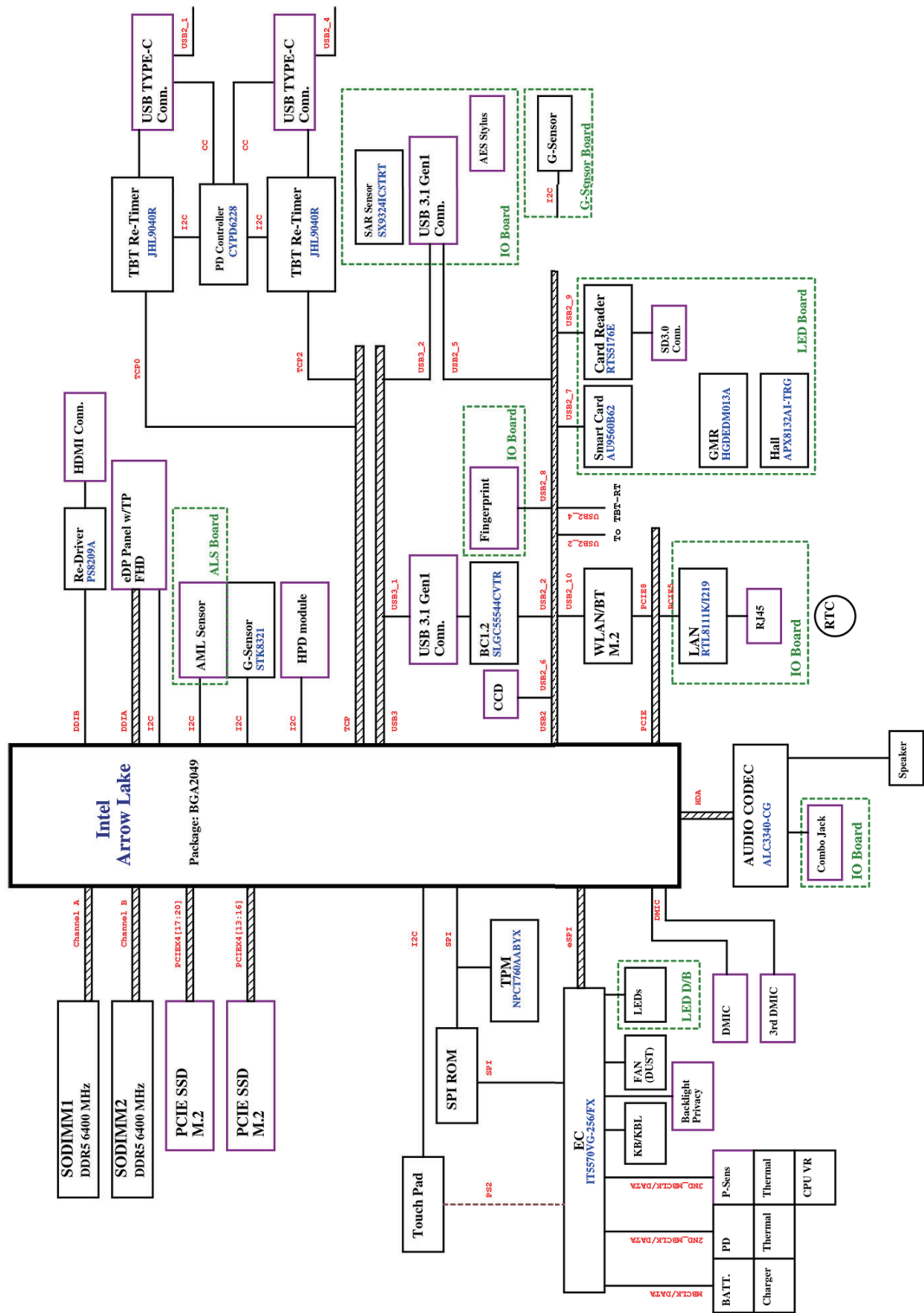
The keyboard is included as part of the top assembly and can not be disassembled. In the event that the keyboard can no longer be used, replace the entire top assembly.



---

**Figure 1-78. 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:

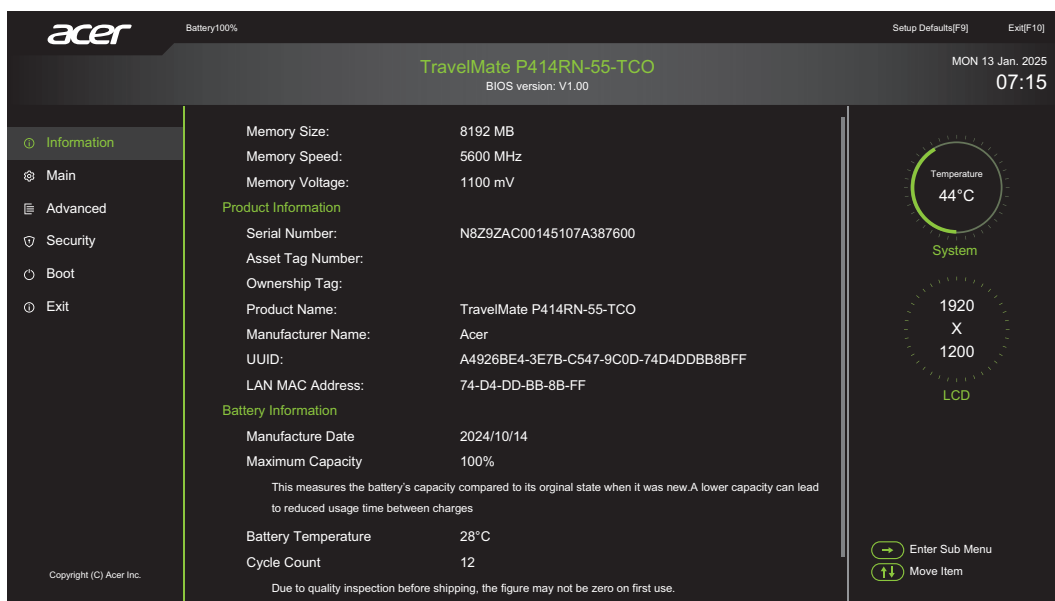
⇒ **NOTE:**  
The screens provided are for reference only. Actual values may differ by model.

## Information

The Information tab shows a summary of computer hardware information.



Figure 1-79. BIOS Information (Page 1)



**Figure 1-80. BIOS Information (Page 2)**

Table 1-1 describes the parameters shown in Figure 1-79 and Figure 1-80.

**Table 1-1. BIOS Information**

| Parameter                              | Description                                                      |
|----------------------------------------|------------------------------------------------------------------|
| CPU Info                               | CPU (central processing unit) type                               |
| Core Frequency                         | CPU (central processing unit) speed                              |
| System BIOS Version                    | System BIOS version                                              |
| GOP Version                            | GOP (graphics output protocol) firmware version of system        |
| HDD(OPAL) Model Name                   | Model name of HDD (hard disk drive)                              |
| HDD(OPAL) Serial Number                | Serial number of HDD                                             |
| Total Memory                           | Total memory installed                                           |
| Memory Vendor / Size / Speed / Voltage | Display the memory vendor, size, speed, and voltage respectively |
| Serial Number                          | Serial number of unit                                            |
| Asset Tag Number                       | Asset tag number of system                                       |
| Ownership Tag                          | Ownership tag number of system                                   |
| Product Name                           | Product name of the system                                       |
| Manufacturer Name                      | Manufacturer of system                                           |
| UUID                                   | Universally Unique Identifier                                    |

**Table 1-1. BIOS Information (Continued)**

| Parameter           | Description                                                                |
|---------------------|----------------------------------------------------------------------------|
| LAN MAC Address     | The device's MAC address                                                   |
| Manufacture Date    | Battery's manufacturing date                                               |
| Maximum Capacity    | View the battery's capacity compared to its original state when it was new |
| Battery Temperature | Battery's temperature                                                      |
| Cycle Count         | Number of times the battery has been fully charged and discharged          |

# Main

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

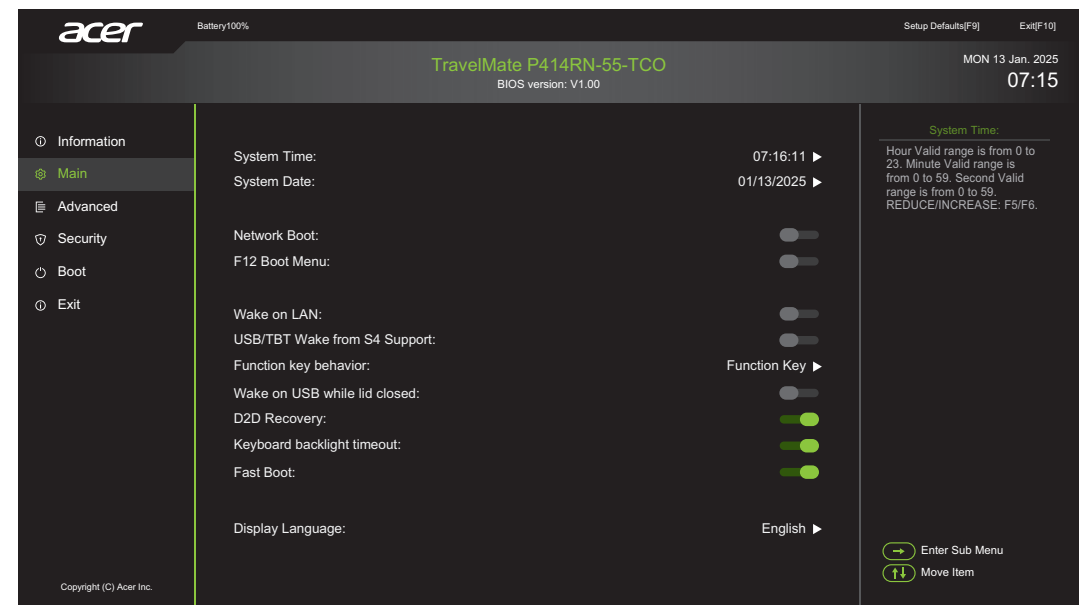


Figure 1-81. BIOS Main (Page 1)

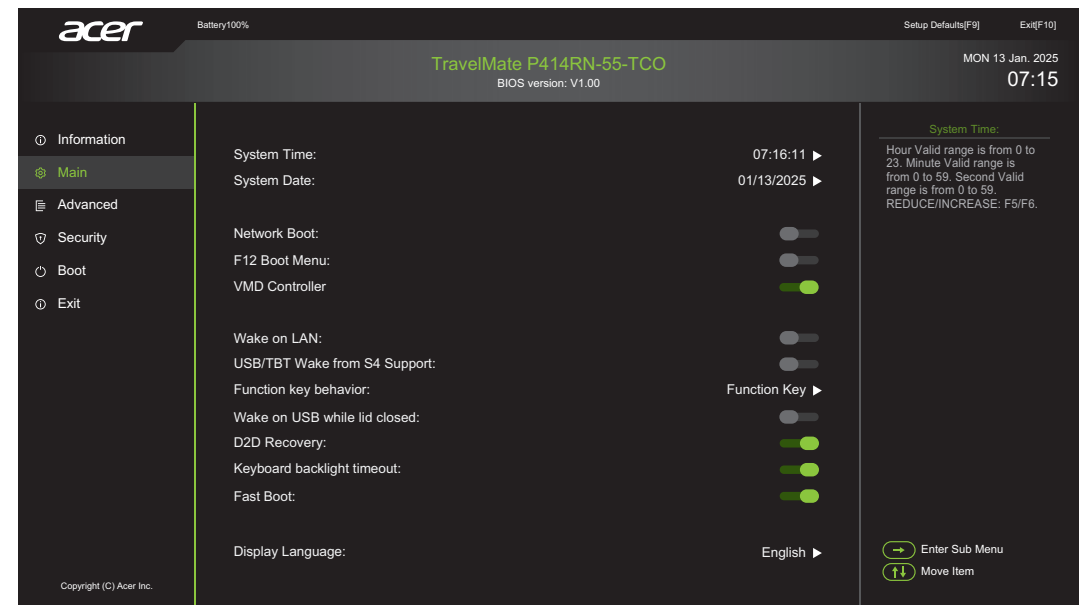
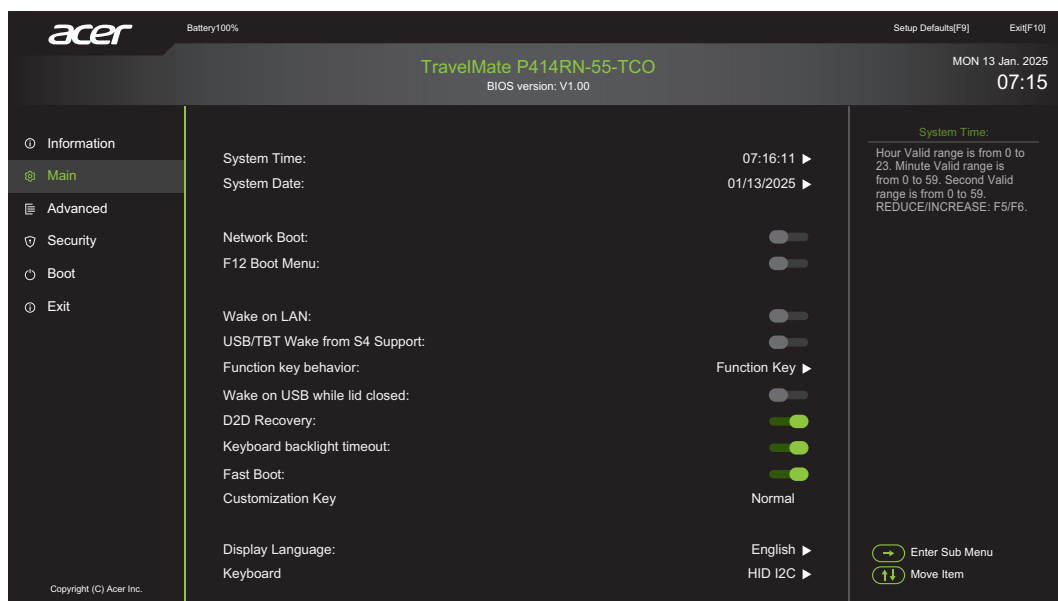


Figure 1-82. BIOS Main (Page 2)





**Figure 1-83. BIOS Main (with hidden options)**

Table 1-2 describes the parameters shown in Figure 1-81, Figure 1-82, and Figure 1-83.

**Table 1-2. BIOS Main**

| Parameter                         | Description                                                | Format/Option                            |
|-----------------------------------|------------------------------------------------------------|------------------------------------------|
| System Time                       | BIOS system time in 24-hour format                         | Format: HH:MM:SS<br>(hour:minute:second) |
| System Date                       | BIOS system date                                           | Format MM/DD/YYYY<br>(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              |
| VMD Controller<br>(hidden option) | Option to set VMD controller                               |                                          |
| Wake on LAN                       | Option to use Wake-on-LAN feature                          | Option: Enabled or Disabled              |
| USB/TBT Wake from S4 Support      | Option to enable/disable support USB/TBT wake from S4      | Option: Enabled or Disabled              |
| Function key behavior             | Option to specify the <b>F1</b> to <b>F12</b> key behavior | Option: Function Key or Media Key        |

**Table 1-2. BIOS Main (Continued)**

| Parameter                         | Description                                                                             | Format/Option                  |
|-----------------------------------|-----------------------------------------------------------------------------------------|--------------------------------|
| 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                                                             | Option: Multi-language options |
| Keyboard (hidden option)          | Option to switch HID I2C and PS2 interface                                              | Option: HID I2C or PS2         |

⇒ **NOTE:**

To show the hidden options.

- Press **Ctrl+S** key to show the "VMD Controller" option.
- 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.

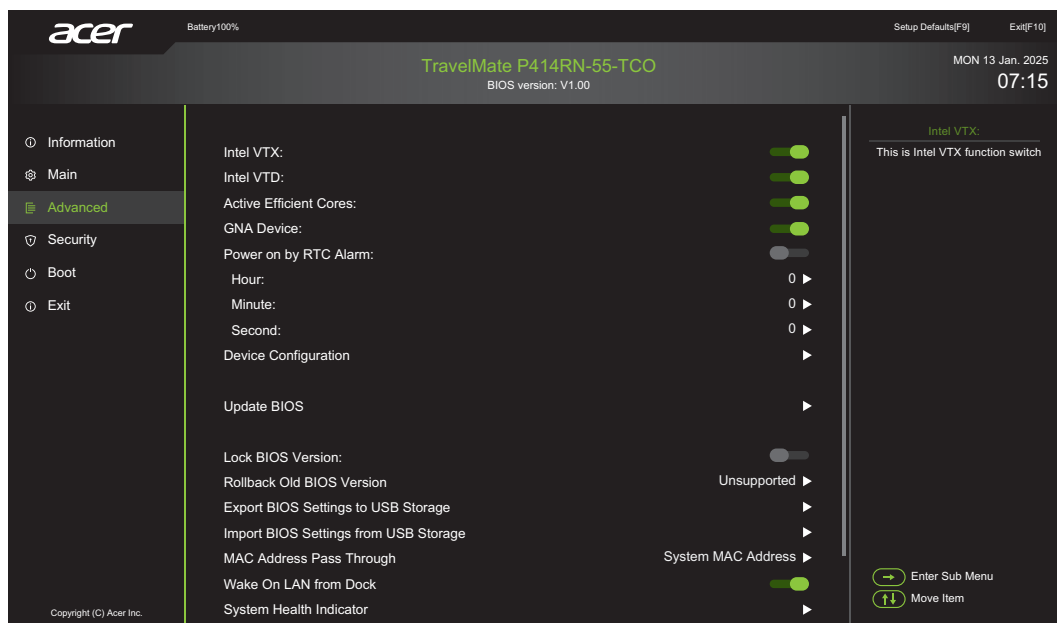


Figure 1-84. BIOS Advanced

Table 1-3 describes the parameters shown in Figure 1-84.

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 |
| GNA Device                   | Option to use GNA device                                     | 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         |
| 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<br>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<br>If <b>Yes</b> 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<br>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<br>If <b>Yes</b> 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.

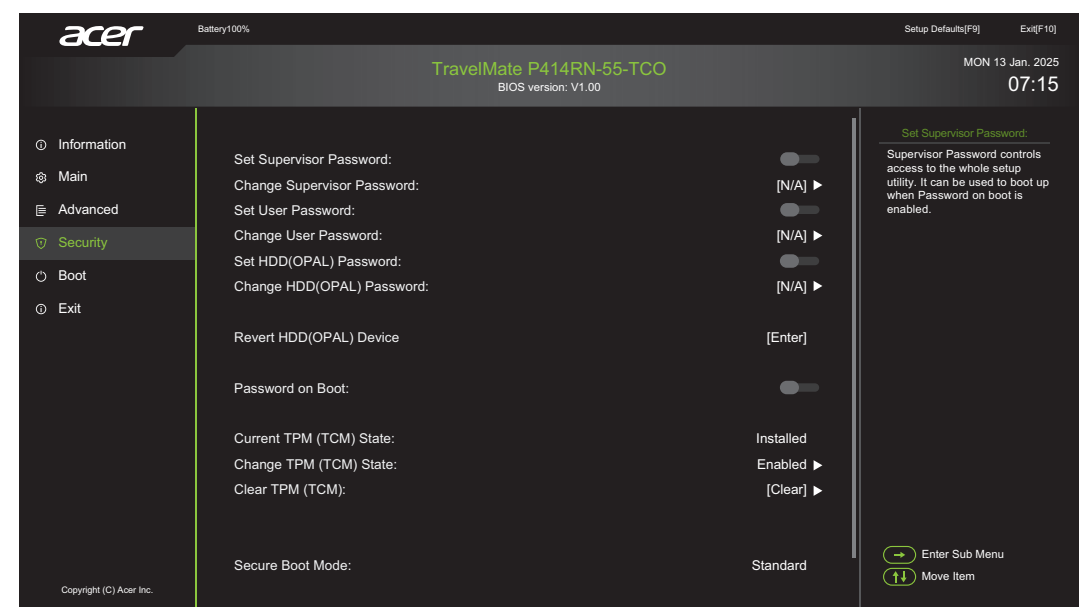


Figure 1-85. BIOS Security (Page 1)

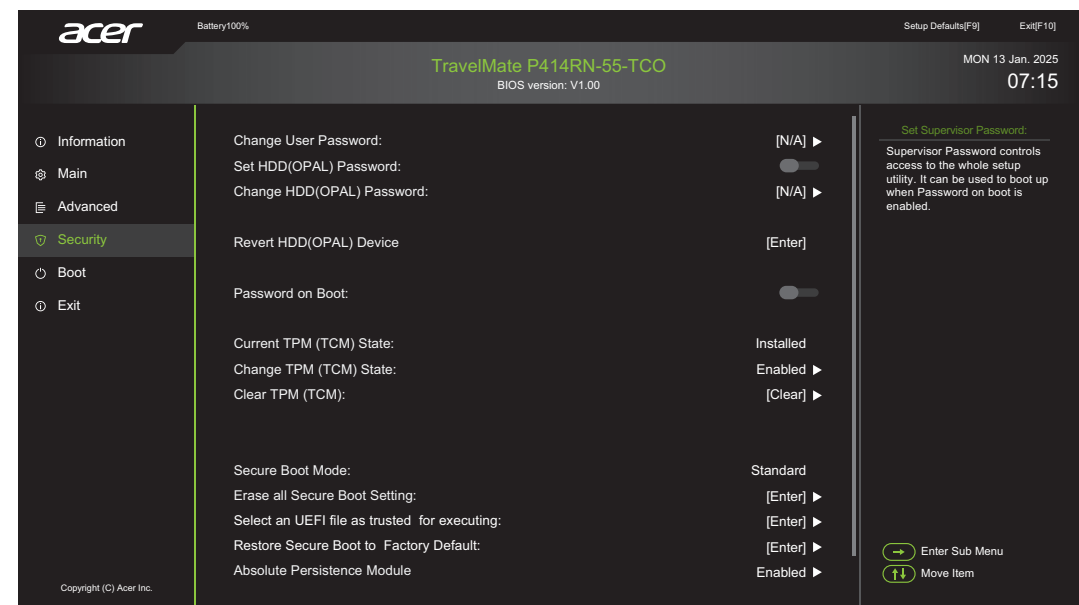


Figure 1-86. BIOS Security (Page 2)

Table 1-4 describes the parameters shown in Figure 1-85 and Figure 1-86.

**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<br><br><b>⚠ CAUTION:</b><br>If Password-on-Boot authentication is enabled, the BIOS password can only be cleared by initiating the Crisis Disk Recovery procedure.                                                                                                                                                                                                                         | Disabled or Enabled |
| Secure Boot Mode                             | Display the current Secure Boot Mode status.<br><ul style="list-style-type: none"> <li>• <b>Standard:</b> Default Option. No manual change has been done to secure boot setting or users have previous restored security boot to factory default.</li> <li>• <b>Custom:</b> Contents of the Secure Boot signature database has been modified with "Erase All Secure Boot Setting" or "Select an UEFI File as Trusted Executing".</li> </ul> | Standard or Custom  |
| Erase all Secure Boot Setting                | Option to erase all secure boot setting                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                 |
| 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                 |
| Current TPM (TCM) State                      | Display the TPM status                                                                                                                                                                                                                                                                                                                                                                                                                      | N/A                 |
| Change TPM (TCM) State                       | Option to use the TPM function                                                                                                                                                                                                                                                                                                                                                                                                              | Disabled or Enabled |



**Table 1-4. BIOS Security (Continued)**

| Parameter                   | Description                                                 | Option              |
|-----------------------------|-------------------------------------------------------------|---------------------|
| Clear TPM (TCM)             | Remove all TPM context associated with a specific owner     | N/A                 |
| Absolute Persistence Module | Option to enable or disable the absolute persistence module | Disabled or Enabled |

**⇒ 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.

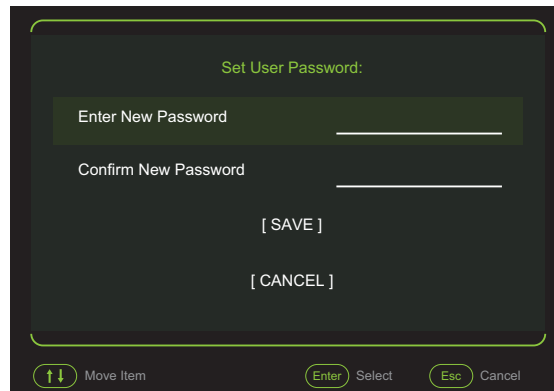


Figure 1-87. Set User Password

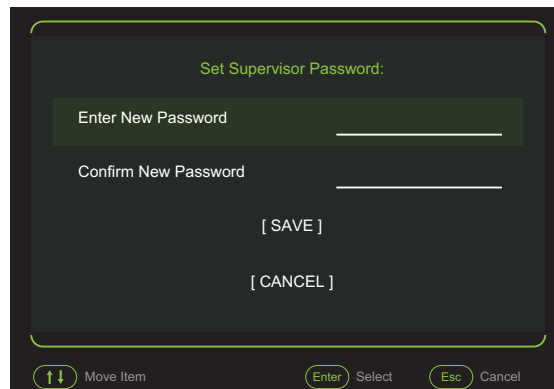
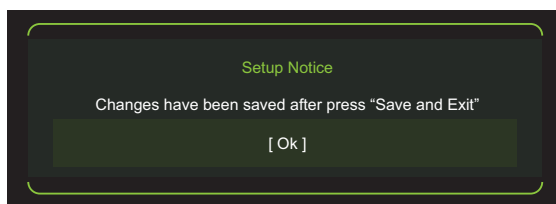


Figure 1-88. Set Supervisor Password

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



---

**Figure 1-89. Setup Notice**

⇒ **NOTE:**

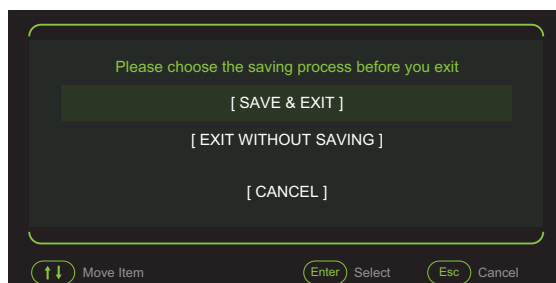
Password on Boot must be set to Enabled to activate password feature.

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*.



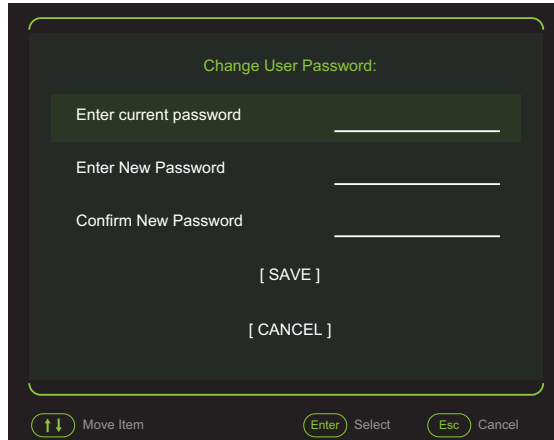
---

**Figure 1-90. Save Configuration Changes and Exit**

## Changing a Password

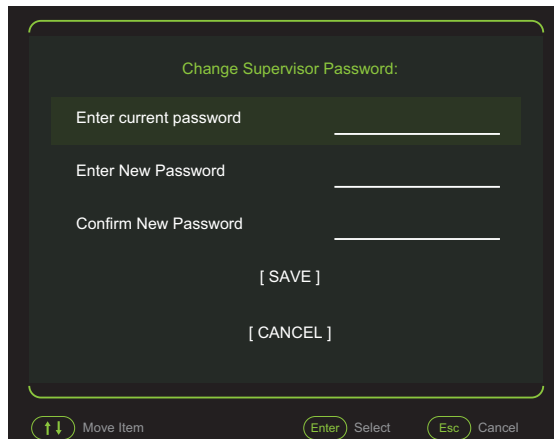
Perform the following:

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.



A screenshot of the 'Change User Password' dialog box. The title 'Change User Password:' is at the top. Below it are three input fields: 'Enter current password', 'Enter New Password', and 'Confirm New Password'. Each field has a corresponding underline. Below the fields are two buttons: '[ SAVE ]' and '[ CANCEL ]'. At the bottom of the dialog box, there is a navigation bar with three items: a left arrow icon labeled 'Move Item', an 'Enter' key icon labeled 'Select', and an 'Esc' key icon labeled 'Cancel'.

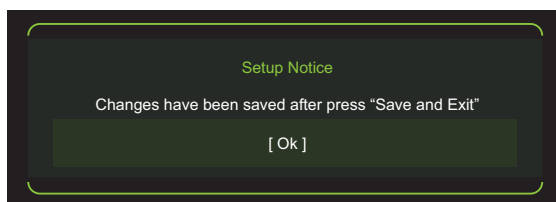
Figure 1-91. Change User Password



A screenshot of the 'Change Supervisor Password' dialog box. The title 'Change Supervisor Password:' is at the top. Below it are three input fields: 'Enter current password', 'Enter New Password', and 'Confirm New Password'. Each field has a corresponding underline. Below the fields are two buttons: '[ SAVE ]' and '[ CANCEL ]'. At the bottom of the dialog box, there is a navigation bar with three items: a left arrow icon labeled 'Move Item', an 'Enter' key icon labeled 'Select', and an 'Esc' key icon labeled 'Cancel'.

Figure 1-92. Change Supervisor Password

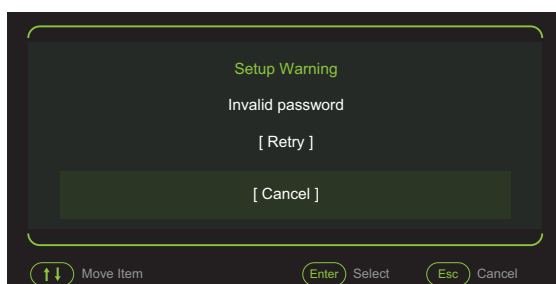
4. Select "SAVE" and press **Enter**. If passwords match, the Setup Notice dialog box appears.



**Figure 1-93. Setup Notice**

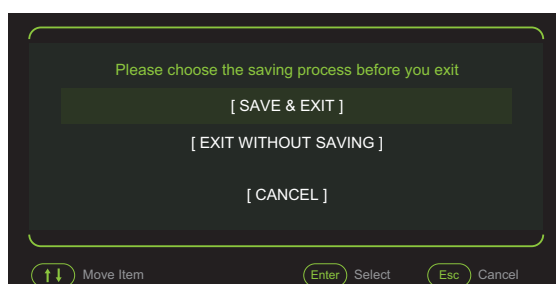
⇒ **NOTE:**

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



**Figure 1-94. Setup Warning**

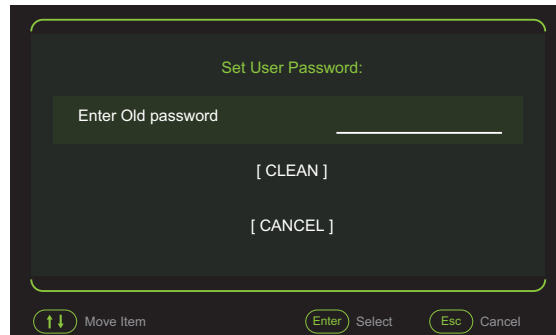
5. Press **Enter** to complete the password modification.
6. Press **F10** and select "SAVE & EXIT". Then press **Enter** to save changes and exit *BIOS Setup Utility*.



**Figure 1-95. Save Configuration Changes and Exit**

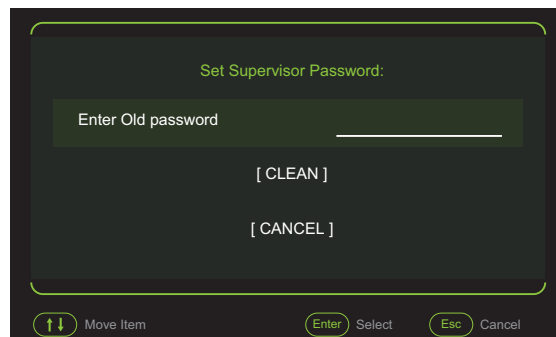
## Removing a Password

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**.



---

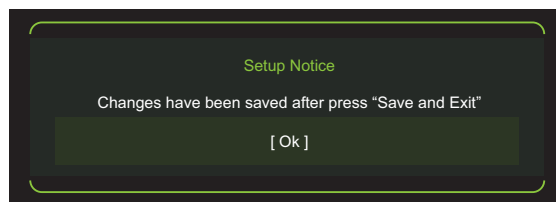
**Figure 1-96. Remove User Password**



---

**Figure 1-97. Remove Supervisor Password**

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



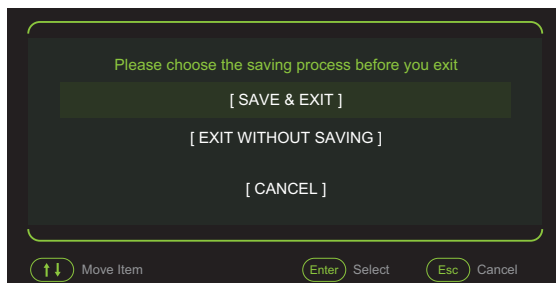
---

**Figure 1-98. 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 1-99. 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

If more than one options, use ↑ and ↓ keys to select a device and press **F5** or **F6** to change the value.

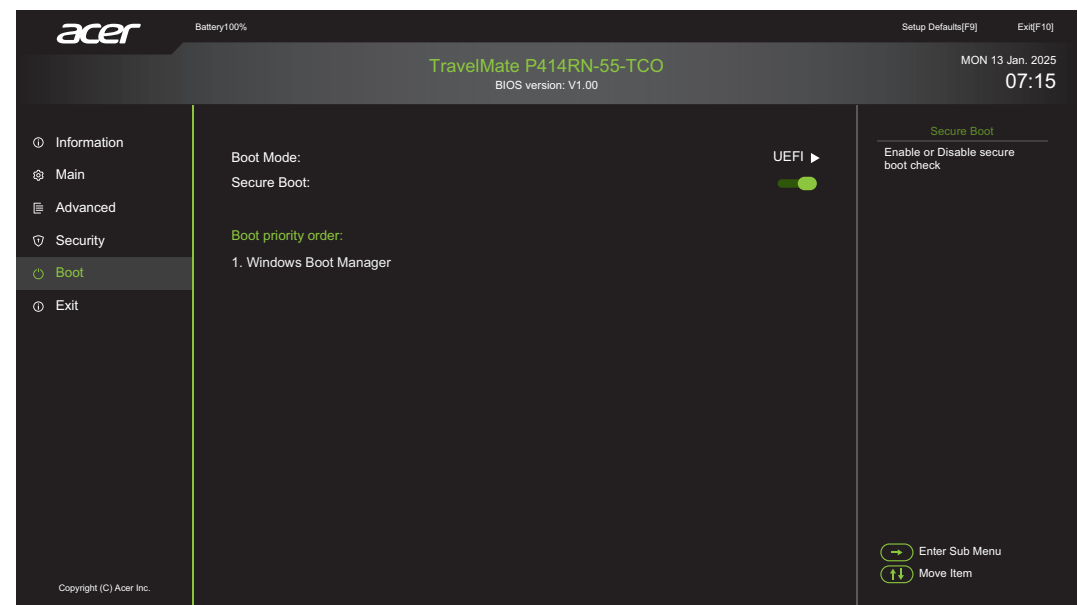


Figure 1-100. BIOS Boot

Table 1-5 describes the parameters in Figure 1-100.

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*.

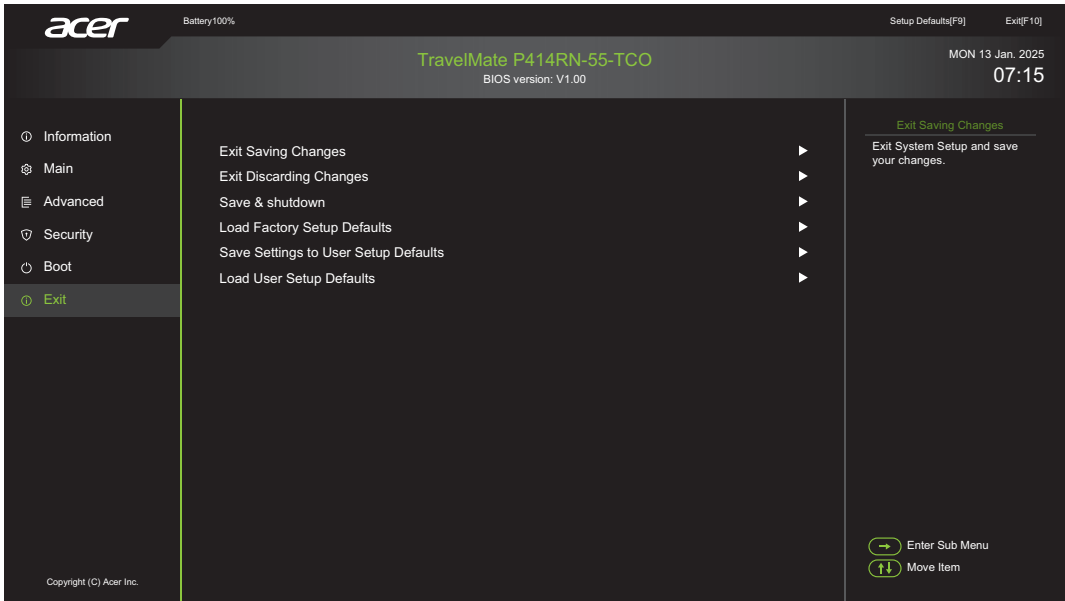


Figure 1-101. BIOS Exit

Table 1-6 describes the parameters in Figure 1-101.

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)                           |
|-----------------------------------------------|
| <a href="#">Power On Issues</a>               |
| <a href="#">No Display Issues</a>             |
| <a href="#">LCD Picture Failure</a>           |
| <a href="#">Internal Keyboard Failure</a>     |
| <a href="#">Touch Pad Failure</a>             |
| <a href="#">Internal Speaker Failure</a>      |
| <a href="#">Audio and Card Reader Failure</a> |
| <a href="#">Other Functions Failure</a>       |
| <a href="#">Intermittent Problems</a>         |
| <a href="#">Undetermined Problems</a>         |

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

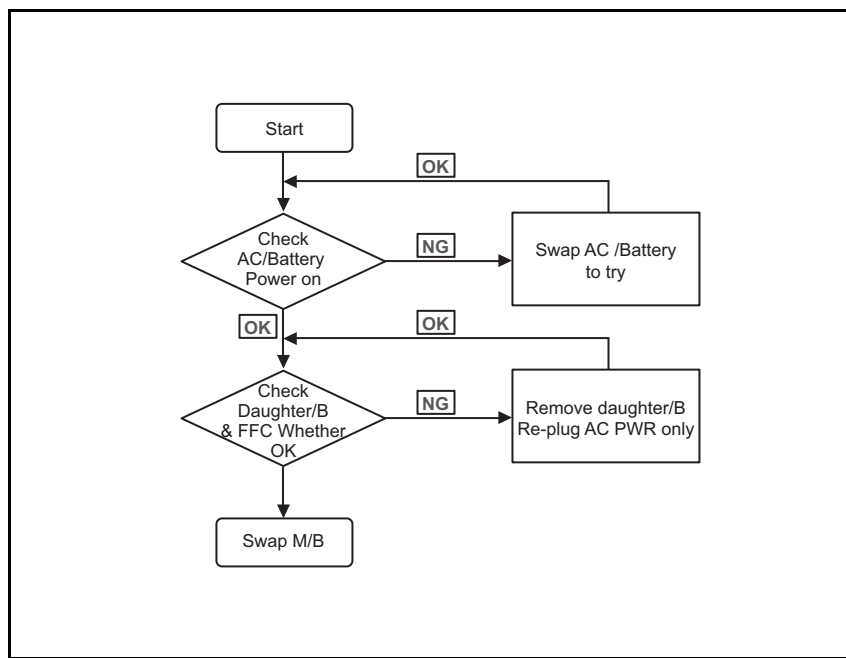
⇒ **NOTE:**

Do not replace non-defective FRU parts.

## Power On Issues

---

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



---

**Figure 1-102. Power On Issue**

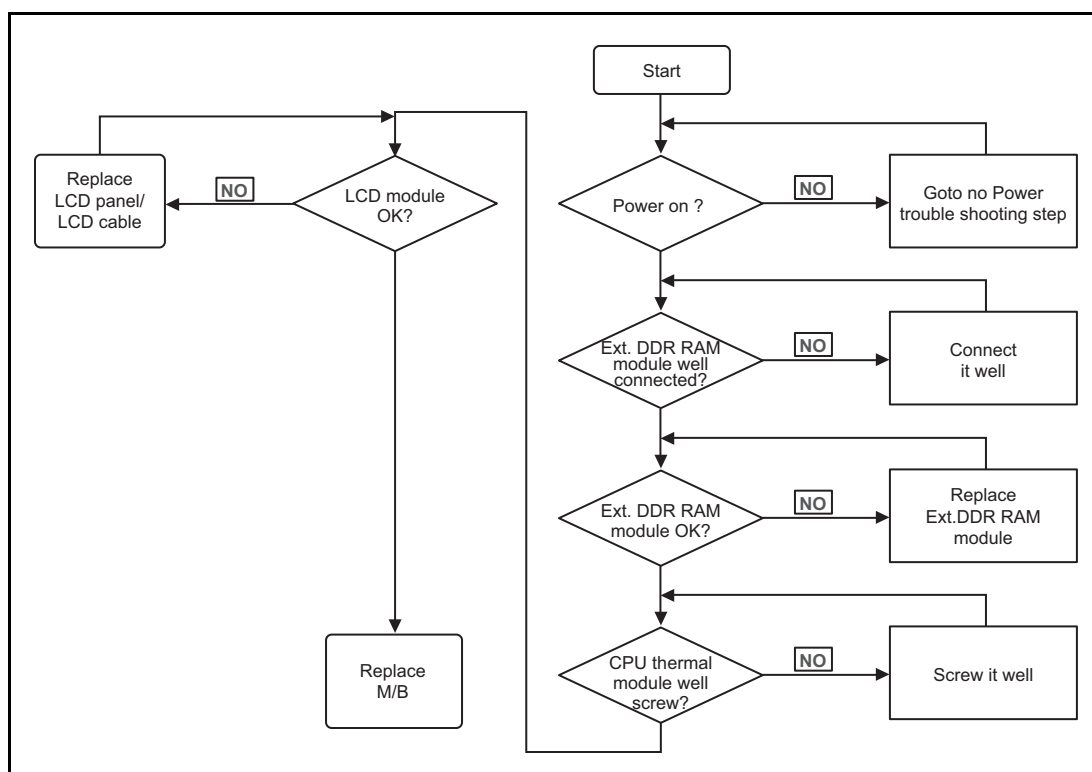
### Computer Shuts Down Intermittently

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

1. Make 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 1-103. 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:

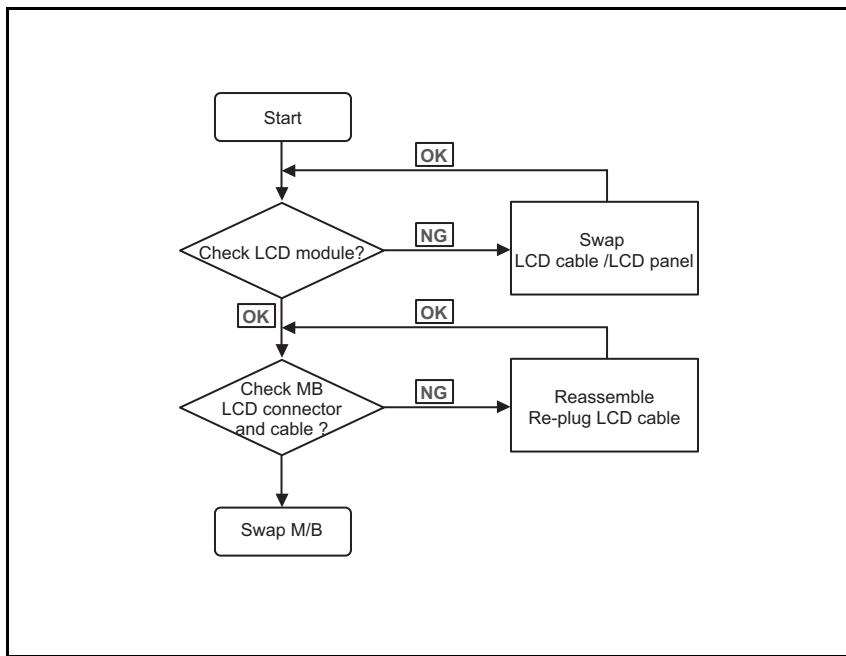
Make sure that the computer is not running on battery alone as this may reduce display brightness.

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:



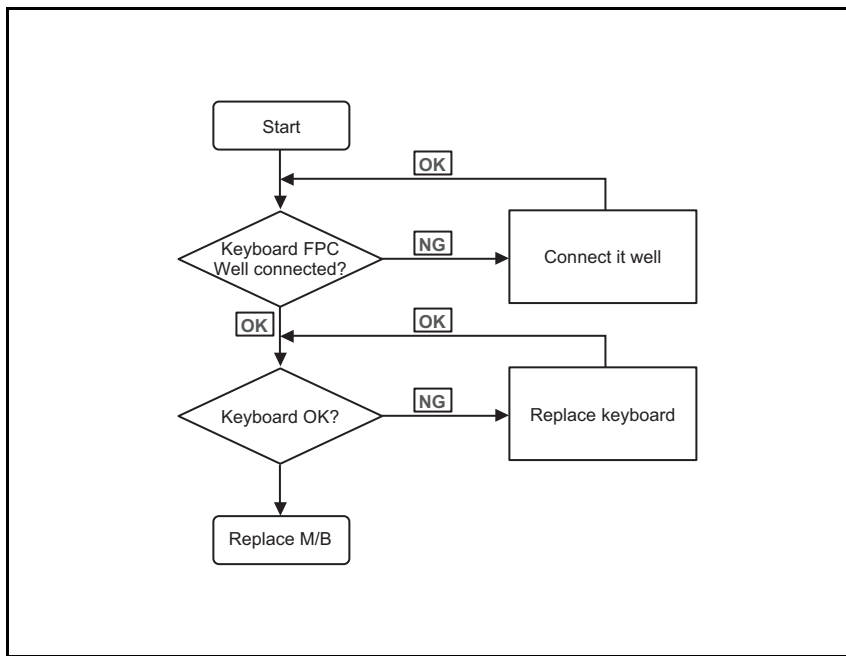
---

**Figure 1-104. LCD Failure**

## Internal Keyboard Failure

---

If the internal keyboard fails, perform the following:



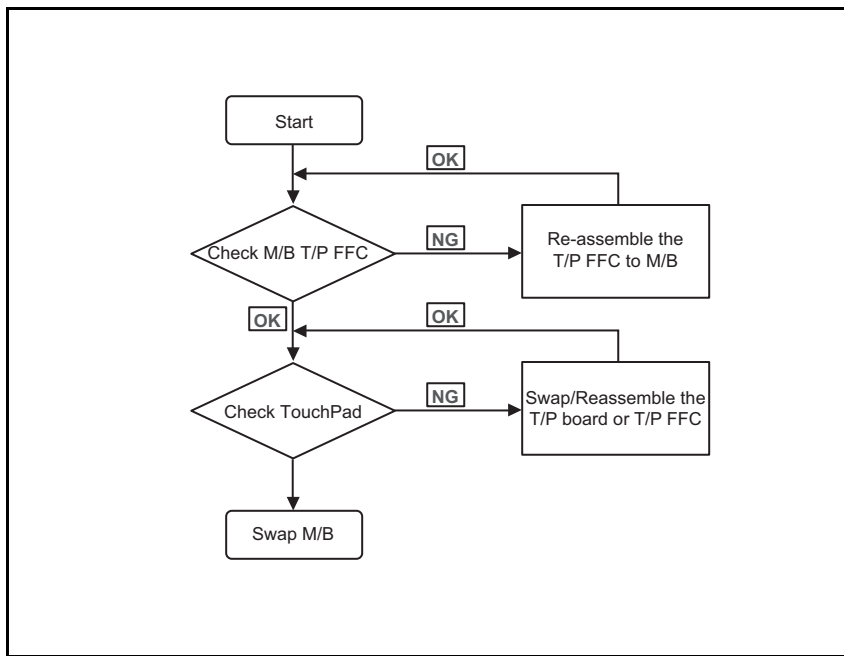
---

**Figure 1-105. Internal Keyboard Failure**

## Touch Pad Failure

---

If the touch pad fails, perform the following:



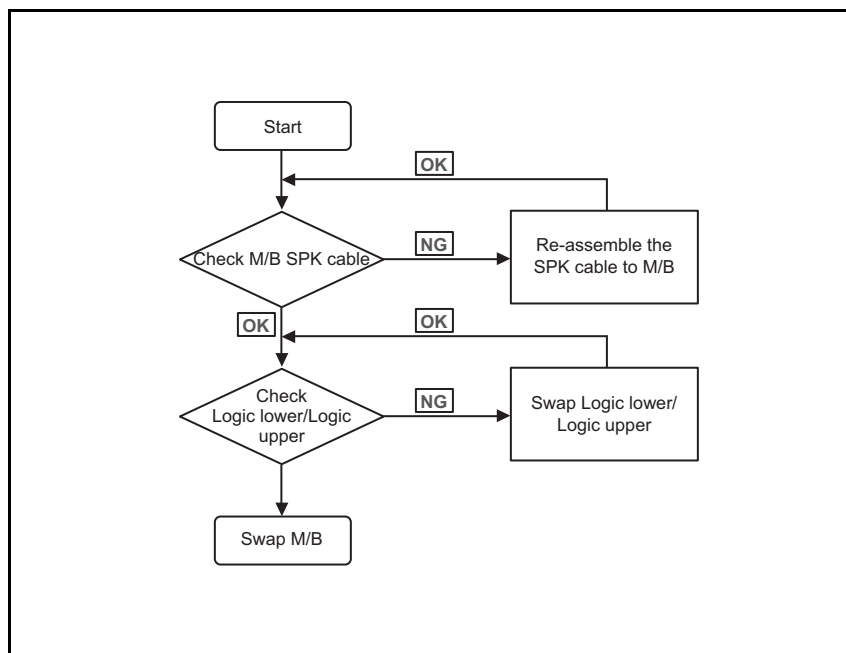
---

**Figure 1-106. Touch Pad Failure**

# Internal Speaker Failure

---

If the internal speakers fail, perform the following:



**Figure 1-107. Internal Speaker Failure**

## Sound Problems

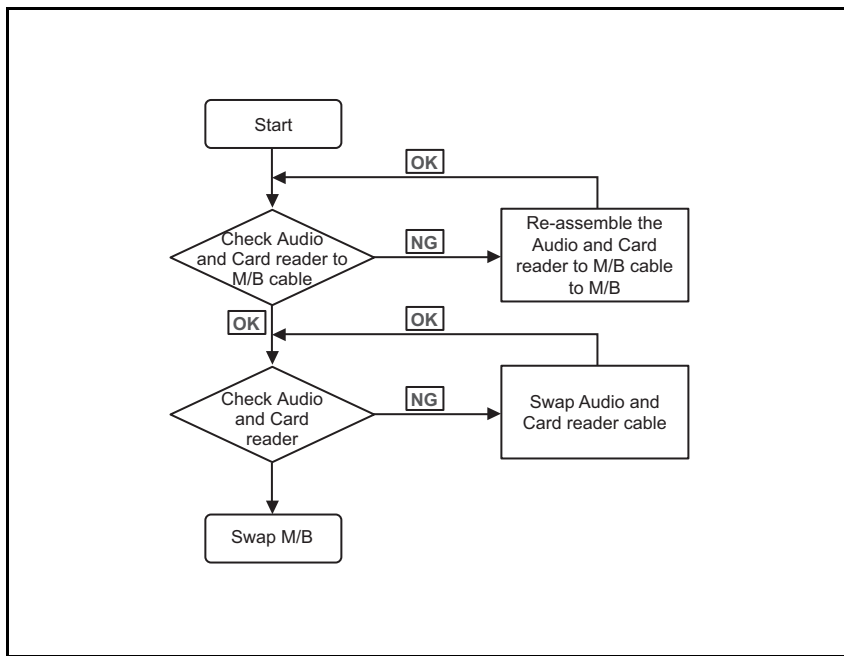
Perform the following, one at a time.

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.

## Audio and Card Reader Failure

---

If audio or card reader fails, perform the following:



---

**Figure 1-108. Audio and Card Reader Failure**

## 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

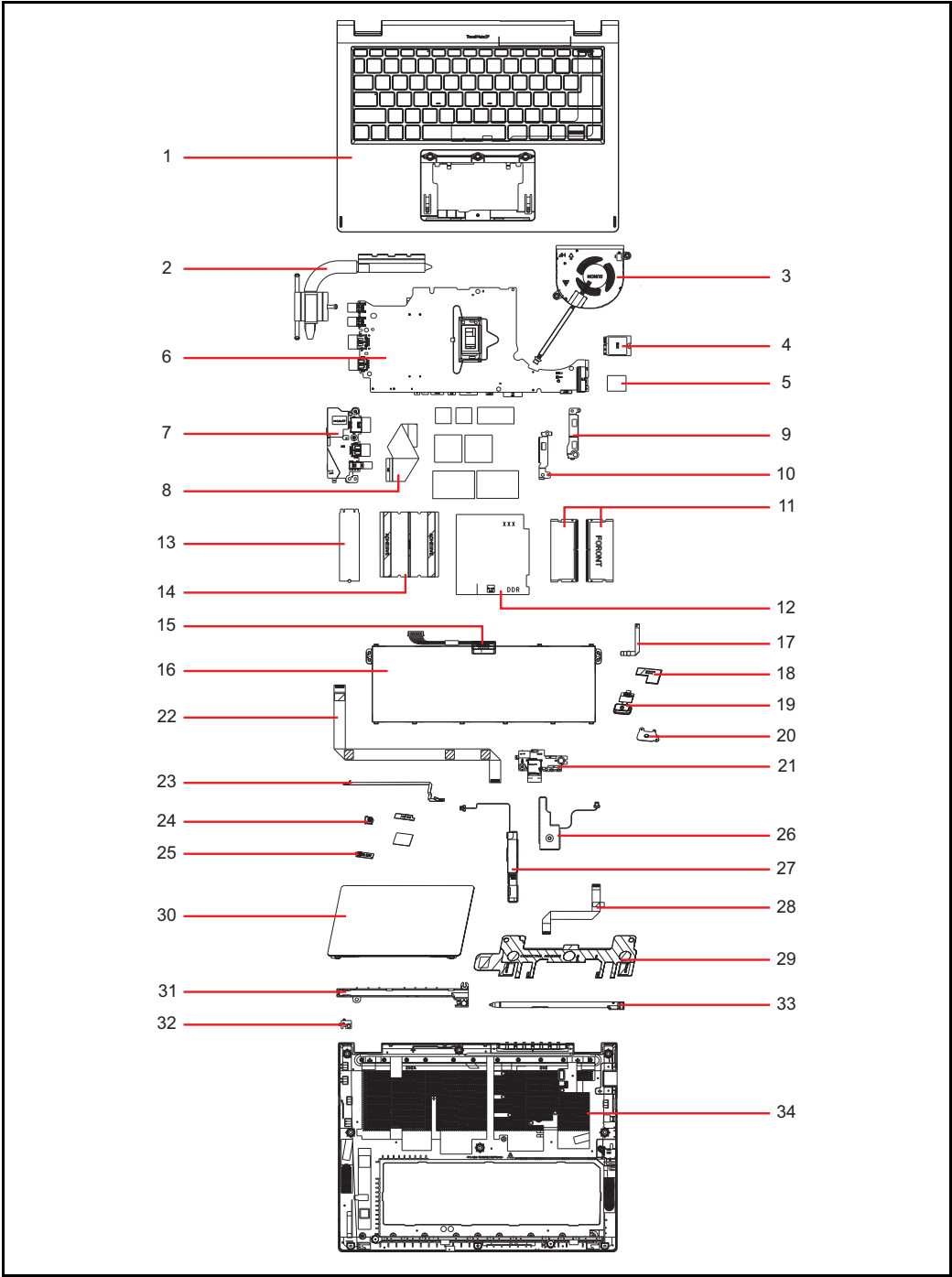


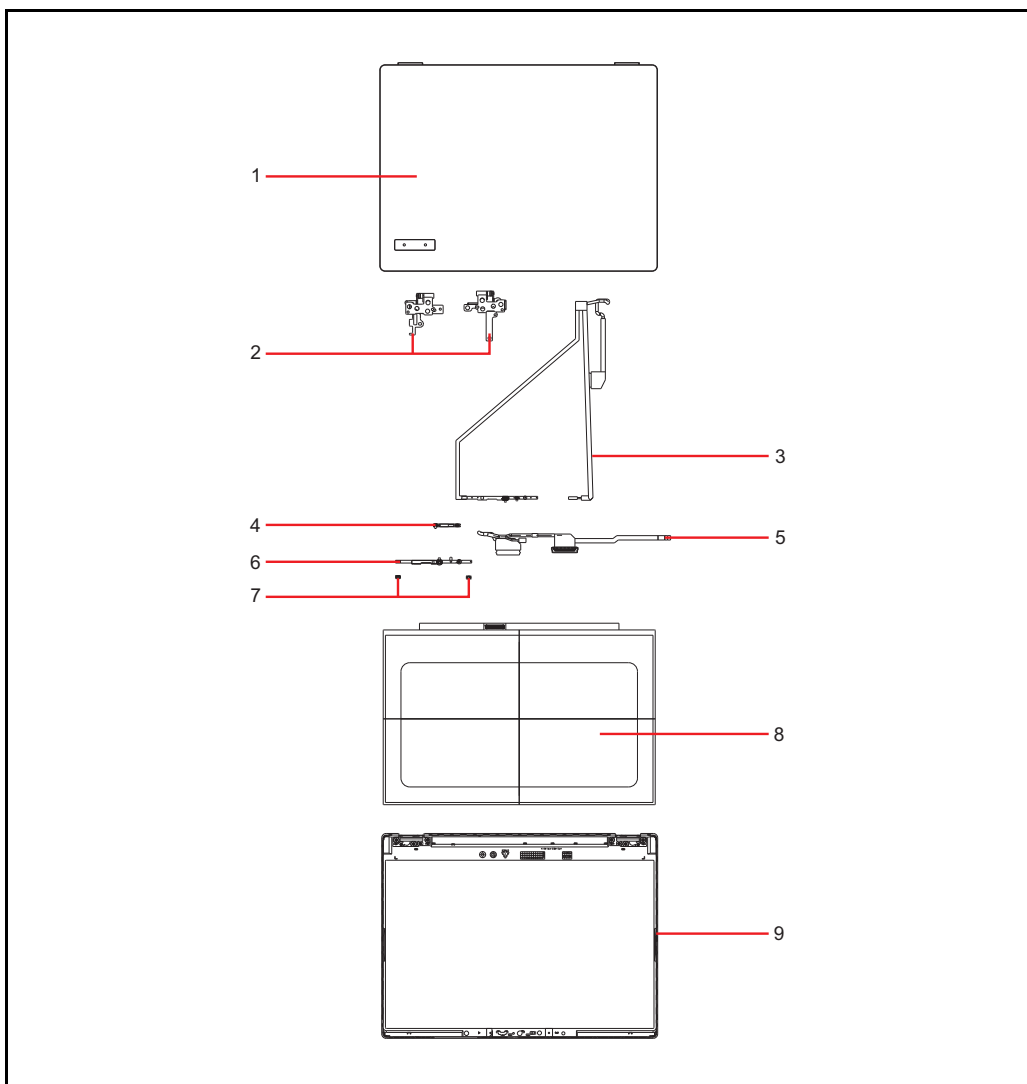
Figure 1-109. System Exploded Diagram

**Table 1-8. System Exploded Diagram**

| No. | Description                                                                                                      |
|-----|------------------------------------------------------------------------------------------------------------------|
| 1   | KEYBOARD ASSY BLUE WIFI SKU W/ANTENA & UPPER CASE COPILOT BL Keyboard VF03P_B45BWL 80KS ALA-Spanish NK.I1313.3G3 |
| 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 WLAN                                                                                             |
| 6   | Mainboard TMP414RN-55-TCO Intel CU5225U UMA dTPM                                                                 |
| 7   | BOARD IO                                                                                                         |
| 8   | CABLE IO BOARD                                                                                                   |
| 9   | BRACKET IO BOARD L                                                                                               |
| 10  | BRACKET IO BOARD R                                                                                               |
| 11  | Memory SAMSUNG SO-DIMM DDRV 5600 8GB M425R1GB4PB0-CWM LF+HF 14nm P die                                           |
| 12  | ABSOR W/INS MYLAR ASSY                                                                                           |
| 13  | Flash Disk WD SSD NAND 1024GB SN5000S SDEQNSJ-1T00-1014 LF+HF                                                    |
| 14  | AL FOIL W/INS MYLAR                                                                                              |
| 15  | CABLE BATTERY EXTERNAL                                                                                           |
| 16  | Battery PANASONIC Typ.53Wh 4590mAh 3S1P AP23A5L 248x84.4x5.5(mm) AP23A 11.55V 70W Polymer (production by PECSZ)  |
| 17  | CABLE FINGERPRINT MODULE                                                                                         |
| 18  | COND FABRIC W/INS MYLAR FOR FINGER PRINT                                                                         |
| 19  | Egis FP on power key Egis ETU920JS MOC solution on power key. Black coating.                                     |
| 20  | BRACKET FINGER PRINT MODULE                                                                                      |
| 21  | BOARD LED                                                                                                        |
| 22  | CABLE LED BOARD                                                                                                  |
| 23  | CABLE MICROPHONE                                                                                                 |
| 24  | RUBB SI THIRD MICROPHONE                                                                                         |
| 25  | MICROPHONE                                                                                                       |
| 26  | SPEAKER L                                                                                                        |
| 27  | SPEAKER R                                                                                                        |
| 28  | CABLE TOUCHPAD                                                                                                   |
| 29  | COND FABRIC W/INS MYLAR FOR TOUCHPAD                                                                             |
| 30  | TOUCHPAD MODULE NC.24611.09Q BLUE                                                                                |

**Table 1-8. System Exploded Diagram (Continued)**

| No. | Description                                                               |
|-----|---------------------------------------------------------------------------|
| 31  | HOLDER STYLUS                                                             |
| 32  | HOLDER BATTERY                                                            |
| 33  | Acer Active Stylus Pen ESP-233-07B-6 AES 2.0/ USI 2.0 Backward Compatible |
| 34  | LOWER CASE BLUE                                                           |



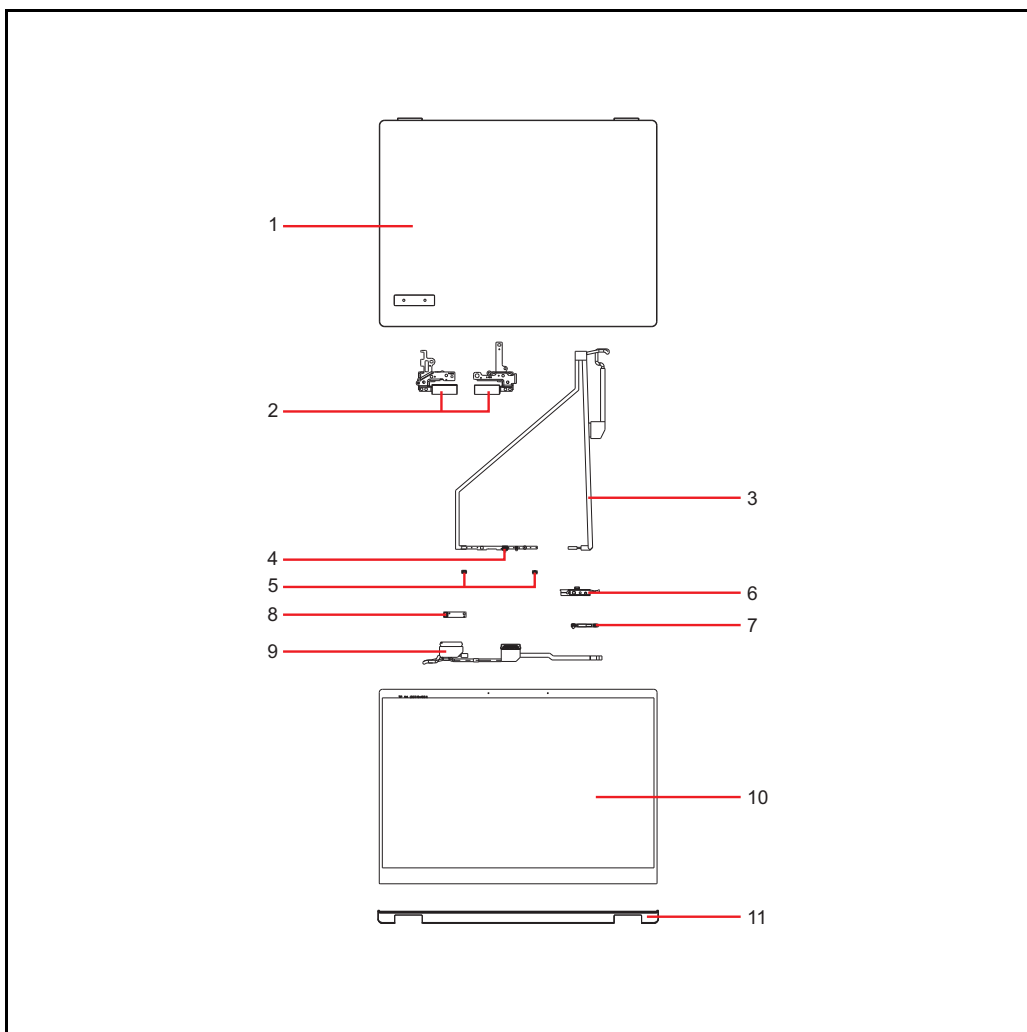
**Figure 1-110. LCD Assembly Exploded Diagram (Clamshell Model)**

**Table 1-9. LCD Assembly Exploded Diagram (Clamshell Model)**

| No. | Description                                                                                                     |
|-----|-----------------------------------------------------------------------------------------------------------------|
| 1   | LCD COVER N14WUSUPILB/N14WUSUPILB/TP3L BLUE                                                                     |
| 2   | HINGE L                                                                                                         |
|     | HINGE R                                                                                                         |
| 3   | CABLE CAMER/HPD                                                                                                 |
| 4   | Vision Sensor - Egis Vision EK006B-1A                                                                           |
| 5   | CABLE LCD N14WUSUPILB                                                                                           |
| 6   | Camera Tech-Front FHD FF YHWL OV02E (CSP) SPCV6202A DS41131C (BG) SPG01R8HT4H-1 USB IR-HM1092(940nm) ,4.2T sHDR |
| 7   | RUBBER SI MIC                                                                                                   |

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

| No. | Description                                                                                                         |
|-----|---------------------------------------------------------------------------------------------------------------------|
| 8   | LED LCD Panel CSOT 14" WUXGA IPS None Glare MNE007QS3-7 V1.0 300nit NTSC 45% 60Hz 20ms 1000:1 (Narrow border, 3.0t) |
| 9   | LCD BEZEL BLUE                                                                                                      |



**Figure 1-111. LCD Assembly Exploded Diagram (Convertible Model)**

**Table 1-10. LCD Assembly Exploded Diagram (Clamshell Model)**

| No. | Description                                                                                   |
|-----|-----------------------------------------------------------------------------------------------|
| 1   | LCD COVER N14WQ2.8KSUPIB/TP1A6AG SILVER FOR TOUCH SKU                                         |
| 2   | HINGE L SILVER FOR TMP414RN-55                                                                |
|     | HINGE R SILVER FOR TMP414RN-55                                                                |
| 3   | CABLE CAMER/HPD                                                                               |
| 4   | Camera Tech-Front FHD FF YHIA OV02E (CSP) RTS5859 DS41131C (BG) SPG01R8HT4H-1 USB , sHDR,4.2T |
| 5   | RUBBER SI MIC                                                                                 |
| 6   | CAMERA DOOR                                                                                   |
| 7   | Vision Sensor - Egis Vision EK006B-1A                                                         |
| 8   | BOARD G-SENSOR                                                                                |



**Table 1-10. LCD Assembly Exploded Diagram (Clamshell Model (Continued))**

| No. | Description                                                                                                                    |
|-----|--------------------------------------------------------------------------------------------------------------------------------|
| 9   | CABLE LCD N14WUSUPILB/TP3L                                                                                                     |
| 10  | LED Touch Panel TPK 14" WUXGA IPS None Glare MNE007QS3-7/ TBC 250nit NTSC 45% 60Hz 20ms 1000:1 (GF2/AG GG3 0.35t/G15T/HID-I2C) |
| 11  | LCD DECO BEZEL                                                                                                                 |

# FRU List

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

**Table 1-11. FRU List**

| Category | Picture                                                                             | Description                                                                                                                               |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| ADAPTER  |   | Adapter Chicony Power A065RPB5P 65W Type C Brick<br>5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A<br>Black TCO10, PCR50%,with LOGO and paper sleeve |
|          |                                                                                     | Adapter LITE-ON PA-1650-58A8 65W Type C Brick<br>5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A<br>Black TCO10, PCR50%,with LOGO and paper sleeve    |
|          |                                                                                     | Adapter DELTA ADP-100XB BN 100W Type C Brick<br>5V/3A_9V/3A_12V/3A_15V/3A_20V/5A<br>Black TCO10, PCR50%,with LOGO and paper sleeve        |
|          |                                                                                     | Adapter Chicony Power A100AP32P 100W Type C Brick<br>5V/3A_9V/3A_12V/3A_15V/3A_20V/5A<br>Black TCO10, PCR50%,with LOGO and paper sleeve   |
| BATTERY  |  | Battery PANASONIC Typ.53Wh 4590mAh 3S1P AP23A5L 248x84.4x5.5(mm) AP23A 11.55V 70W Polymer (production by PECSZ)                           |
|          |                                                                                     | Battery CosMx Typ.53Wh 4661mAh 3S1P AP23ABL 248x84.4x5.5(mm) AP23A 11.37V 65W Li-Ion TI BQ40Z555 FW5.12                                   |
|          |                                                                                     | Battery LGES Typ.53Wh 4700mAh 3S1P AP23A8L 248x84.4x5.5(mm) AP23A 11.28V 70W Li-Ion                                                       |
|          |                                                                                     | Battery CosMx Typ.65Wh 5570mAh 3S1P AP22ABN 248x90x5.5(mm) AP22A 11.67V 75W Li-Ion with SMT type connector                                |
|          |                                                                                     | Battery LGES Typ.65Wh 4180mAh 4S1P AP22A8N 248x90x5.5(mm) AP22A 11.52V 75W Li-Ion with SMT type connector                                 |

Table 1-11. FRU List (Continued)

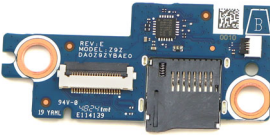
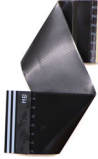
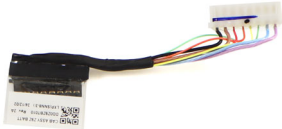
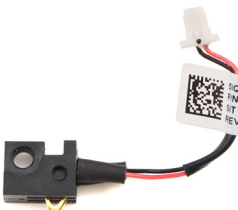
| Category | Picture                                                                             | Description                                                                                                               |
|----------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| BOARD    |    | BOARD IO                                                                                                                  |
|          |                                                                                     | BOARD IO FOR VPRO                                                                                                         |
|          |    | BOARD LED                                                                                                                 |
|          |                                                                                     | BOARD LED FOR TOUCH SKU                                                                                                   |
|          |   | Egis FP on power key Egis ETU920JS MOC solution on power key. Black coating.                                              |
|          |                                                                                     | Elan FP on power key LCC-2687-00 Elan LCC-2687-00 MOC on power key. 2.4N, black coating,plastic cover.Module maker: Ofilm |
|          |                                                                                     | Egis FP on power key Egis ETU920JS MOC solution on power key. Steel gray coating.                                         |
|          |                                                                                     | Elan FP on power key Elan LCC-2687-01 MOC on power key.2.4N,steel gray coating,plastic cover.Module maker: Ofilm          |
|          |  | BOARD AMBIENT LIGHT SENSOR                                                                                                |
|          |  | Vision Sensor - Egis Vision EK006B-1A                                                                                     |
|          |                                                                                     | Vision Sensor- Egis Vision- BNVGF3079-B                                                                                   |
|          |  | BOARD G-SENSOR                                                                                                            |
| CABLE    |  | CABLE MICROPHONE                                                                                                          |
|          |  | CABLE FINGERPRINT MODULE                                                                                                  |

Table 1-11. FRU List (Continued)

| Category | Picture                                                                             | Description                      |
|----------|-------------------------------------------------------------------------------------|----------------------------------|
| CABLE    |    | CABLE IO BOARD                   |
|          |    | CABLE LED BOARD                  |
|          |    | CABLE TOUCHPAD                   |
|          |   | CABLE BATTERY EXTERNAL           |
|          |  | STYLUS CHARGER CABLE             |
|          |  | CABLE LCD N14WUSUPILB            |
|          |                                                                                     | CABLE LCD N14WQ2.8KSSPIBY        |
|          |                                                                                     | CABLE LCD N14WUSUPILB/TP3L       |
|          |                                                                                     | CABLE LCD N14WUSUPILB/TP1A6AG    |
|          |                                                                                     | CABLE LCD N14WQ2.8KSUPIB/TP1A6AG |
|          |  | CABLE CAMER/AMBIENT LIGHT SENSOR |

**Table 1-11. FRU List (Continued)**

| Category | Picture                                                                             | Description                                                                                                     |
|----------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| CABLE    |    | CABLE CAMER/HPD                                                                                                 |
| CAMERA   |    | Camera Tech-Front FHD FF YHWL OV02E (CSP) SPCV6202A DS41131C (BG) SPG01R8HT4H-1 USB IR-HM1092(940nm) ,4.2T sHDR |
|          |                                                                                     | Camera Tech-Front FHD FF YHIA OV02E (CSP) RT55859 DS41131C (BG) SPG01R8HT4H-1 USB , sHDR,4.2T                   |
|          |                                                                                     | Camera AzureWave FHD FF AM-4SF52BE-A GC2607 SPCV6200A DS-41131C (B/G) ZTS6534SAC USB 4.2T ,sHDR                 |
|          |                                                                                     | Camera CHICONY 5M FF CKFOE71 OV05C10 (COB) RT55867 PS-45233A1B6(w/BG) ZTS6534SA USB IR-HM1092(940nm),sHDR       |
| FAN      |  | FAN                                                                                                             |
| HDD      |  | Flash Disk WD SSD NAND 1024GB SN5000S SDEQNSJ-1T00-1014 LF+HF                                                   |
|          |                                                                                     | Flash Disk WD SSD NAND 512GB SN5000S SDEQNSJ-512G-1014 LF+HF                                                    |
|          |                                                                                     | Flash Disk MICRON SSD NAND 1024GB Micron 2500 QLC 1024GB MTFDKBA1T0QGN-1BN15ABYY LF+HF                          |
|          |                                                                                     | Flash Disk HYNIX SSD NAND 256GB M.2 2280 BC901 256G HFS256GEJ9X110N LF+HF                                       |
|          |                                                                                     | Flash Disk MICRON SSD NAND 512GB Micron 2500 QLC 512GB MTFDKBA512QGN-1BN15ABYY LF+HF                            |

**Table 1-11. FRU List (Continued)**

| Category             | Picture                                                                            | Description                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| KEYBOARD<br>ASSEMBLY |  | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS<br>ALA-Spanish NK.I1313.3G3          |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS Arabic<br>NK.I1313.3FR               |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Belgium<br>NK.I1313.3G4              |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Brazilian<br>Portuguese NK.I1313.3G5 |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS CZ/SK<br>NK.I1313.3G6                |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Danish<br>NK.I1313.3G7               |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS FR/Arabic<br>NK.I1313.3G8            |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS French<br>NK.I1313.3G9               |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS German<br>NK.I1313.3GA               |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS Greek<br>NK.I1313.3FT                |

**Table 1-11. FRU List (Continued)**

| Category             | Picture                                                                            | Description                                                                                                              |
|----------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| KEYBOARD<br>ASSEMBLY |  | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS<br>Hungarian NK.I1313.3GB  |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Italian<br>NK.I1313.3GC    |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 83KS Japanese<br>NK.I1313.3GN   |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS Korean<br>NK.I1313.3FU     |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Nordic<br>NK.I1313.3GD     |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS<br>Norwegian NK.I1313.3GE  |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS Persian<br>NK.I1313.3FX    |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS<br>Portuguese NK.I1313.3GF |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS Russian<br>NK.I1313.3FV    |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS SLO/CRO<br>NK.I1313.3GG    |
|                      |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Spanish<br>NK.I1313.3GH    |

**Table 1-11. FRU List (Continued)**

| Category          | Picture                                                                            | Description                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| KEYBOARD ASSEMBLY |  | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Sweden<br>NK.I1313.3GJ                                 |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Swiss/G<br>NK.I1313.3GK                                |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS Thailand<br>NK.I1313.3FY                               |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS<br>Traditional Chinese NK.I1313.3F5                    |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS Turkish<br>NK.I1313.3GL                                |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 80KS UK<br>NK.I1313.3GM                                     |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS Ukrainian<br>NK.I1313.3FW                              |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS US<br>International NK.I1313.3FZ                       |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS US<br>International w/ Bulgaria NK.I1313.3G2           |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS US<br>International w/ Canadian French<br>NK.I1313.3G1 |
|                   |                                                                                    | KEYBOARD ASSY BLUE WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45BWL 79KS US<br>International w/ Hebrew NK.I1313.3G0             |



**Table 1-11. FRU List (Continued)**

| Category             | Picture                                                                            | Description                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| KEYBOARD<br>ASSEMBLY |  | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS<br>ALA-Spanish NK.I1313.3N0          |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS Arabic<br>NK.I1313.3MN               |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Belgium<br>NK.I1313.3N1              |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Brazilian<br>Portuguese NK.I1313.3N2 |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS CZ/SK<br>NK.I1313.3N3                |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Danish<br>NK.I1313.3N4               |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS FR/Arabic<br>NK.I1313.3N5            |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS French<br>NK.I1313.3N6               |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS German<br>NK.I1313.3N7               |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS Greek<br>NK.I1313.3MQ                |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS<br>Hungarian NK.I1313.3N8            |

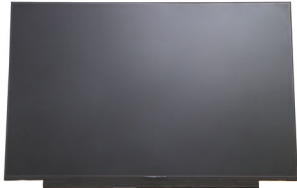
**Table 1-11. FRU List (Continued)**

| Category             | Picture                                                                            | Description                                                                                                                |
|----------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| KEYBOARD<br>ASSEMBLY |  | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Italian<br>NK.I1313.3N9    |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 83KS Japanese<br>NK.I1313.3NK   |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS Korean<br>NK.I1313.3MR     |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Nordic<br>NK.I1313.3NA     |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS<br>Norwegian NK.I1313.3NB  |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS Persian<br>NK.I1313.3MU    |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS<br>Portuguese NK.I1313.3NC |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS Russian<br>NK.I1313.3MS    |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS SLO/CRO<br>NK.I1313.3ND    |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Spanish<br>NK.I1313.3NE    |
|                      |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU<br>W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Sweden<br>NK.I1313.3NF     |

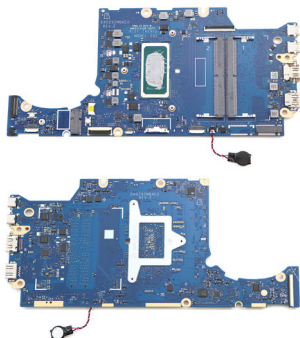
**Table 1-11. FRU List (Continued)**

| Category          | Picture                                                                            | Description                                                                                                                                         |
|-------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| KEYBOARD ASSEMBLY |  | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Swiss/G<br>NK.I1313.3NG                                |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS Thailand<br>NK.I1313.3MV                               |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS<br>Traditional Chinese NK.I1313.3MP                    |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS Turkish<br>NK.I1313.3NH                                |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 80KS UK<br>NK.I1313.3NJ                                     |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS Ukrainian<br>NK.I1313.3MT                              |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS US<br>International NK.I1313.3MW                       |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS US<br>International w/ Bulgaria NK.I1313.3MZ           |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS US<br>International w/ Canadian French<br>NK.I1313.3MY |
|                   |                                                                                    | KEYBOARD ASSY SILVER WIFI SKU W/ANTENA & UPPER CASE COPILOT BL<br>Keyboard VF03P_B45EWL 79KS US<br>International w/ Hebrew NK.I1313.3MX             |

**Table 1-11. FRU List (Continued)**

| Category  | Picture                                                                             | Description                                                                                                                                               |
|-----------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| LCD       |    | LED LCD Panel CSOT 14" WUXGA IPS<br>None Glare MNE007QS3-7 V1.0 300nit<br>NTSC 45% 60Hz 20ms 1000:1 (Narrow<br>border, 3.0t)                              |
|           |                                                                                     | LED LCD Panel BOE 14" WUXGA IPS None<br>Glare NV140WUM-N45 V8.0 300nit NTSC<br>45% 60Hz 20ms 1000:1 (Narrow border,<br>3.0t)                              |
|           |                                                                                     | LED LCD Panel AUO 14" WQXGA+ IPS<br>None Glare B140QAN08.M H/W 0A<br>400nit sRGB 100% 120Hz 25ms 1200:1<br>(140g, Narrow 1.85/2.15t(flat),<br>LRR2.5/PSR) |
|           |                                                                                     | LED Touch Panel AUO 14" WUXGA IPS<br>None Glare B140UAK02.5 H/W 0A 300nit<br>NTSC 45% 60Hz 25ms 1000:1 (Narrow<br>border, 3.0t, oTP lite)                 |
|           |  | LED Touch Panel TPK 14" WUXGA IPS<br>None Glare MNE007QS3-7/ TBC 250nit<br>NTSC 45% 60Hz 20ms 1000:1 (GF2/AG<br>GG3 0.35t/G15T/HID-I2C)                   |
|           |                                                                                     | LED Touch Panel TPK 14" WUXGA IPS<br>None Glare TBC/ NV140WUM-N45 V8.0<br>250nit NTSC 45% 60Hz 20ms 1000:1<br>(GF2/AG GG3 0.35t/G15T/HID-I2C)             |
|           |                                                                                     | LED Touch Panel GIS 14" WUXGA IPS<br>None Glare MNE007QS3-7/ TBC 250nit<br>NTSC 45% 60Hz 20ms 1000:1 (GF2/AG<br>GG3 0.35t/G15T/HID-I2C)                   |
|           |                                                                                     | LED Touch Panel TPK 14" WQXGA+ IPS<br>None Glare B140QAN08.H/TBC 340nit<br>sRGB 100% 60Hz 25ms 1200:1 (GF2/AG<br>GG3 0.35t/G15T/HID-I2C)                  |
| LCD BEZEL |  | LCD BEZEL BLUE                                                                                                                                            |
|           |                                                                                     | LCD BEZEL SILVER                                                                                                                                          |
|           |  | LCD DECO BEZEL                                                                                                                                            |

**Table 1-11. FRU List (Continued)**

| Category   | Picture                                                                             | Description                                                |
|------------|-------------------------------------------------------------------------------------|------------------------------------------------------------|
| LCD COVER  |    | LCD COVER<br>N14WUSUPILB/N14WUSUPILB/TP3L BLUE             |
|            |                                                                                     | LCD COVER<br>N14WUSUPILB/N14WUSUPILB/TP3L SILVER           |
|            |                                                                                     | LCD COVER N14WQ2.8KSSPIBY BLUE                             |
|            |                                                                                     | LCD COVER N14WQ2.8KSSPIBY SILVER                           |
|            |                                                                                     | LCD COVER N14WUSUPILB/TP1A6AG SILVER FOR TOUCH SKU         |
|            |                                                                                     | LCD COVER N14WQ2.8KSUPIB/TP1A6AG SILVER FOR TOUCH SKU      |
|            |                                                                                     | LCD COVER N14WUSUPILB/TP1A6AG BLUE FOR TOUCH SKU           |
|            |                                                                                     | LCD COVER N14WQ2.8KSUPIB/TP1A6AG BLUE FOR TOUCH SKU        |
| LOWER CASE |   | LOWER CASE BLUE                                            |
|            |                                                                                     | LOWER CASE SILVER                                          |
|            |  | LOWER CASE BLUE FOR TOUCH SKU                              |
|            |                                                                                     | LOWER CASE SILVER FOR TOUCH SKU                            |
| MAINBOARD  |  | Mainboard TMP414RN-55-TCO Intel CU5225U UMA dTPM           |
|            |                                                                                     | Mainboard TMP414RN-55-TCO Intel CU7255U UMA dTPM           |
|            |                                                                                     | Mainboard TMP414RN-55-TCO Intel CU5235U UMA dTPM, vPro LAN |

**Table 1-11. FRU List (Continued)**

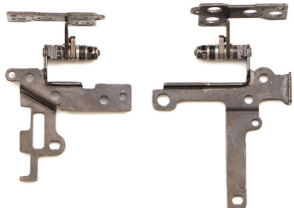
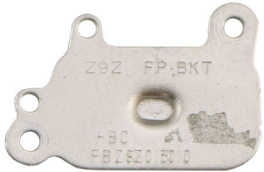
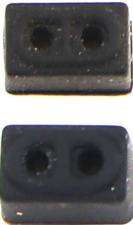
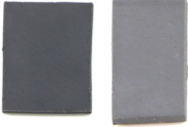
| Category | Picture                                                                             | Description                                                                         |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| MEMORY   |    | Memory SAMSUNG SO-DIMM DDRV 5600 8GB M425R1GB4PB0-CWM LF+HF 14nm P die              |
|          |                                                                                     | Memory MICRON SO-DIMM DDRV 5600 8GB MTC4C10163S15C56BD1 LF+HF 1Rx16, 1b Y52K, D-die |
|          |                                                                                     | Memory SAMSUNG SO-DIMM DDRV 5600 16GB M425R2GA3EB0-CWM LF+HF 1bnm E-die             |
|          |                                                                                     | Memory MICRON SO-DIMM DDRV 5600 16GB MTC8C1084S15C56BD1 LF+HF 1Rx8, Y52K D-die      |
| METAL    |    | HINGE L                                                                             |
|          |                                                                                     | HINGE R                                                                             |
|          |   | HINGE L BLUE FOR TMP414RN-55                                                        |
|          |                                                                                     | HINGE R BLUE FOR TMP414RN-55                                                        |
|          |                                                                                     | HINGE L SILVER FOR TMP414RN-55                                                      |
|          |                                                                                     | HINGE R SILVER FOR TMP414RN-55                                                      |
|          |  | BRACKET FINGER PRINT MODULE                                                         |
|          |  | BRACKET IO BOARD L                                                                  |

Table 1-11. FRU List (Continued)

| Category      | Picture                                                                             | Description                                     |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------|
| METAL         |    | BRACKET IO BOARD R                              |
| MISCELLANEOUS |    | LCD ADHESIVE W/MYLAR ASSY<br>200*6.5*0.5MM      |
|               |                                                                                     | LCD ADHESIVE W/MYLAR ASSY<br>200*6.5*1.4MM      |
|               |   | LCD ADHESIVE W/MYLAR ASSY<br>197*28.85*0.58MM L |
|               |                                                                                     | LCD ADHESIVE W/MYLAR ASSY<br>197*28.85*0.58MM R |
|               |                                                                                     | LCD ADHESIVE W/MYLAR ASSY<br>197*28.85*0.65MM L |
|               |                                                                                     | LCD ADHESIVE W/MYLAR ASSY<br>197*28.85*0.65MM R |
|               |  | LCD ADHESIVE W/MYLAR ASSY<br>243.3*14.9*0.5MM   |
|               |  | GRAPHITE SHEET FOR TOP                          |
|               |  | RUBBER SI MIC                                   |
|               |                                                                                     | RUBBER QHD CCD                                  |
|               |  | RUBB SI THIRD MICROPHONE                        |
|               |  | SPONGE FOR FINGER PRINT                         |
|               |  | SPONGE SUPT FOR FINGER PRINT                    |

**Table 1-11. FRU List (Continued)**

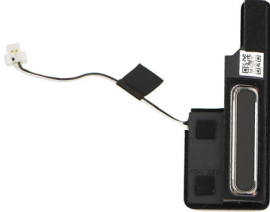
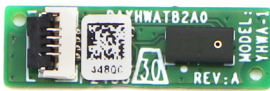
| Category      | Picture                                                                             | Description                              |
|---------------|-------------------------------------------------------------------------------------|------------------------------------------|
| MISCELLANEOUS |    | COND FABRIC W/INS MYLAR FOR FINGER PRINT |
|               |    | COND FABRIC W/INS MYLAR FOR TOUCHPAD     |
|               |    | THERMAL PAD FOR WLAN                     |
|               |    | FOIL COMPOSITE W/ PAD                    |
|               |  | AL FOIL W/INS MYLAR                      |
|               |  | ABSOR W/INS MYLAR ASSY                   |
|               |  | TAPE KAPTON TOP MIC                      |
|               |  | KAPTON TAPE MB KB                        |



**Table 1-11. FRU List (Continued)**

| Category      | Picture                                                                             | Description                             |
|---------------|-------------------------------------------------------------------------------------|-----------------------------------------|
| MISCELLANEOUS |    | INSULATOR MYLAR ON BATTERY CABLE        |
|               |    | MYLAR FFC COONECTOR                     |
|               |    | ACETATE TAPE FOR BATTERY(21*21mm)       |
|               |    | LCD ALIGNMENT MYLAR                     |
| PLASTICS      |  | HOLDER STYLUS                           |
|               |  | CAMERA DOOR                             |
|               |  | HOLDER BATTERY                          |
| POWER CORD    |  | 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 |

**Table 1-11. FRU List (Continued)**

| Category               | Picture                                                                             | Description                                                               |
|------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| POWER CORD             |    | POWER CORD 1M 250V INDIA BLACK TCO10                                      |
|                        |                                                                                     | POWER CORD 1M 250V BRAZIL BLACK TCO10                                     |
|                        |                                                                                     | POWER CORD 1M 250V UK BLACK TCO10                                         |
|                        |                                                                                     | 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 125V TAIWAN BLACK TCO10                                     |
| SPEAKER/<br>MICROPHONE |   | SPEAKER L                                                                 |
|                        |  | SPEAKER R                                                                 |
|                        |  | MICROPHONE                                                                |
| STYLUS                 |  | Acer Active Stylus Pen ESP-233-07B-6 AES 2.0/ US1 2.0 Backward Compatible |
| THERMAL                |  | HEAT SINK                                                                 |

**Table 1-11. FRU List (Continued)**

| Category     | Picture                                                                             | Description                                                              |
|--------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| TOUCHPAD     |    | TOUCHPAD MODULE NC.24611.09Q BLUE                                        |
|              |                                                                                     | TOUCHPAD MODULE NC.24611.0CA SILVER                                      |
| WIRELESS LAN |    | Wireless LAN Intel Wi-Fi 7 BT5.4 BE201.NGWG.NV Intel 2x2 M.2 2230 CNVi   |
|              |                                                                                     | Wireless LAN Intel Wi-Fi 7 BT5.4 BE201.NGWG Intel 2x2 M.2 2230 CNVi vPro |
| SCREWS       |    | SCREW M2.0*2.0- I(BNI)(NY)IRON                                           |
|              |    | SCREW M2.0*2.0-I(NI,NYLOK)STL                                            |
|              |    | SCREW M2.0*4.0-IBNINYLOKD5.0T0.8)STL                                     |
|              |    | SCREW M1.6*3.0                                                           |
|              |  | SCREW M2.5*5.0-IBNINYLOKD5.0T0.8)STL                                     |
|              |  | SCREW M2.5*2.5-I(BNI)(NYLOK)T=0.6                                        |
|              |  | SCREW M2*6-I,NYLOK BKZN-NIW/WASHER                                       |
|              |  | SCREW W/WASHER KIT (M2.5*7.0)                                            |
|              |  | SCREW M2*6.0                                                             |
|              |  | SCREW M2.5*7.0                                                           |
|              |  | SCREW M2.5*1.8-H(BNI,NY,D5.0,T4.0,IT)STL                                 |
|              |  | SCREW M2.0*5.0-I(NI)(NYLOK)IRON                                          |
|              |  | SCREW M2.0*2.0- I(BZN)(NYLOK)IRON                                        |

# Software Update

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## System BIOS & Driver Updates

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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

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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

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

# Personal Data Removal

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## Removing your personal data

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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**.