TravelMate P414RN-54/P414RN-54-TCO
Piccolo_MTU

# LIFECYCLE EXTENSION GUIDE

# Self-Repair

This chapter offers limited customer self-repair capabilities.

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

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

**NOTE:**

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

**NOTE:**

For replacement parts, always use only Acer certified components in order to safeguard quality, optimum system performance, stability and reliability of the product.

**NOTE:**

Any damage to the product that occur during self-repair, or which has occurred as a result of a careless or unsuccessful self-repair attempt, is not covered by the standard product warranty.

# Disassembly Procedures

## Safety Guidelines

This chapter contains step by step procedures on how to remove and de-install components from the computer. Use the following safety guidelines to ensure your personal safety. Each procedure included in this chapter assumes that you are preparing your computer for recycling and disposal. **By performing any of these procedures you acknowledge that any remaining warranty applicable to your computer will be voided if any damage is done to the unit or components during the repair. Before you start any of the procedures in this chapter, make sure to read the following safety guidelines and the respective instructions within the chapter.**

**CAUTION!**

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

## Recommended Equipment

The following equipment are recommended to do the following maintenance procedures:

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

# WEEE Annex VII Component

These components are classified as requiring selective treatment:

- Battery pack
- LTE module
- WLAN module
- DIMM modules
- RTC battery
- SSD modules
- LTE board
- Mainboard
- Card Reader board
- Touchpad module
- LCD panel

# Pre-disassembly Instructions

Do the following prior to starting any maintenance procedures:

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

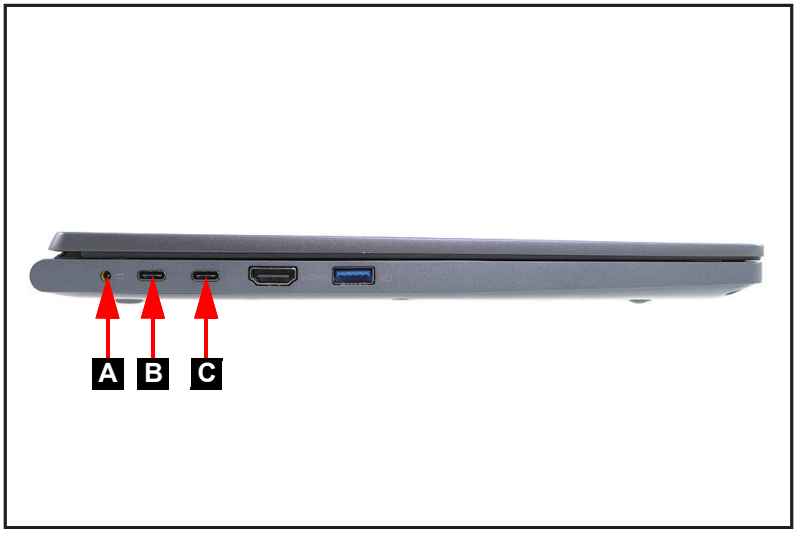



**Figure 1-1. Adapter Outlet**

4. Remove the microSD card from the microSD card slot (D). Then remove the smart card from the smart card slot (E) (Figure 1-2).

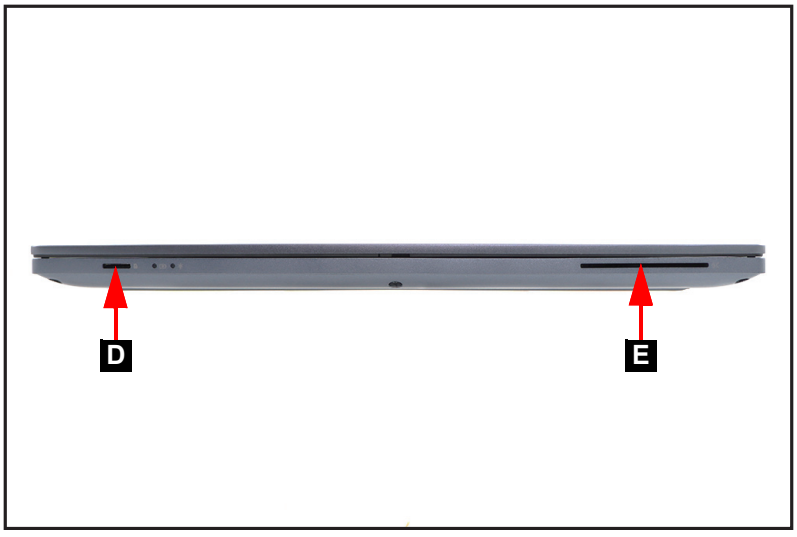



**Figure 1-2. microSD Card and Smart Card Removal**

5. Remove the stylus from the stylus slot (F) (Figure 1-3).
6. Insert the eject tool into the hole on the SIM card tray (G). Then push to eject the card tray and remove the SIM card (LTE SKU only) (Figure 1-3).

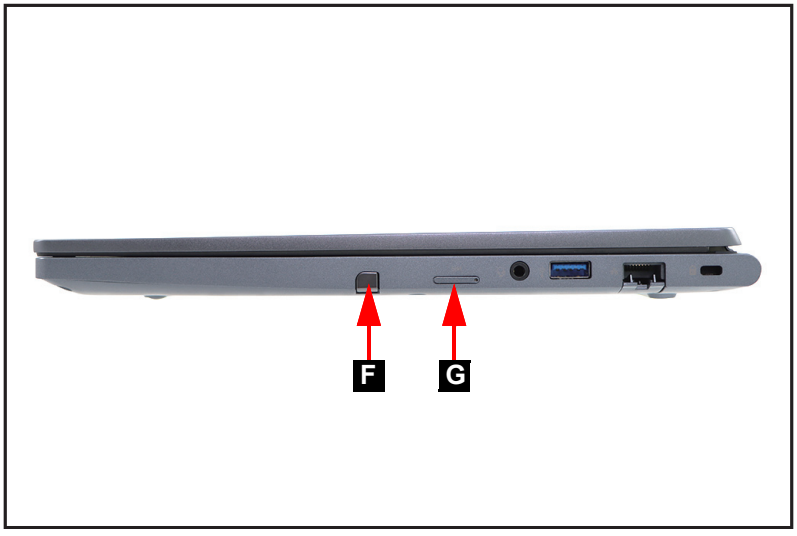



**Figure 1-3. Stylus and SIM Card Removal**

**NOTE:**

Make sure the system is completely powered off.

# Base Cover Removal

1. Remove ten (10) Torx screws from the base cover (Figure 1-4).

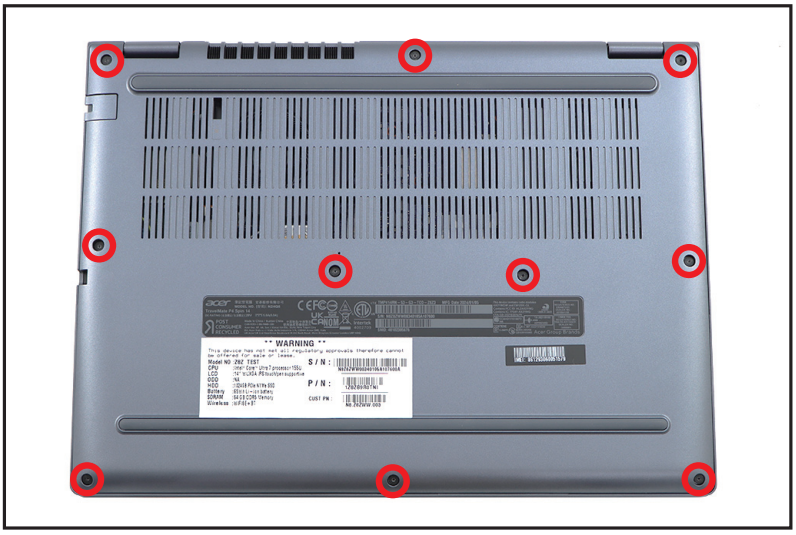


**Figure 1-4. Base Cover Removal**

2. Carefully pry up the base cover starting from the upper side closer to the hinge caps to release the latches. Then continue releasing the remaining latches on the left, right, and bottom sides (Figure 1-5).

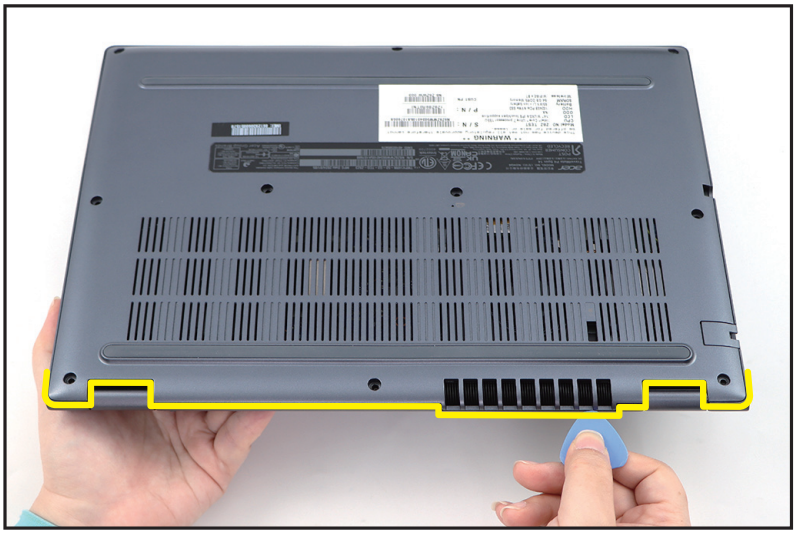


**Figure 1-5. Base Cover Removal**

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

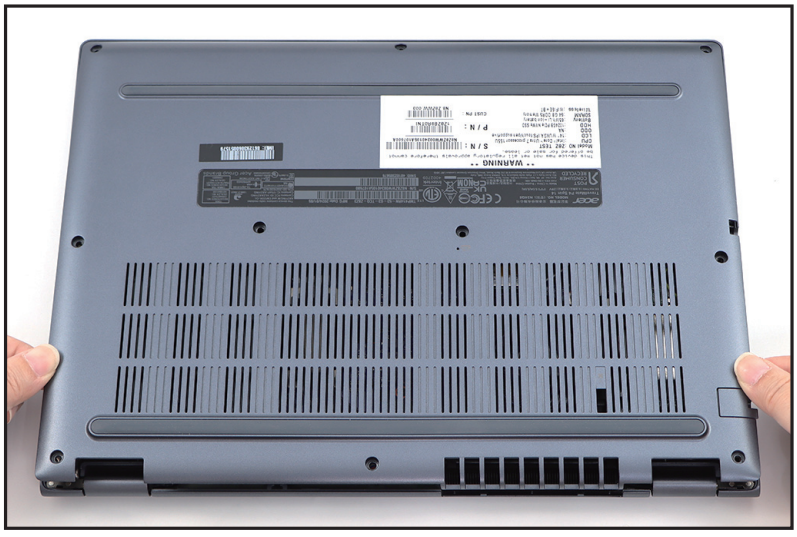


**Figure 1-6. Base Cover Removal**

# Battery Pack Removal

## Prerequisite:

Base Cover Removal

1. Detach the mylar (A) as shown in Figure 1-7.

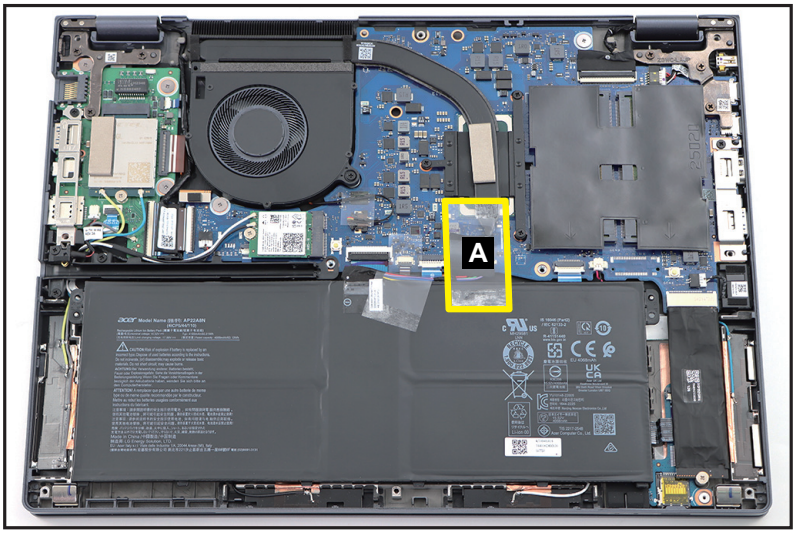



**Figure 1-7. Battery Pack Removal**

2. Detach the tape (B) securing the battery cable connection (Figure 1-8).


**Figure 1-8. Battery Pack Removal**

3. Disconnect the battery cable from the mainboard connector (C) (Figure 1-9).

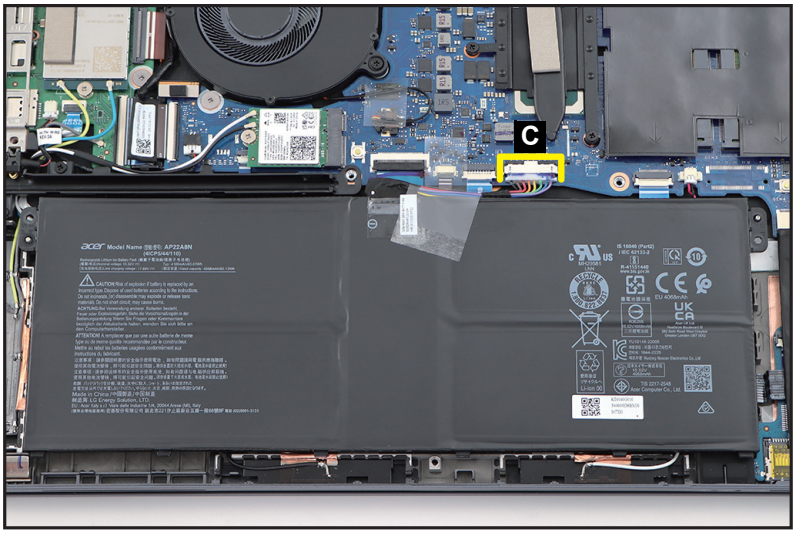



**Figure 1-9. Battery Pack Removal**

4. Lift to release the battery pack (D) from the guide pins (E) and compartment studs (highlighted with the green lines) (Figure 1-10). Then remove the battery pack.

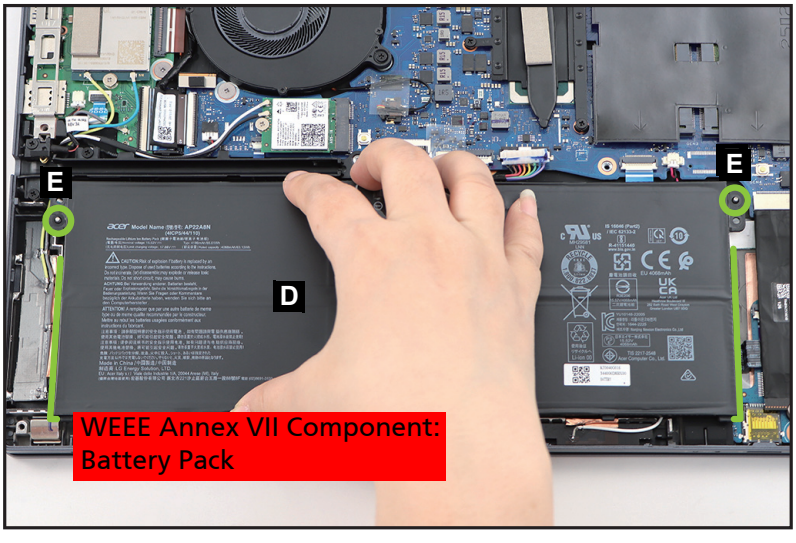



**Figure 1-10. Battery Pack Removal**

5. Detach the mylar (F) securing the battery cable to the battery pack (Figure 1-11).

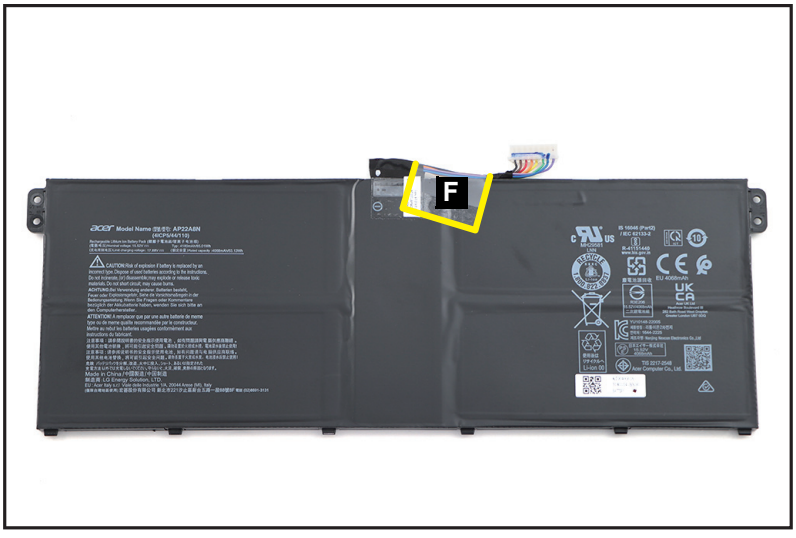



**Figure 1-11. Battery Pack Removal**

6. Detach another mylar (G) securing the battery cable connection (Figure 1-12).


**Figure 1-12. Battery Pack Removal**

7. Disconnect the battery cable from the battery connector (H) (Figure 1-13). Then remove the battery cable.

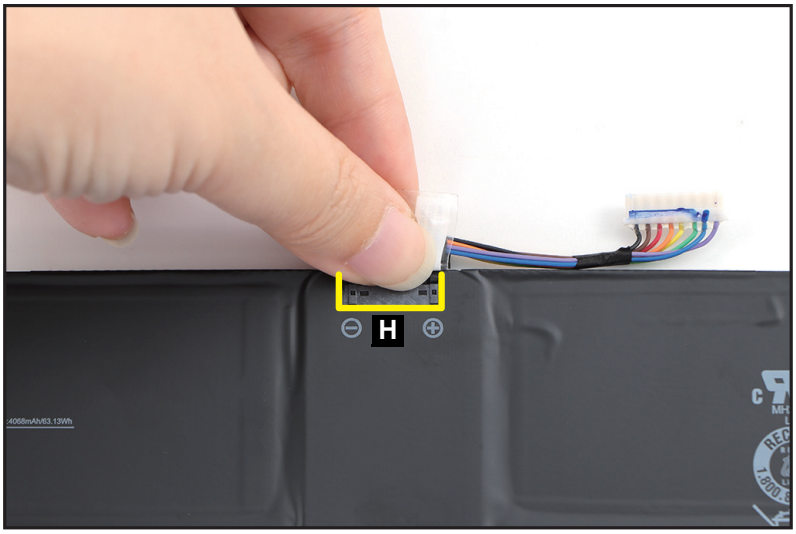



**Figure 1-13. Battery Pack Removal**

**IMPORTANT:**

Follow local regulations for battery disposal.

# LTE Module Removal (LTE SKU Only)

## Prerequisite:

Battery Pack Removal

1. Detach the gasket (A) from the LTE module (Figure 1-14).

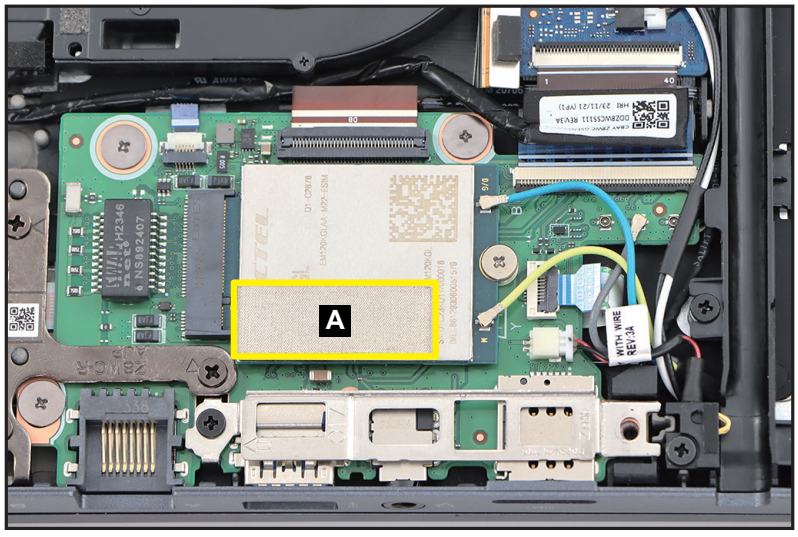



**Figure 1-14. LTE Module Removal**

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

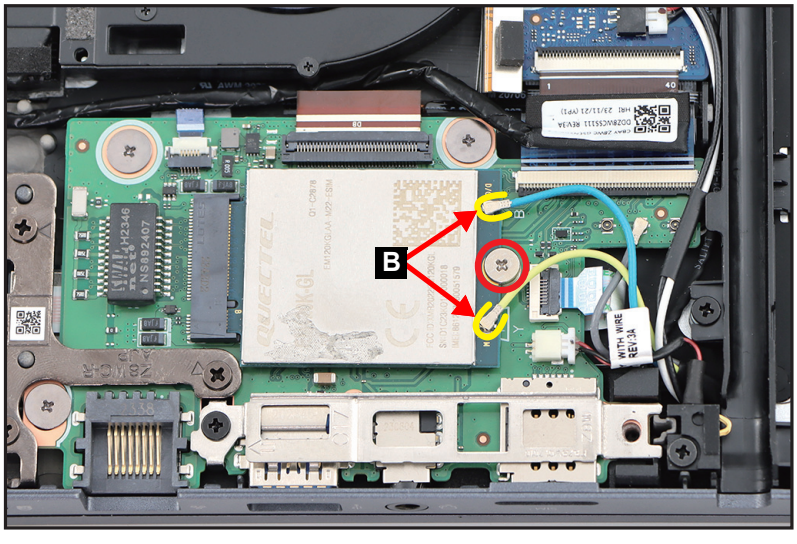



**Figure 1-15. LTE Module Removal**

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

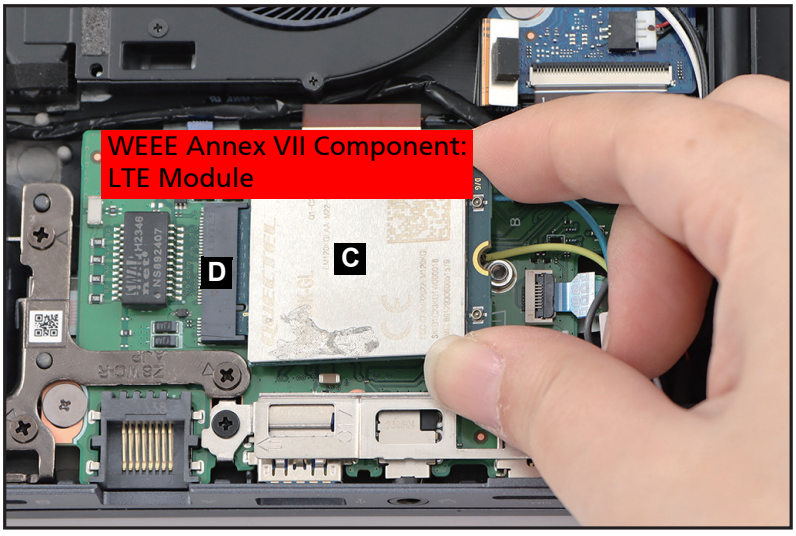



**Figure 1-16. LTE Module Removal**

# WLAN Module Removal

## Prerequisite:

Battery Pack Removal

1. Find the WLAN module (A) on the top assembly (Figure 1-17).

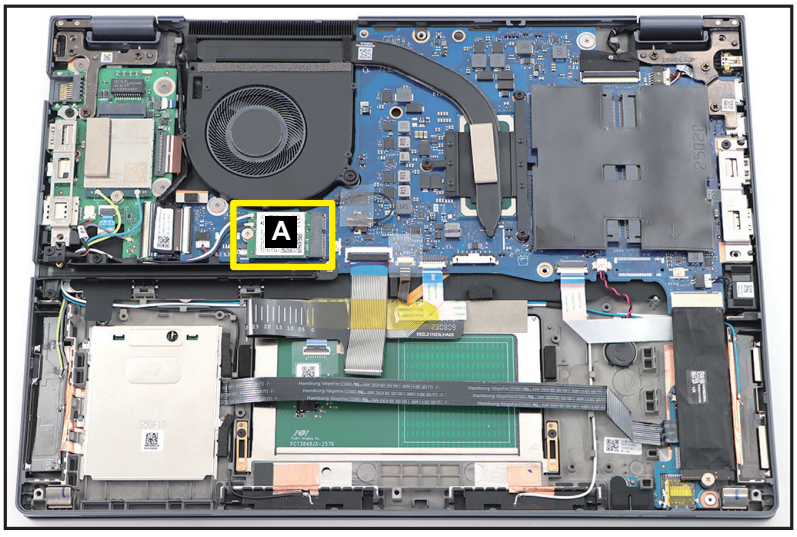



**Figure 1-17. WLAN Module Location**

2. Disconnect the WLAN antennas cables from the WLAN module connectors (B) (Figure 1-18).
3. Remove one (1) screw securing the WLAN module in place (Figure 1-18).

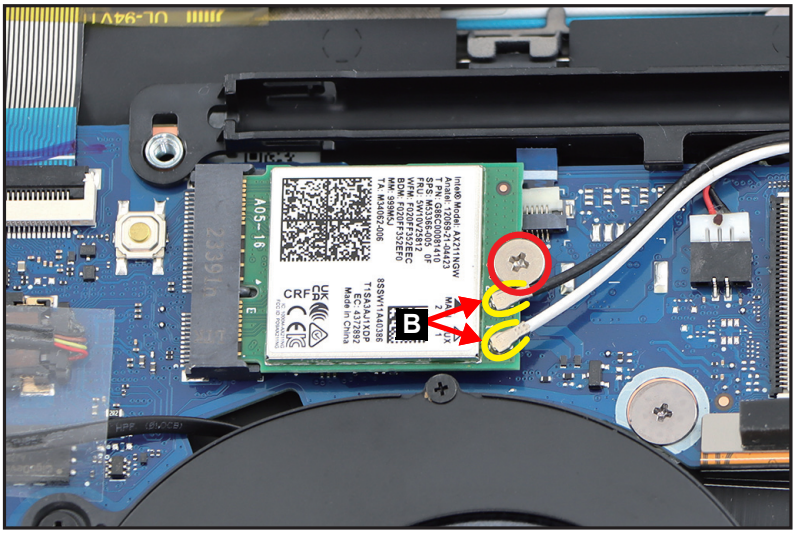



**Figure 1-18. WLAN Module Removal**

4. Disconnect the WLAN module from the mainboard connector (C) (Figure 1-19). Then remove the WLAN module.


**Figure 1-19. WLAN Module Removal**

# LCD Module Removal

## Prerequisite:

Battery Pack Removal

1. Disconnect the sensor cable from the mainboard connector (A). Then unroute the cable from the cable guides as shown in Figure 1-20.

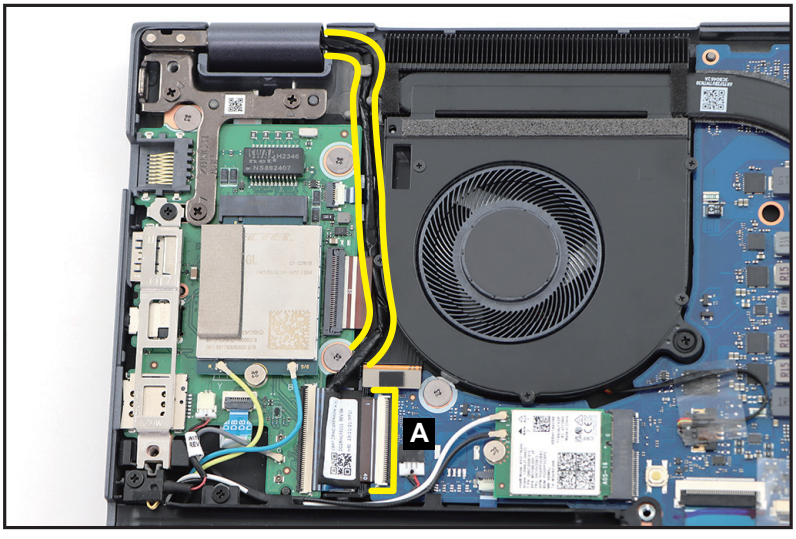



**Figure 1-20. LCD Module Removal**

2. Disconnect the LCD cable from the mainboard connector (B). Then unroute the cable from the cable guides as shown in Figure 1-21.

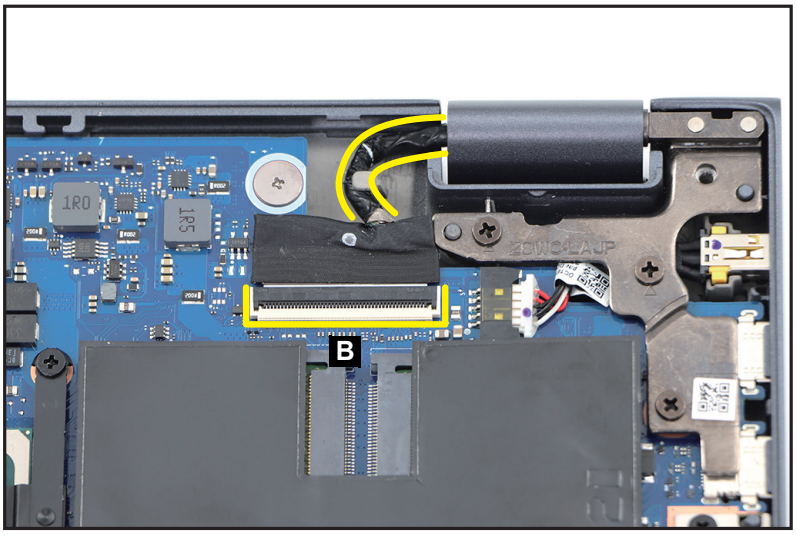



**Figure 1-21. LCD Module Removal**

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

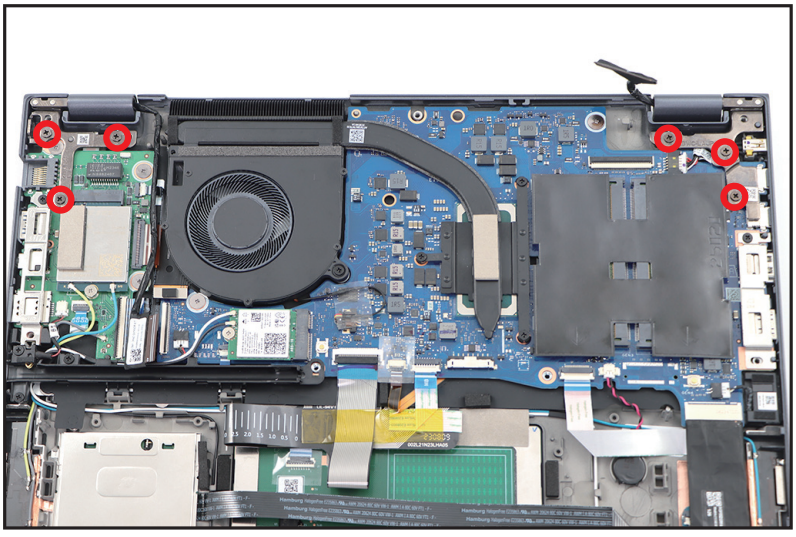


**Figure 1-22. LCD Module Removal**

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

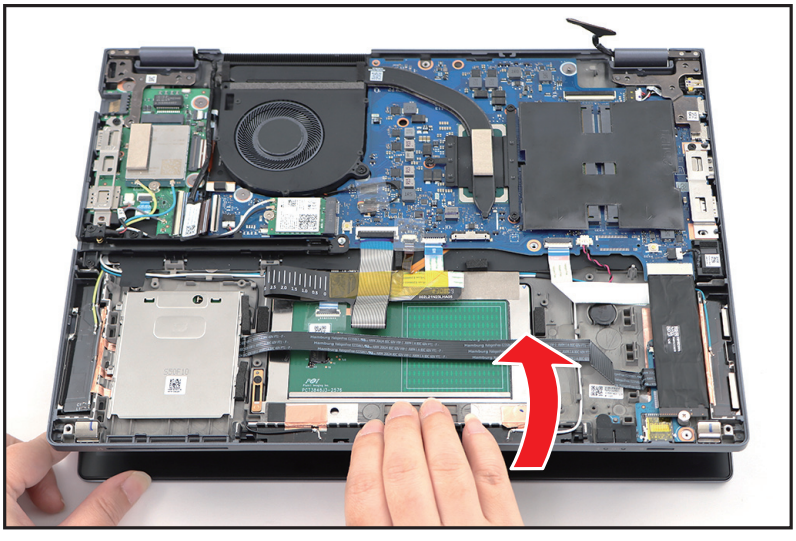


**Figure 1-23. LCD Module Removal**

5. Close the top assembly and lift both LCD hinges until they are fully extended (Figure 1-24).

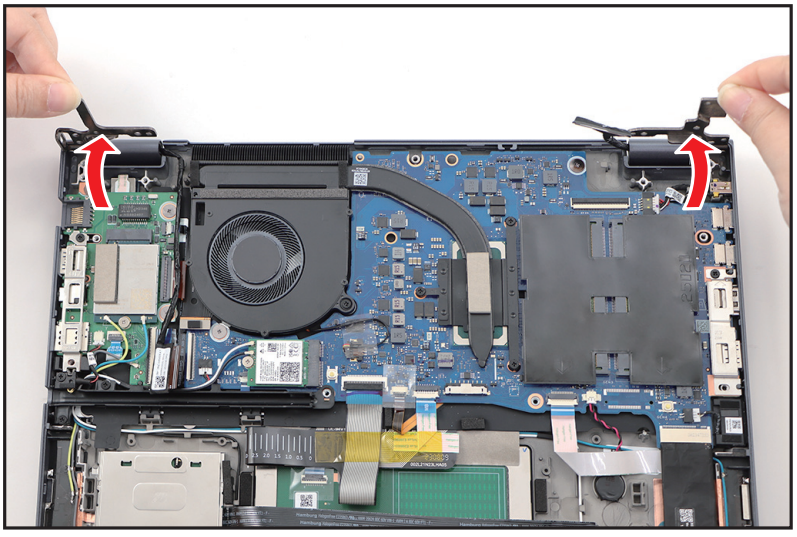


**Figure 1-24. LCD Module Removal**

6. Open the top assembly again. Then remove the LCD module (C) away from the top assembly (Figure 1-25).

**⚠ CAUTION:**

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

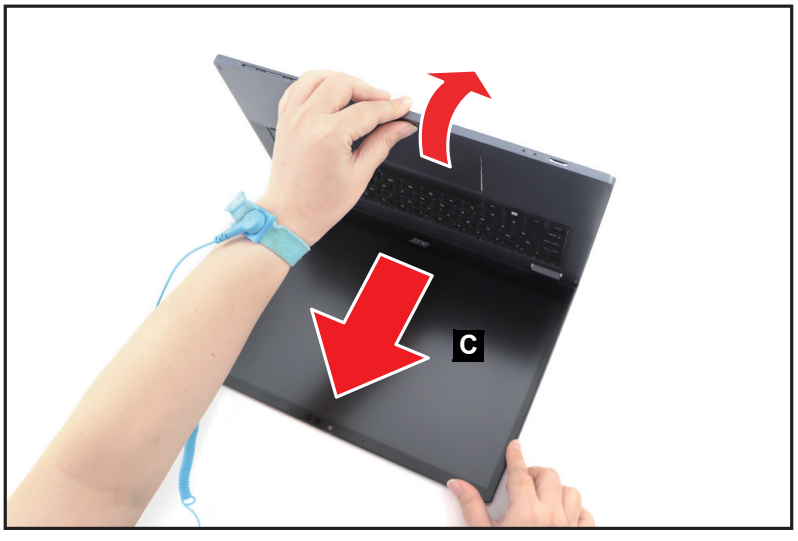



**Figure 1-25. LCD Module Removal**

# DIMM Modules Removal

## Prerequisite:

Battery Pack Removal

1. Detach the absorber with mylar (A) covering the DIMM modules (Figure 1-26).

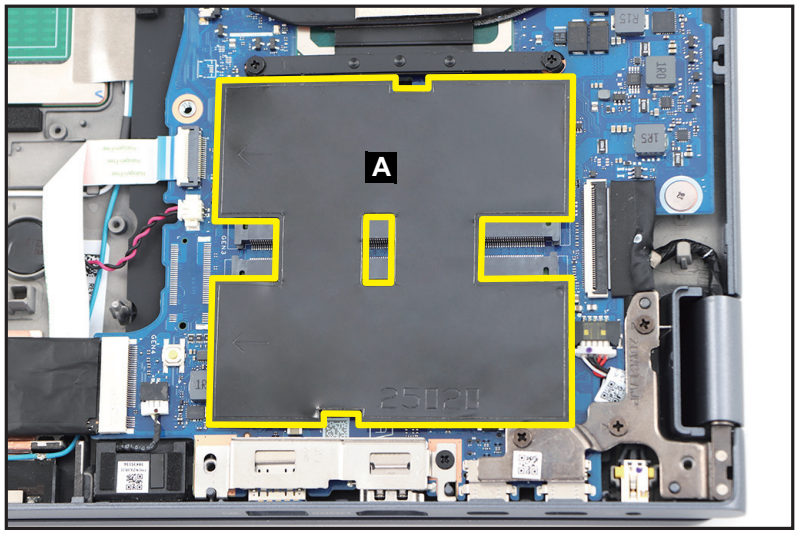



**Figure 1-26. DIMM Module Removal**

2. Push the DIMM module clips (B) outwards (Figure 1-27).

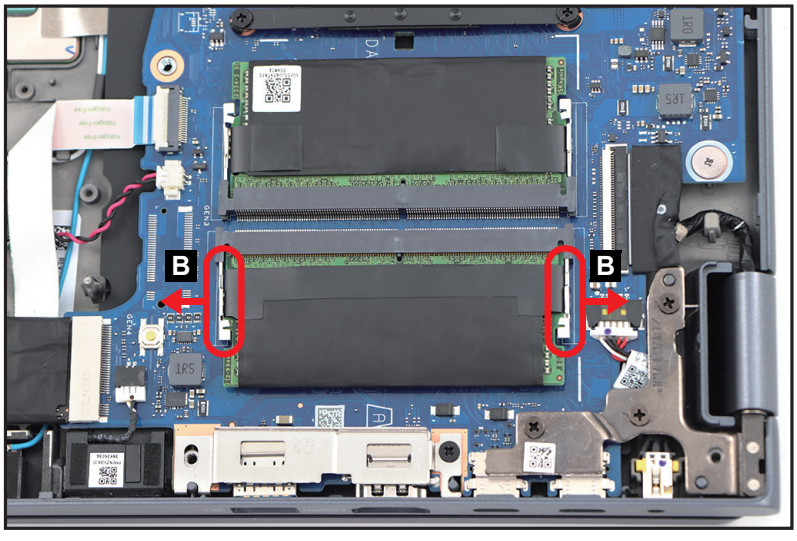



**Figure 1-27. DIMM Module Removal**

3. Disconnect the DIMM module (C) from the mainboard connector (D) (Figure 1-28). Then remove the DIMM module.

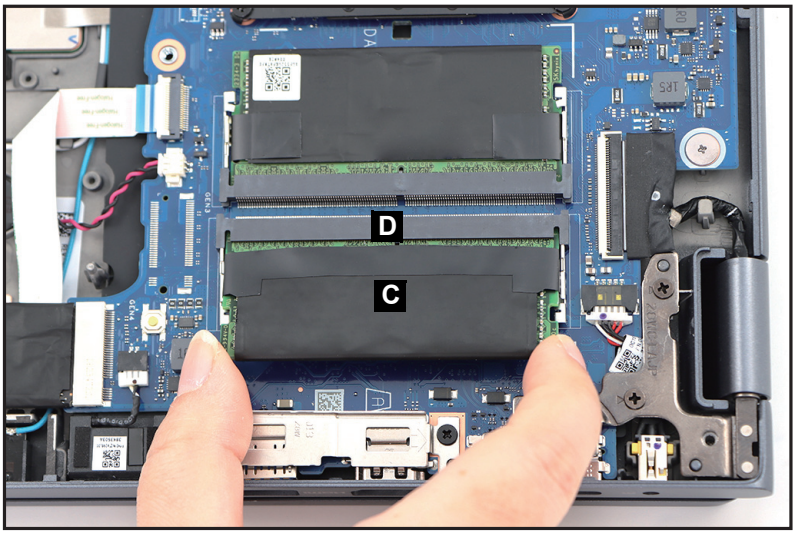



**Figure 1-28. DIMM Module Removal**

4. Repeat steps 2~3 to remove another DIMM module.
5. Detach the tabs (E) of the composite foil with thermal pad from the DIMM module as shown in Figure 1-29.

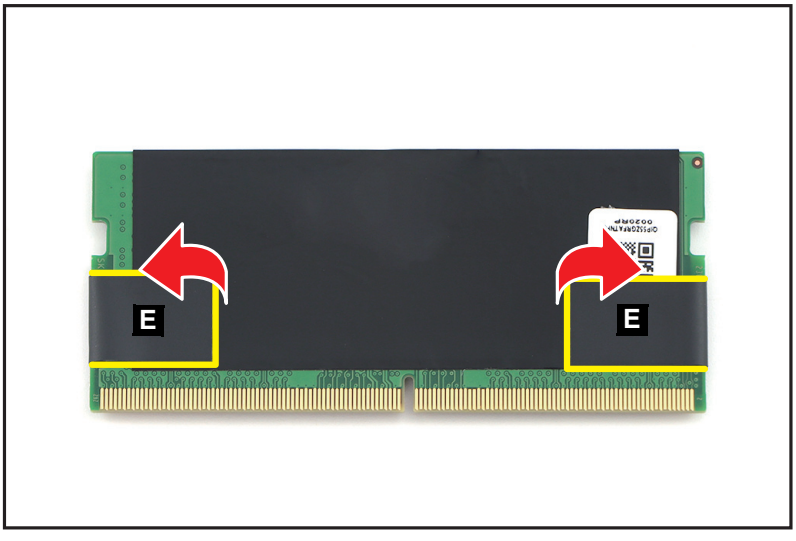



**Figure 1-29. DIMM Module Removal**

6. Peel off the composite foil with thermal pad (F) from the DIMM module (Figure 1-30).

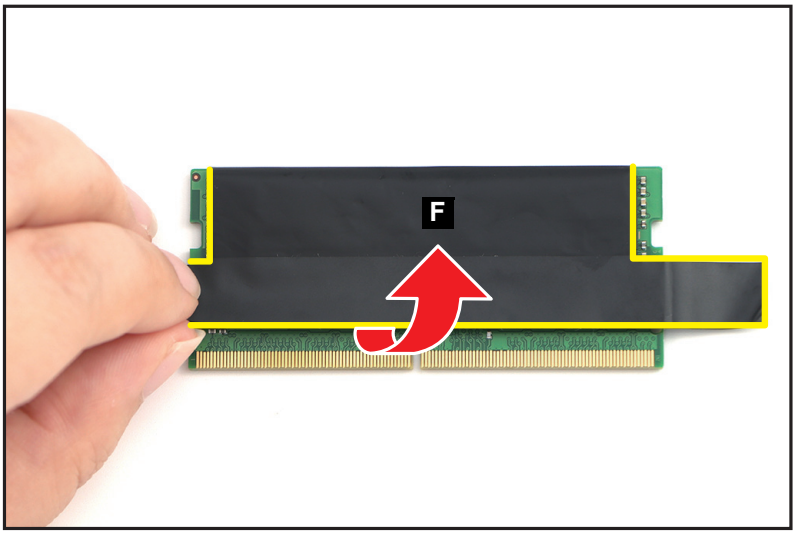



**Figure 1-30. DIMM Module Removal**

7. Detach the DIMM module from the adhesive graphite strip (marked with yellow dashed line) as shown in Figure 1-31.

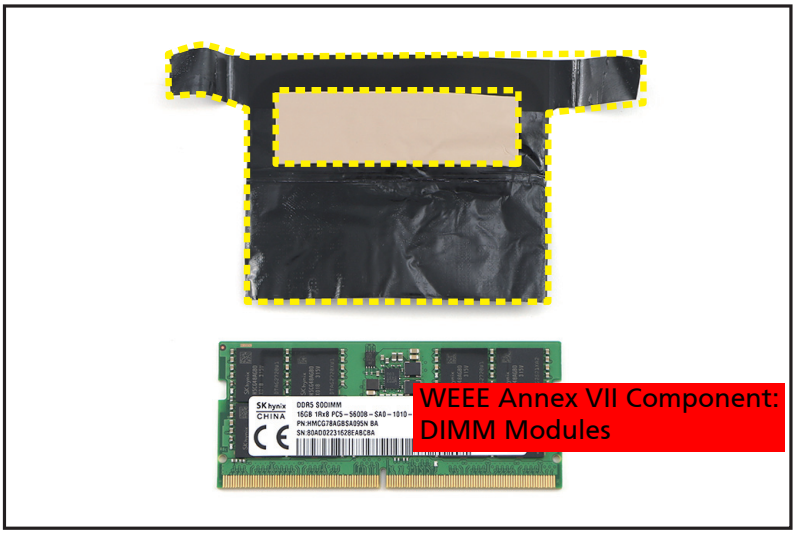



**Figure 1-31. DIMM Module Removal**

8. Repeat steps 5~7 to remove the composite foil with thermal pad from another DIMM module.

# RTC Battery Removal

## Prerequisite:

Battery Pack Removal

1. Disconnect the card reader board FFC from the mainboard connector (A) (Figure 1-32).

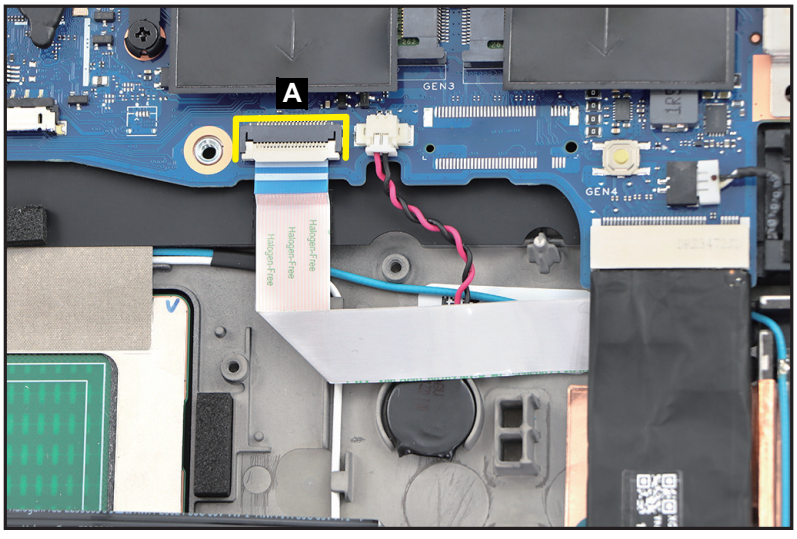



**Figure 1-32. RTC Battery Removal**

**⚠ CAUTION:**

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

2. Disconnect the RTC battery cable from the mainboard connector (B) (Figure 1-33).
3. Using plastic tweezers, carefully pry to detach the adhesive tape underneath the RTC battery (C) (Figure 1-33). Then remove the RTC battery.

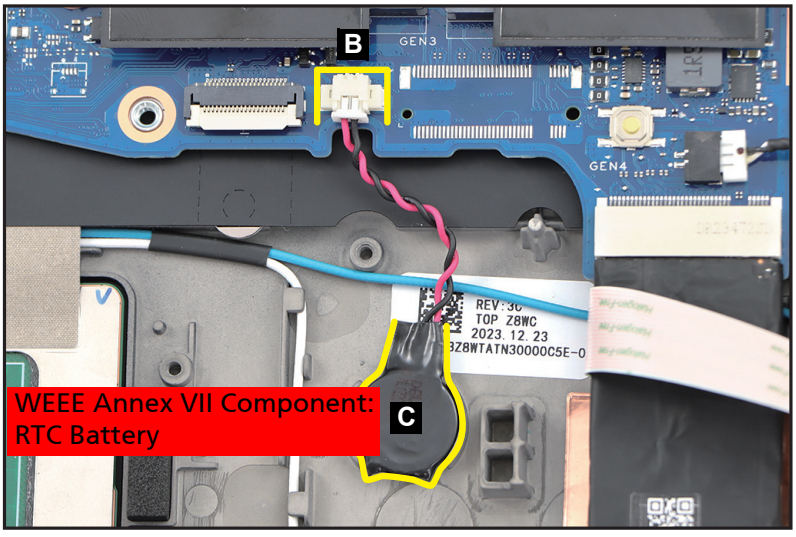



**Figure 1-33. RTC Battery Removal**

**IMPORTANT:**

Follow local regulations for battery disposal.

# SSD Modules Removal

## Prerequisite:

Battery Pack Removal

1. Remove one (1) screw securing the SSD module (Figure 1-34).

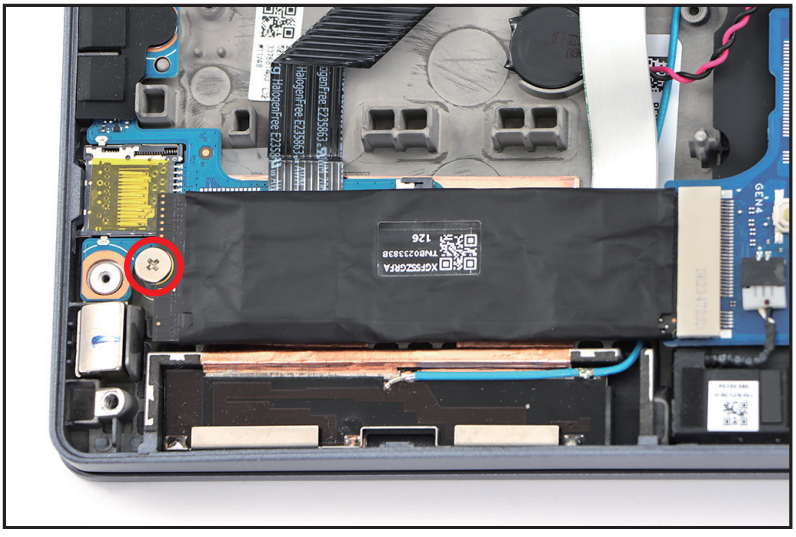


**Figure 1-34. SSD Module Removal**

2. Disconnect the SSD module (A) from the mainboard connector (B) (Figure 1-35). Then remove the SSD module.

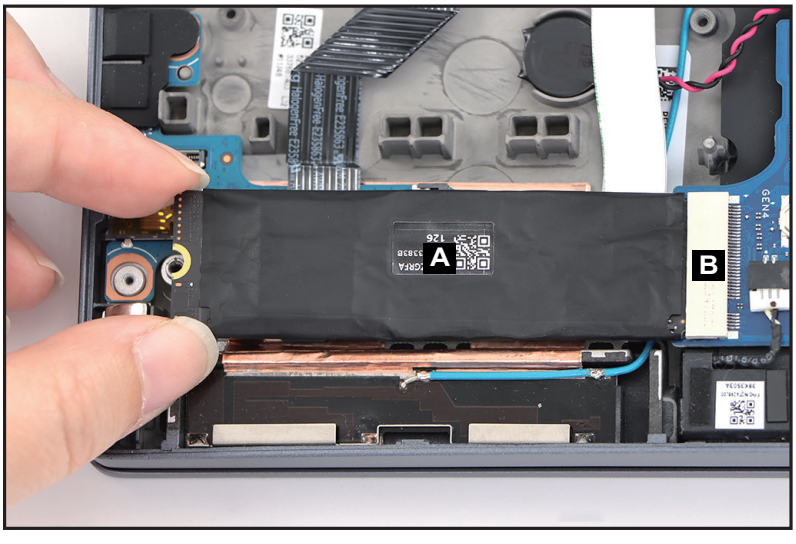



**Figure 1-35. SSD Module Removal**

3. Repeat steps 1~2 to remove another SSD module.

4. By holding the upper edge of the copper foil with mylar (C), unfold and detach it from the SSD module as shown in Figure 1-36 and Figure 1-37 but DO NOT remove yet!

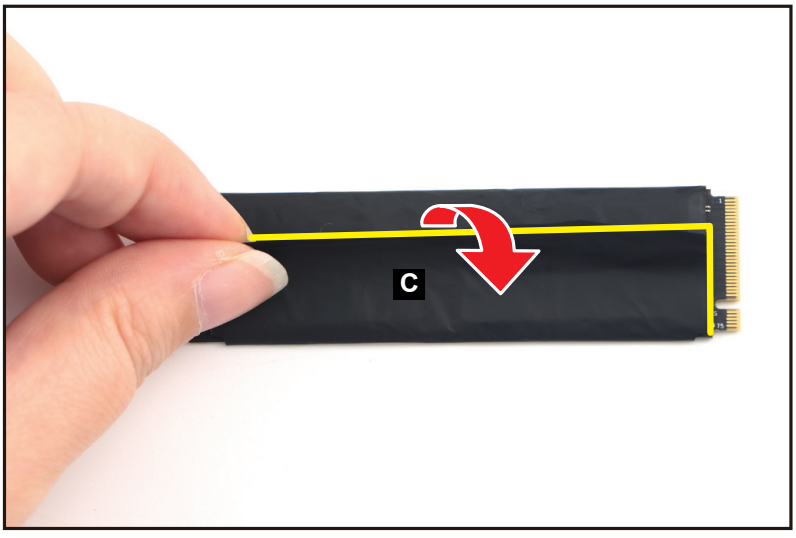



**Figure 1-36. SSD Module Removal**


**Figure 1-37. SSD Module Removal**

5. Detach the SSD module from the adhesive graphite strip (marked with yellow dashed line) as shown in Figure 1-38.

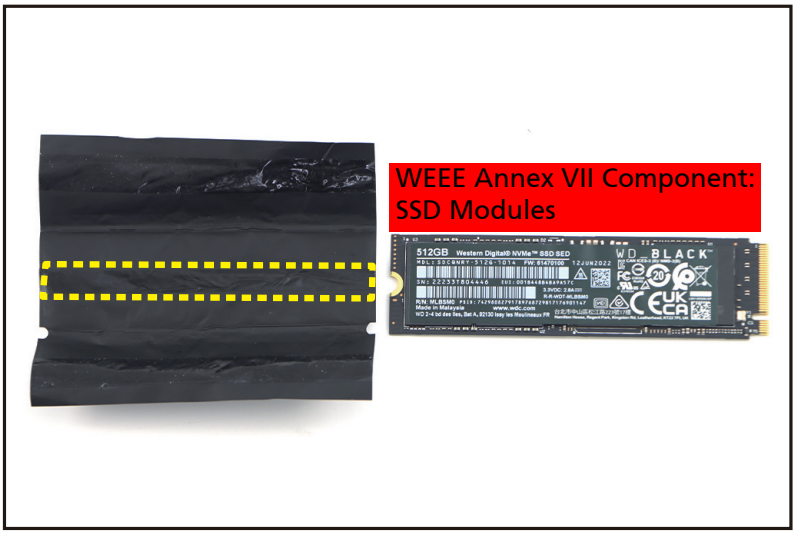



**Figure 1-38. SSD Module Removal**

6. Repeat steps 4~5 to remove the copper foil with mylar from another SSD module.

# LTE Board Removal (LTE SKU Only)

## Prerequisite:

Ensure that the **LTE Module**, **Thermal Module**, **WLAN Module**, **LCD Module**, and **Stylus Holder** have been disassembled prior removing the LTE board.

1. Remove one (1) screw (A) securing the right I/O bracket in place (Figure 1-39).

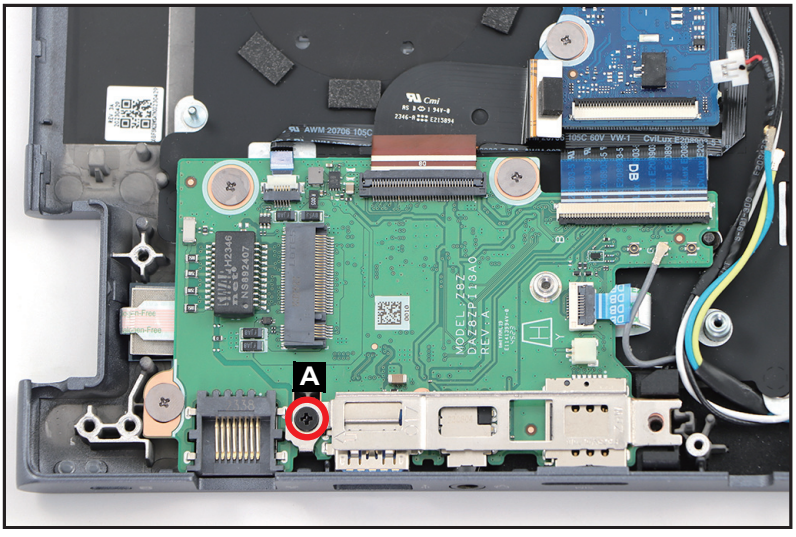



**Figure 1-39. LTE Board Removal**

2. Lift to release the I/O bracket (B) from the compartment studs (highlighted with the green line and circle) (Figure 1-40). Then remove the bracket.

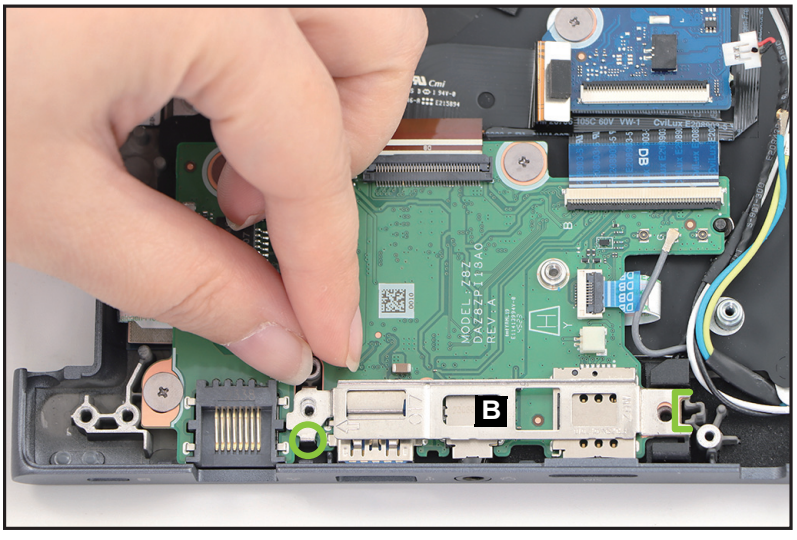



**Figure 1-40. LTE Board Removal**

3. Disconnect one end of the LTE board FPC from the LTE board connector (C) (Figure 1-41).
4. Disconnect other end of the LTE board FPC from the mainboard connector (D) (Figure 1-41).
5. Disconnect the LTE board FFC from the LTE board connector (E) (Figure 1-41).
6. Disconnect the fingerprint FFC from the LTE board connector (F) (Figure 1-41).
7. Disconnect the LTE antenna cable from the LTE board connector (G) (Figure 1-41).

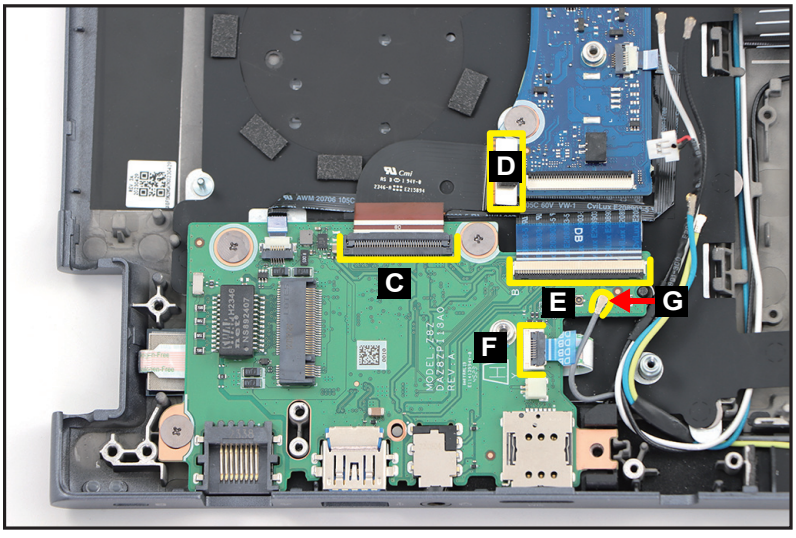



**Figure 1-41. LTE Board Removal**

**⚠ CAUTION:**

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

8. Disconnect the P-sensor FFC (H) from the LTE board and mainboard connectors. Carefully detach the middle portions (highlighted with the yellow lines) of the FFC from its underneath adhesive (Figure 1-42). Remove the P-sensor FFC.
9. Remove three (3) screws (I) securing the LTE board in place (Figure 1-42).

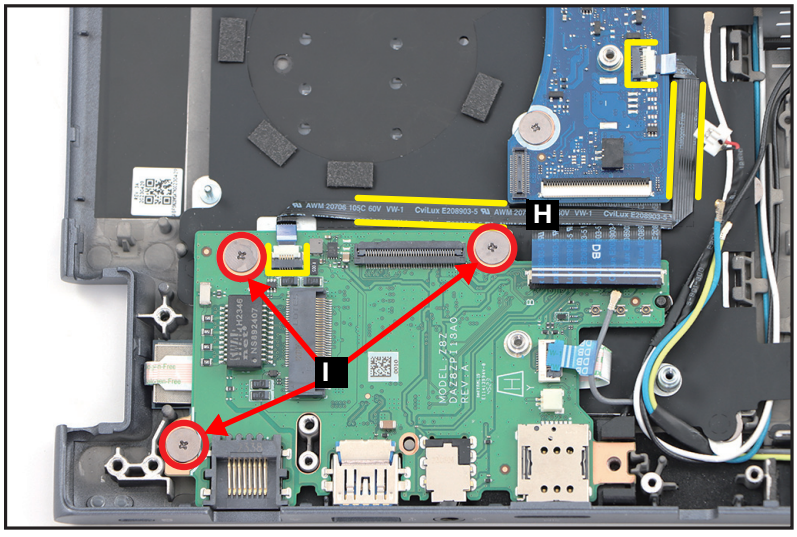



**Figure 1-42. LTE Board Removal**

**⚠ CAUTION:**

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

10. Release the LTE board (J) from the I/O port slots and guide pin (K) on the top assembly (Figure 1-43). Then remove the LTE board.

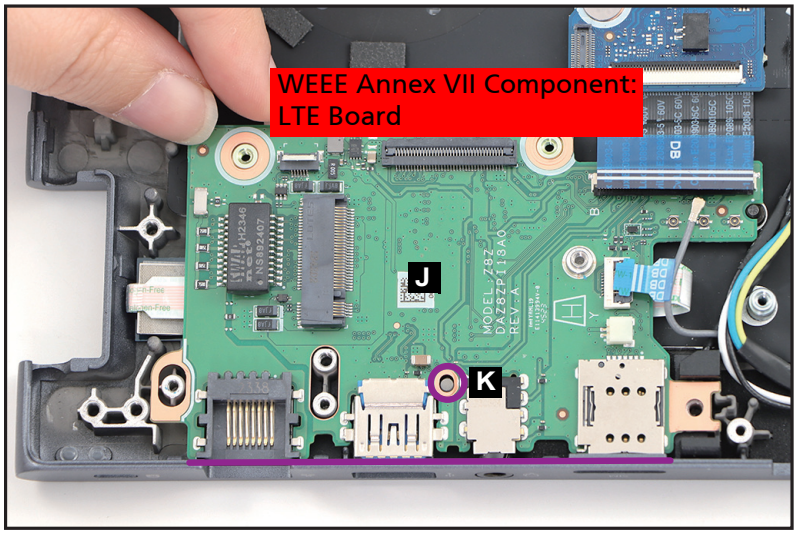



**Figure 1-43. LTE Board Removal**

# Mainboard Removal

## Prerequisite:

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

1. Detach the kapton tape (A) and the mylar (B) securing the cables in place (Figure 1-44).

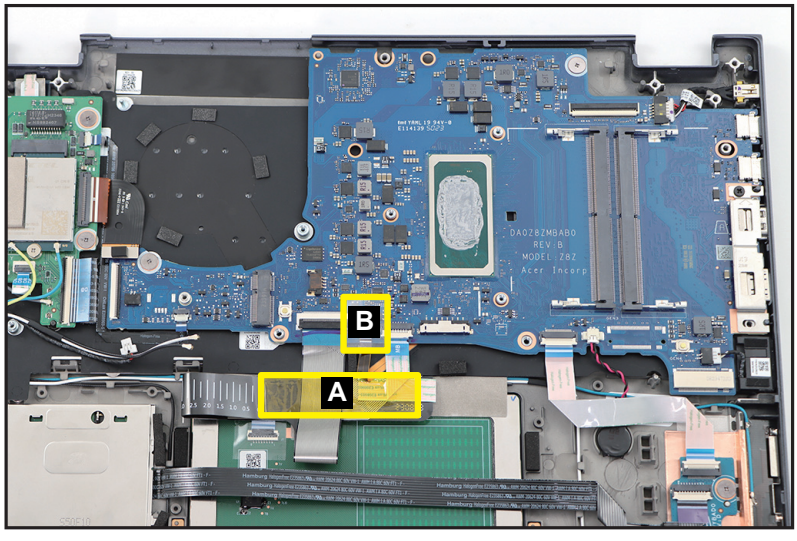



**Figure 1-44. Mainboard Removal**

2. Disconnect the LTE board FPC from the mainboard connector (C) (Figure 1-45).
3. Disconnect the P-sensor FFC from the mainboard connector (D). Carefully detach the middle portion (highlighted with the yellow lines) of the FFC from its underneath adhesive(Figure 1-45).
4. Disconnect the keyboard FPC from the mainboard connector (E) (Figure 1-45).
5. Disconnect the keyboard backlight FPC from the mainboard connector (F) (Figure 1-45).
6. Disconnect the touchpad FFC from the mainboard connector (G) (Figure 1-45).
7. Disconnect the card reader board FFC from the mainboard connector (H) (Figure 1-45).
8. Disconnect the left speaker cable from the mainboard connector (I) (Figure 1-45).
9. Disconnect the DC-IN cable from the mainboard connector (J) (Figure 1-45).

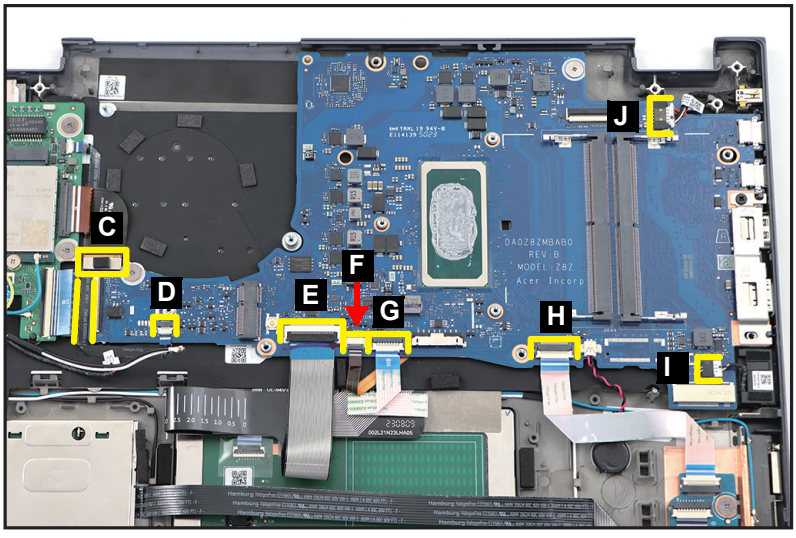



**Figure 1-45. Mainboard Removal**

**⚠ CAUTION:**

P-sensor FFC (Flexible Flat Circuit), touchpad FFC, card reader board FFC, LTE board FPC (Flexible Printed Circuit), keyboard FPC, and keyboard backlight FPC, can be damaged if removed while the mainboard connectors are locked.

10. Remove one (1) screw (K) securing the left I/O bracket (Figure 1-46).

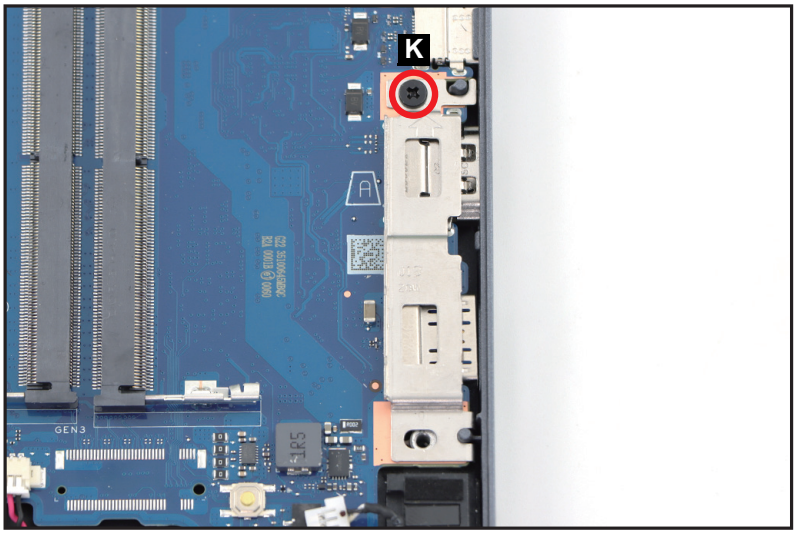



**Figure 1-46. Mainboard Removal**

11. Lift to release the left I/O bracket (L) from the compartment studs (highlighted with the green line and circle) (Figure 1-47). Then remove the bracket.

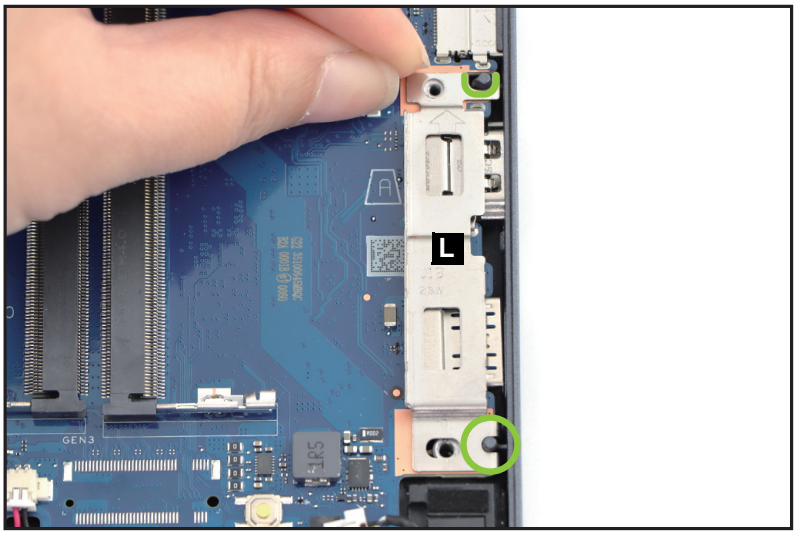



**Figure 1-47. Mainboard Removal**

12. Disconnect the LTE board FFC from the LTE board connector (M) (Figure 1-48).
13. Remove two (2) screws (N) securing the mainboard in place (Figure 1-48).
14. Pry to detach the adhesive tape underneath the RTC battery (O) (Figure 1-48).

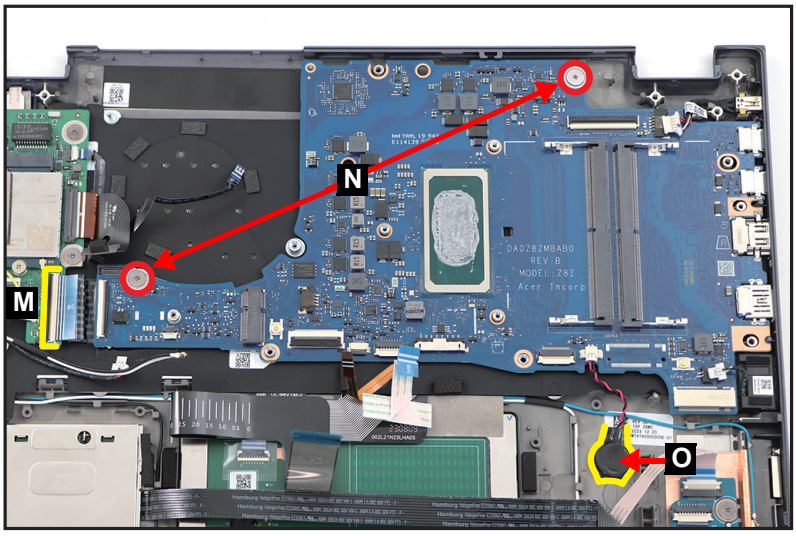



**Figure 1-48. Mainboard Removal**

**⚠ CAUTION:**

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

15. Release the mainboard (P) from the I/O ports slots and guide pin (Q) on the top assembly (Figure 1-49). Then remove the mainboard.

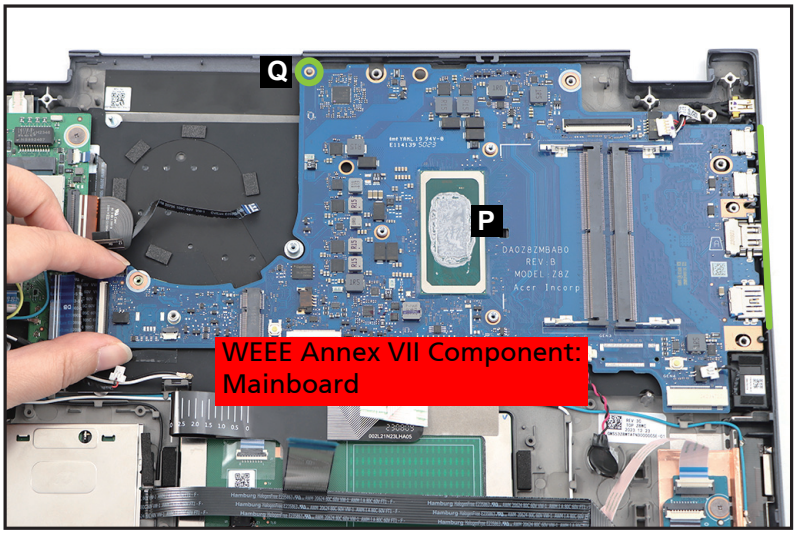



**Figure 1-49. Mainboard Removal**

16. Flip the mainboard. Then detach the tape (R) securing the LTE board FFC connection (Figure 1-50).

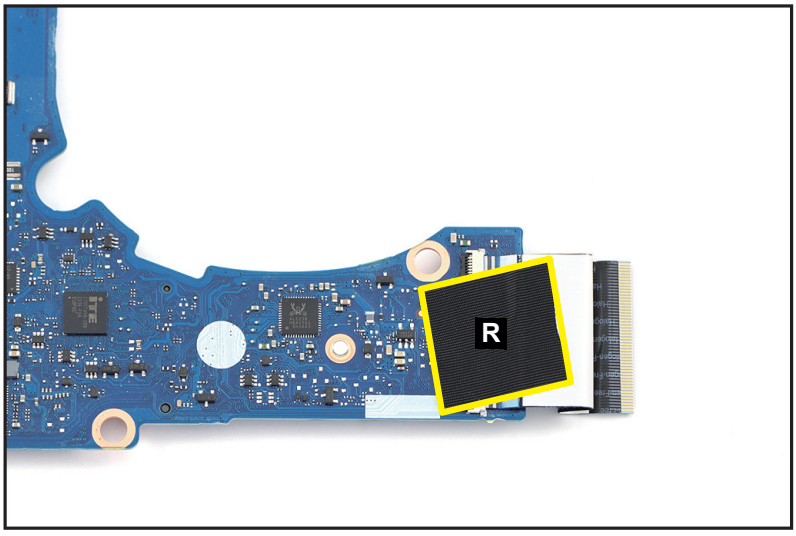



**Figure 1-50. Mainboard Removal**

17. Disconnect the other end of the LTE board FFC from the mainboard connector (S) (Figure 1-51). Remove the FFC.

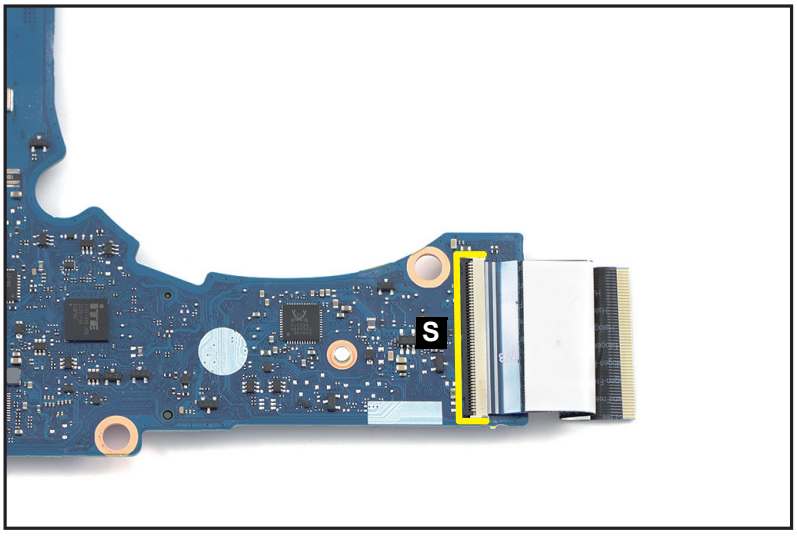



**Figure 1-51. Mainboard Removal**

**⚠ CAUTION:**

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

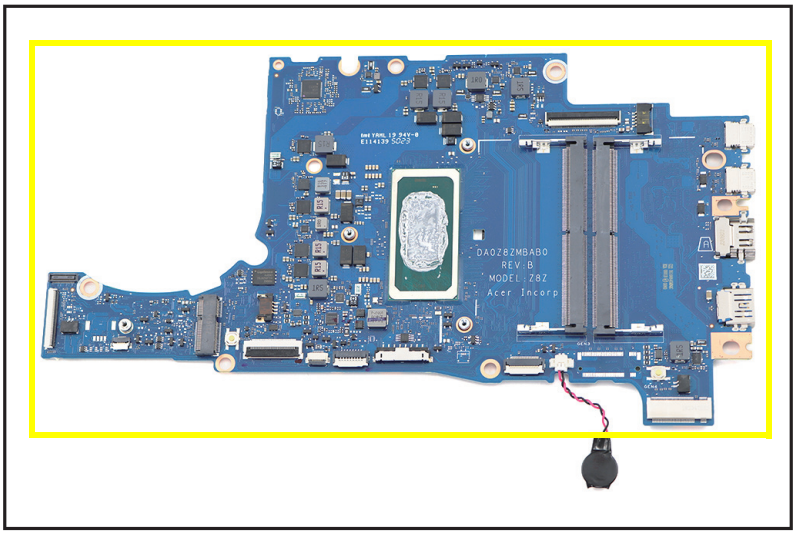



**Figure 1-52. Mainboard**

**IMPORTANT:**

Circuit boards >10 cm² have been highlighted with a yellow rectangle as shown in Figure 1-52. Remove the circuit board and follow local regulations for disposal.

# Card Reader Board Removal

## Prerequisite:

SSD Modules Removal

1. Detach the rubber (A) from the card reader board (Figure 1-53).

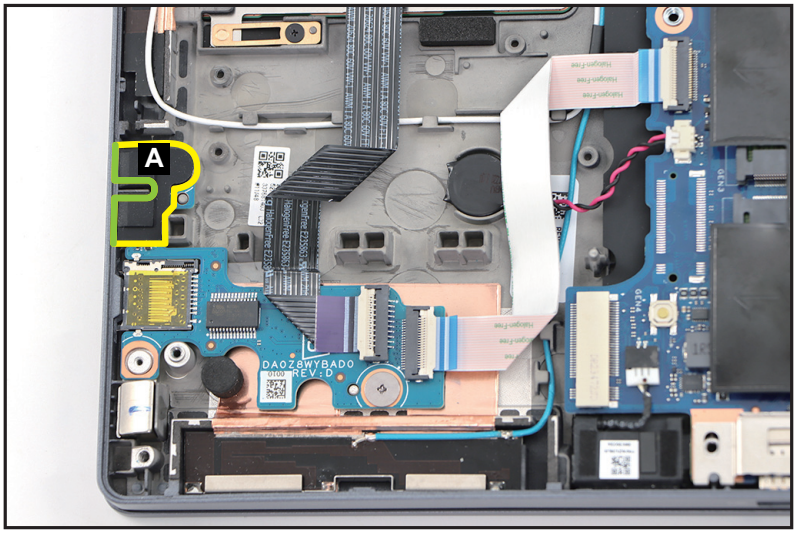



**Figure 1-53. Card Reader Board Removal**

2. Disconnect the smart card reader FFC from the card reader board connector (B) (Figure 1-54).
3. Disconnect the card reader board FFC (C) from the card reader board and mainboard connectors (Figure 1-54). Then remove the FFC.
4. Remove two (2) screws securing the card reader board (Figure 1-54).

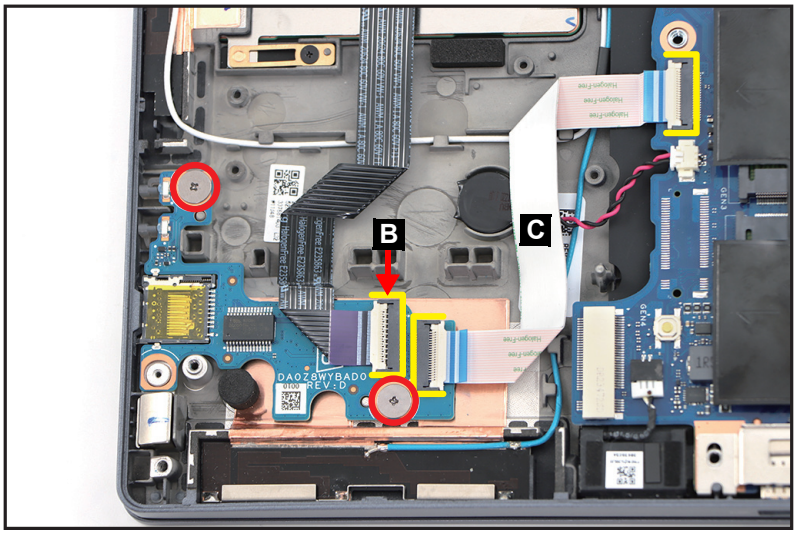



**Figure 1-54. Card Reader Board Removal**

**⚠ CAUTION:**

Smart card reader FFC (Flexible Flat Circuit) and card reader board FFC can be damaged if removed while the card reader board and/or mainboard connectors are locked.

5. Release the card reader board (D) from the card reader slot and guide pins (E) (Figure 1-55). Then remove the card reader board.

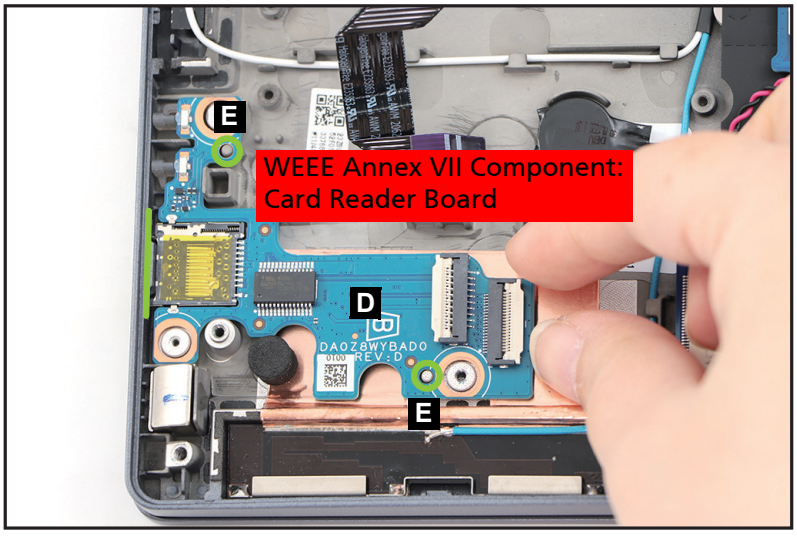



**Figure 1-55. Card Reader Board Removal**

# Touchpad Module Removal

## Prerequisite:

SSD Modules Removal

1. Detach the kapton tape (A) and the mylar (B) securing the cables in place (Figure 1-56).

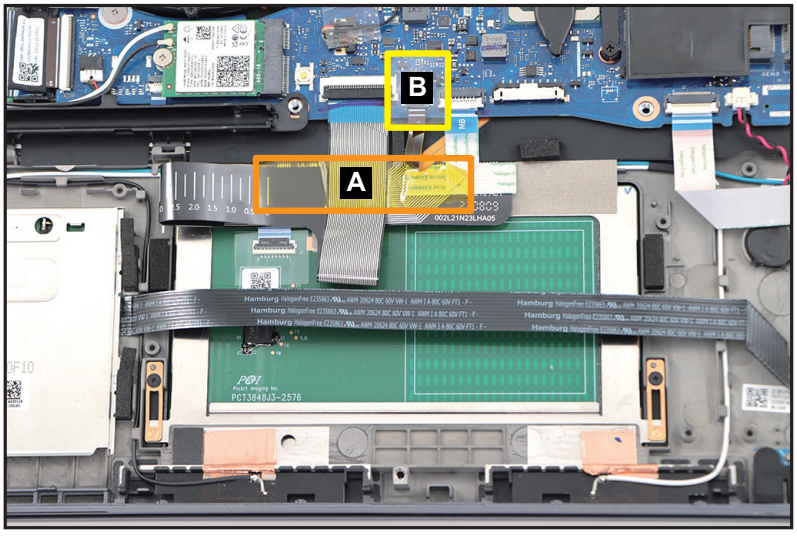



**Figure 1-56. Touchpad Module Removal**

2. Disconnect the smart card reader FFC from the card reader board connector (C) (Figure 1-57).
3. Disconnect the touchpad FFC from the mainboard connector (D) (Figure 1-57).

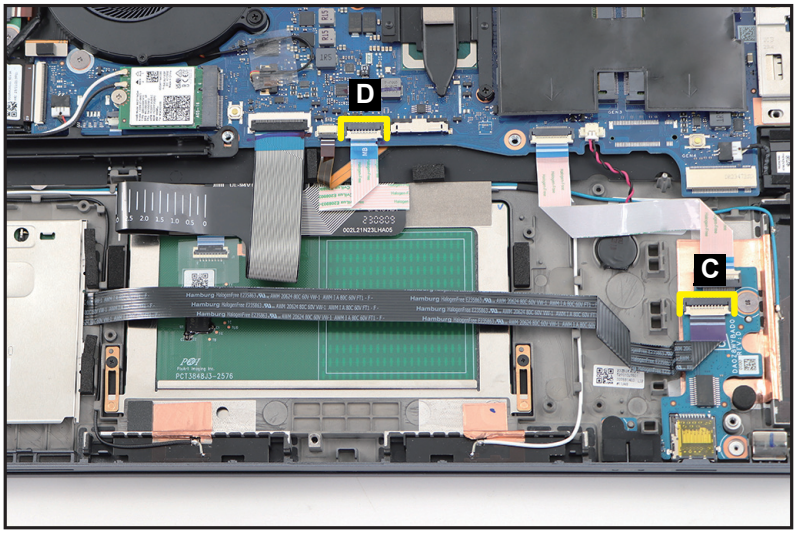



**Figure 1-57. Touchpad Module Removal**

**⚠ CAUTION:**

Smart card reader FFC (Flexible Flat Circuit) and touchpad FFC can be damaged if removed while the card reader board or mainboard connector is locked.

4. Slightly detach and lift the mylar. Then detach the mylar (E) securing the touchpad FFC connection (Figure 1-58).

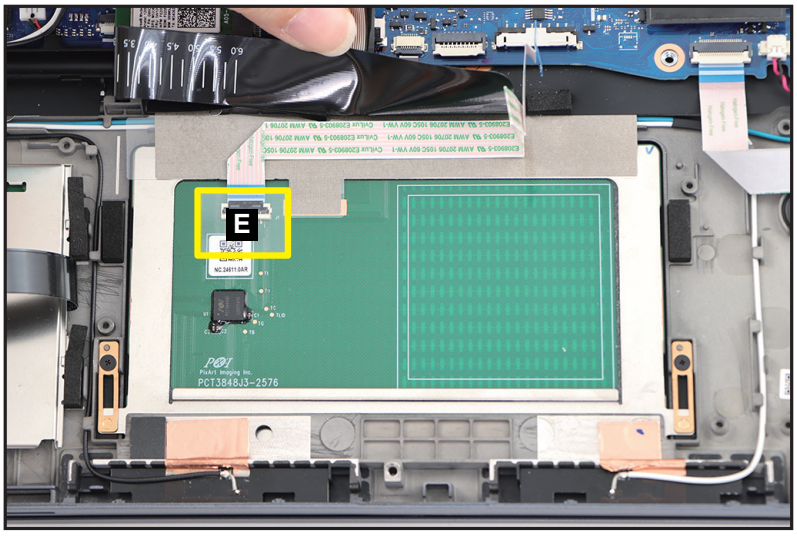



**Figure 1-58. Touchpad Module Removal**

5. Disconnect the touchpad FFC from the touchpad module connector (F) (Figure 1-59).

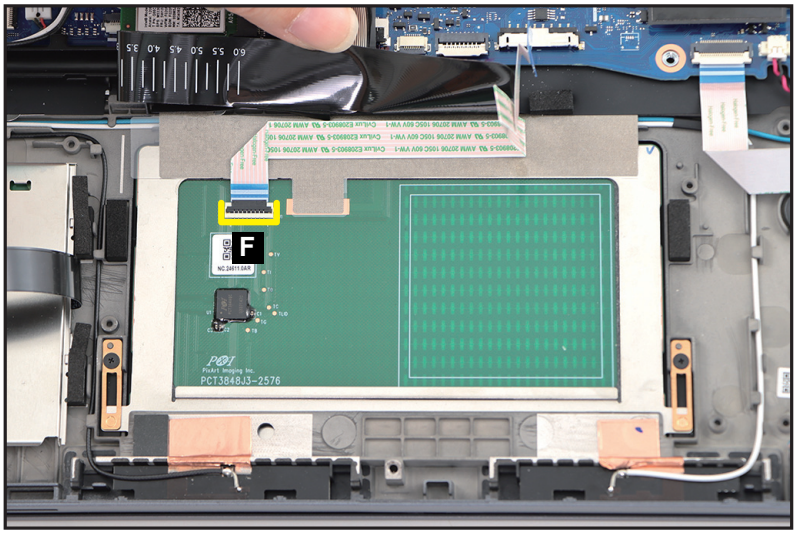



**Figure 1-59. Touchpad Module Removal**

**⚠ CAUTION:**

Touchpad FFC (Flexible Flat Circuit) can be damaged if removed while the touchpad module connector is locked.

6. Detach the conductive tape (G) from the touchpad module and top assembly (Figure 1-60).

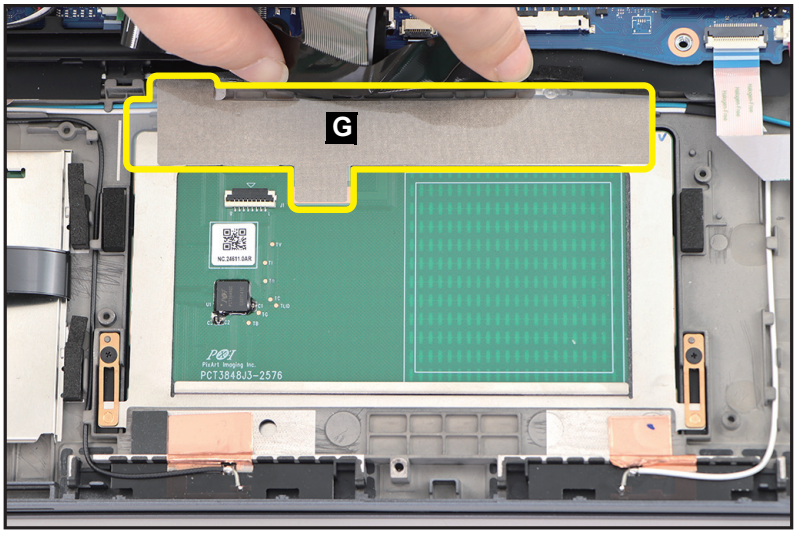



**Figure 1-60. Touchpad Module Removal**

7. Remove five (5) screws securing the touchpad module and touchpad brackets (Figure 1-61).

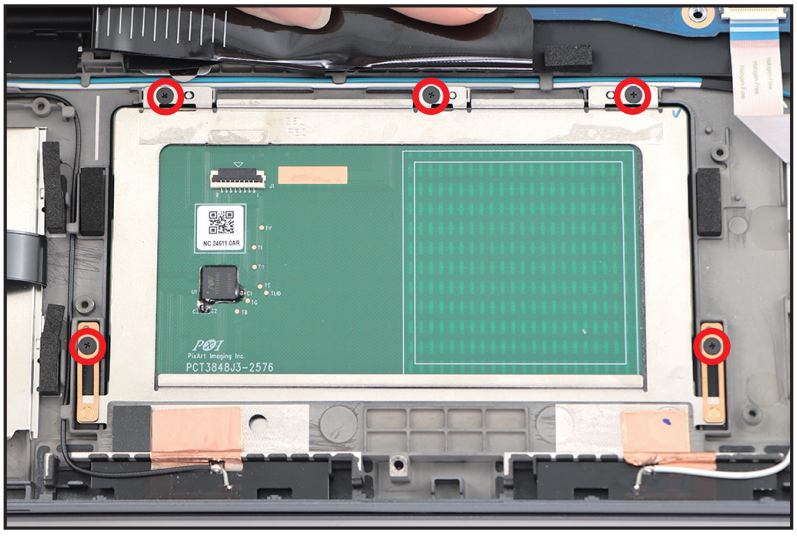



**Figure 1-61. Touchpad Module Removal**

8. Remove the touchpad brackets (H) from the top assembly (Figure 1-62).

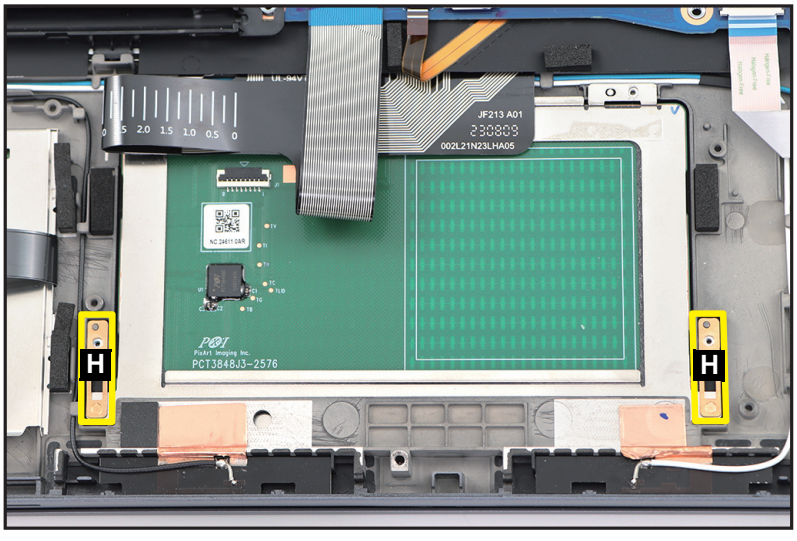



**Figure 1-62. Touchpad Module Removal**

9. Slide the touchpad module (I) slightly to disengage it from the bottom latches (highlighted with the green line) (Figure 1-63). Then remove the touchpad module.

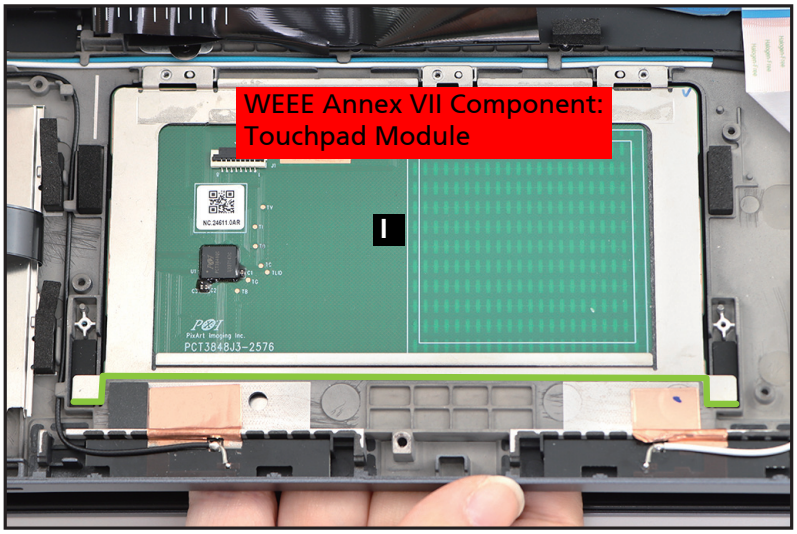



**Figure 1-63. Touchpad Module Removal**

# LCD Panel Removal

## Prerequisite:

LCD Module Removal

1. Push down both hinges towards the LCD cover (Figure 1-64).

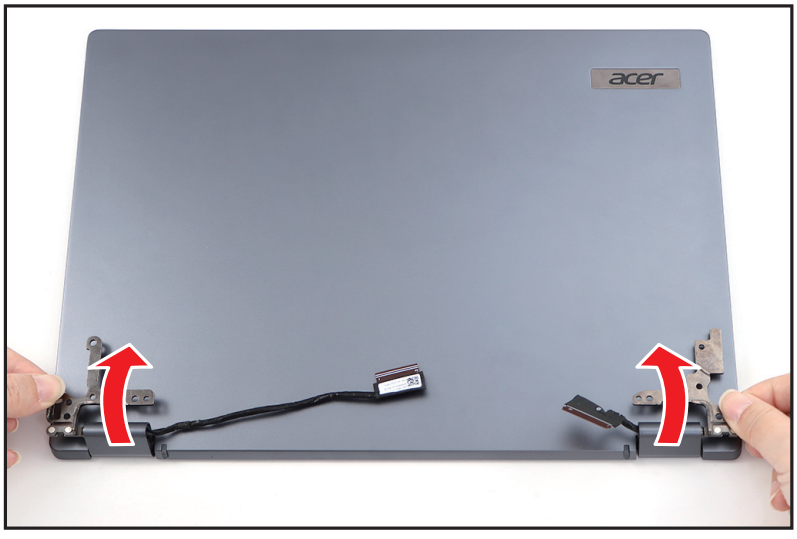



**Figure 1-64. LCD Panel Removal**

2. Pry around the bezel of the LCD panel to release the latches from the LCD cover (Figure 1-65).

**Figure 1-65. LCD Panel Removal**

3. Lift the LCD hinges until they are fully extended (Figure 1-66).


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

4. Release the LCD cable from the LCD hinge cap as shown in Figure 1-67. Then remove the LCD panel.

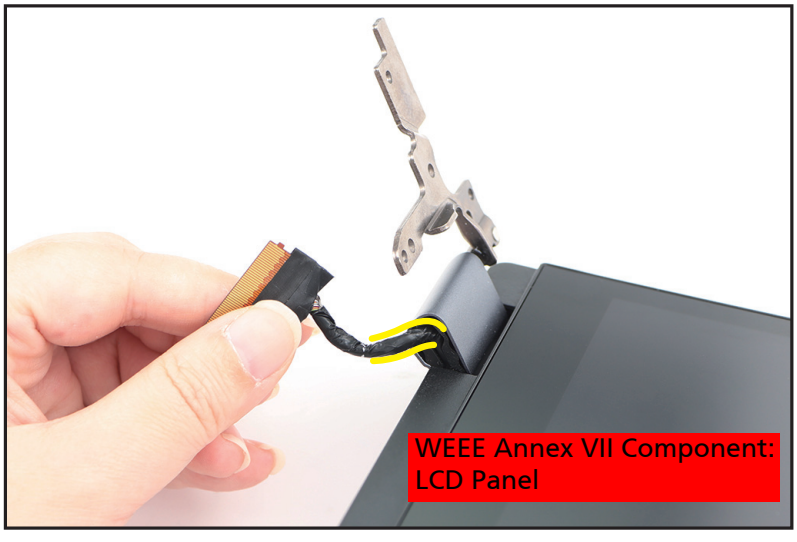



**Figure 1-67. LCD Panel Removal**

# Top Assembly Removal (Keyboard Removal)

## Prerequisite:

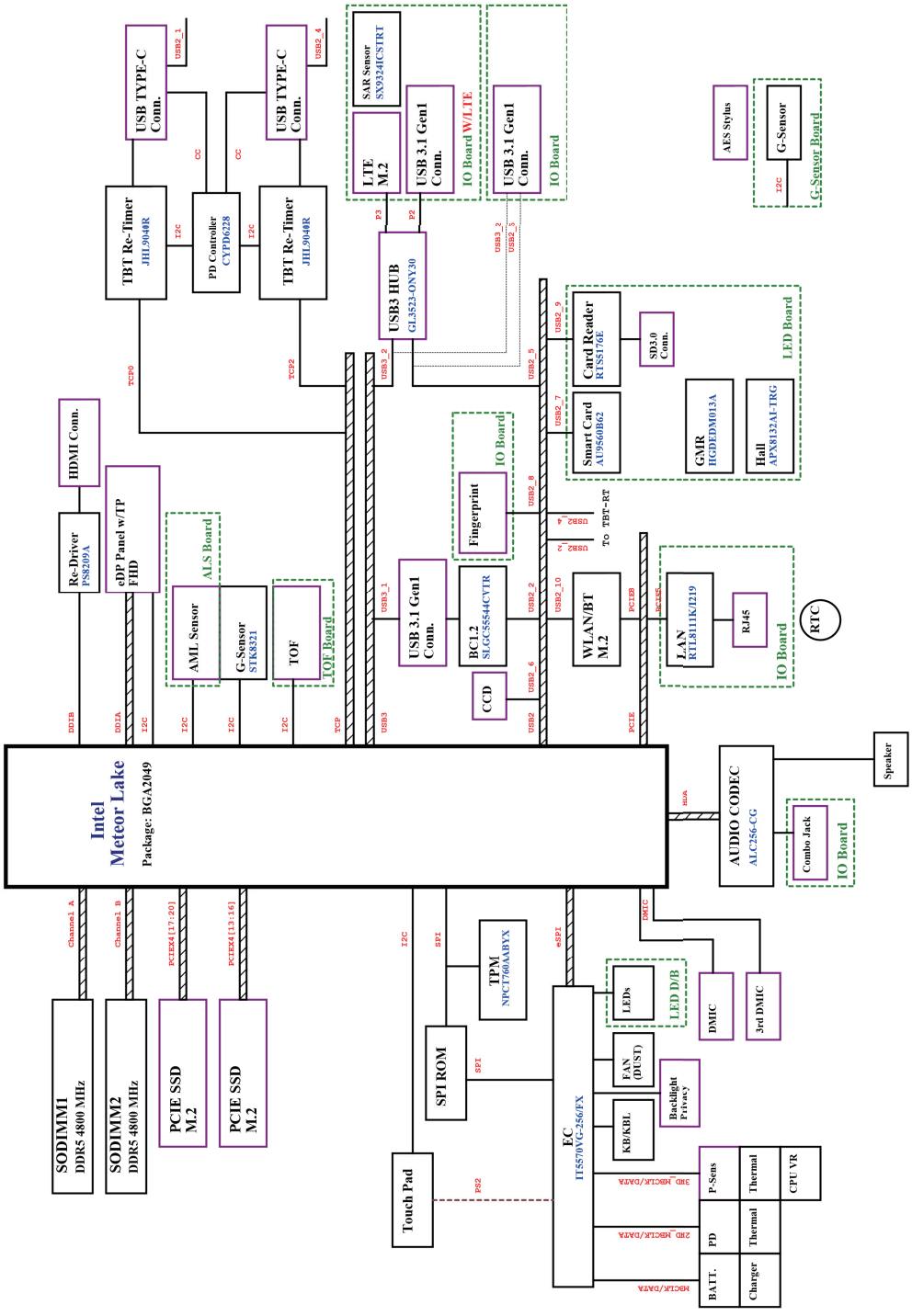
Ensure that the **DC-IN Cable**, **Smart Card Reader**, **Card Reader Board**, **Touchpad Module**, **Right Speaker**, **Fingerprint Module**, and **Left Speaker** have been disassembled prior removing the top assembly.

**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 1-68. 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.

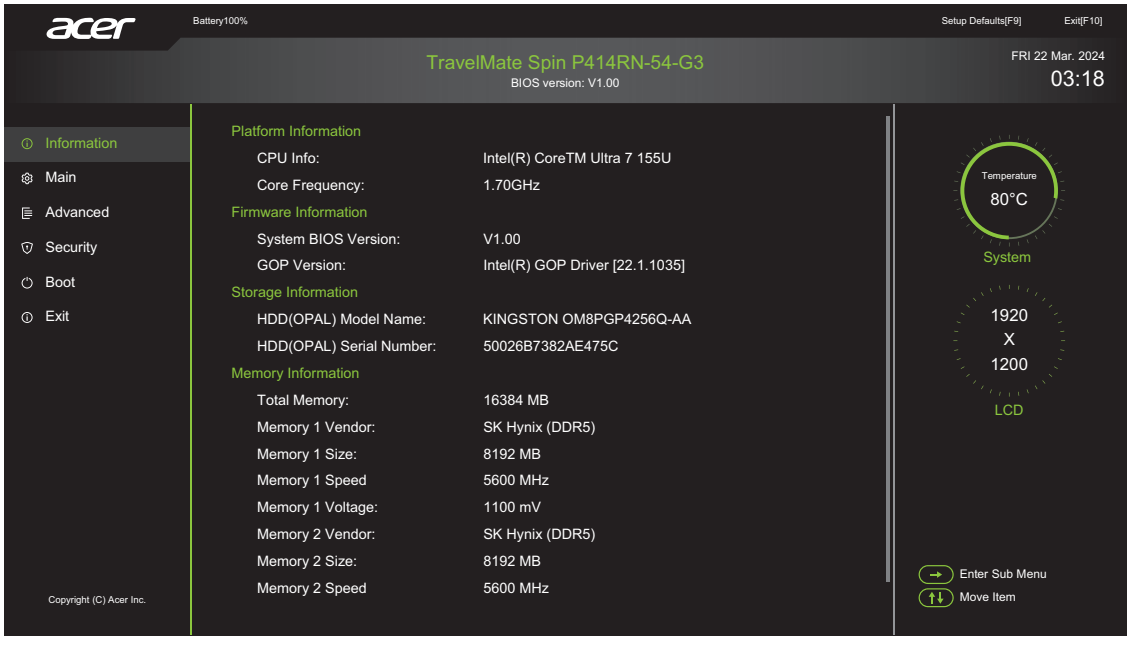



**Figure 1-69. BIOS Information**

Table 1-1 describes the parameters shown in Figure 1-69.

**Table 1-1. BIOS Information**

| Parameter | Description |
|---|---|
| CPU Info | CPU (central processing unit) type and speed of the system |
| Core Frequency | CPU core frequency |
| System BIOS Version | System BIOS version |
| GOP Version | GOP (graphics output protocol) firmware version of the system |
| HDD(OPAL) Model Name | Model name of HDD (hard disk drive) installed on the primary IDE master |
| HDD(OPAL) Serial Number | Serial number of HDD installed on the primary IDE master |

Table 1-1. BIOS Information (Continued)

| Parameter | Description |
|---|---|
| Total Memory | Total memory installed |
| Memory Vendor | Manufacturer of the installed memory |
| Memory Size | Size of the installed memory |
| Memory Speed | Configured speed of the installed memory |
| Memory Voltage | Voltage of the installed memory |
| Serial Number | Serial number of the unit |
| Asset Tag Number | Asset tag number of the system |
| Ownership Tag | Ownership tag of the system |
| Product Name | Product name of the system |
| Manufacturer Name | Manufacturer of the system |
| UUID | Universally Unique Identifier |
| LAN MAC Address | LAN MAC address of the system |

# Main

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

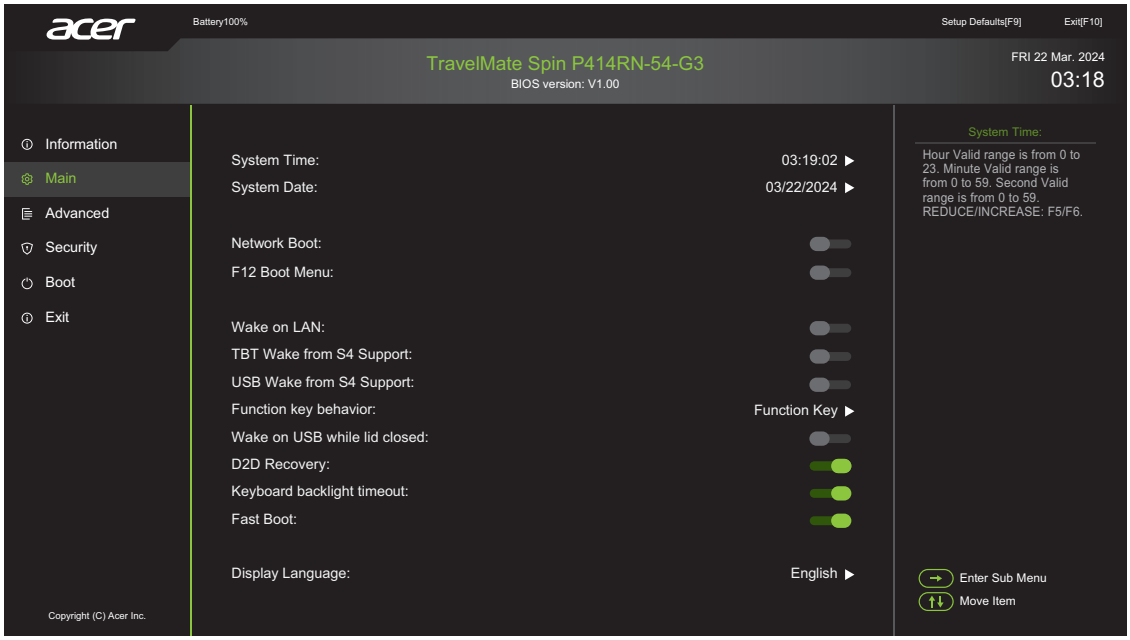



**Figure 1-70. BIOS Main**


**Figure 1-71. BIOS Main (All Options)**

Table 1-2 describes the parameters shown in Figure 1-70 and Figure 1-71.

**Table 1-2. BIOS Main**

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

**NOTE:**

Press ***Ctrl*** **+S** keys to show the hidden options.

# Advanced

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

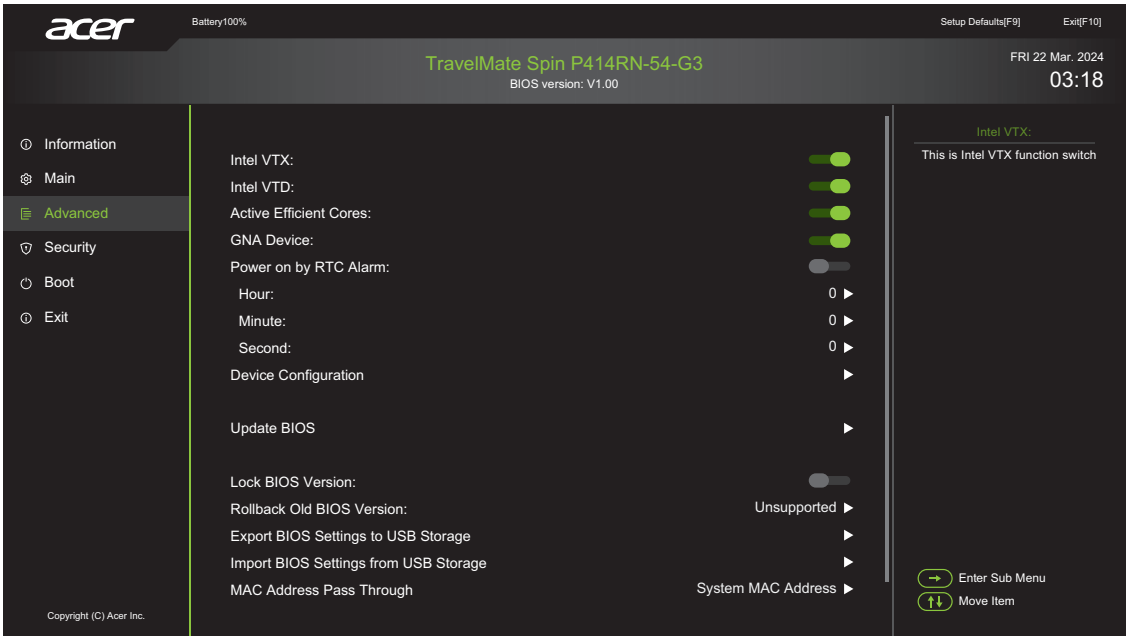



**Figure 1-72. BIOS Advanced**

Table 1-3 describes the parameters shown in Figure 1-72.

**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 efficiency cores feature | Enabled or Disabled |
| GNA Device | Option to use GNA plugin feature | 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 Yes is selected, the system will save the current BIOS settings as a file, and exit the dialog box. | |
| Import BIOS Settings from USB Storage | Option to restore the BIOS settings from the USB storage. Only profile with same project name can be imported. Otherwise, a warning message will appear on the screen.<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 Yes is selected, the system will load the file into BIOS, then exit the dialog box. | |
| MAC Address Pass Through | Option to enable/disable the MAC address pass through function. If the setting is set to Enabled, it will clone system MAC address to Dock. | |
| Wake On LAN from Dock | Option to enable/disable the WOL from Dock function. If the setting is set to Enabled, it will allow the WOL event triggered from Dock to wake the system. | Enabled or Disabled |
| System Health Indicator | When an abnormality is detected, the system health indicator will flash the indicator to immediately notify the user and remind the user to properly check the system. | |

# Security

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

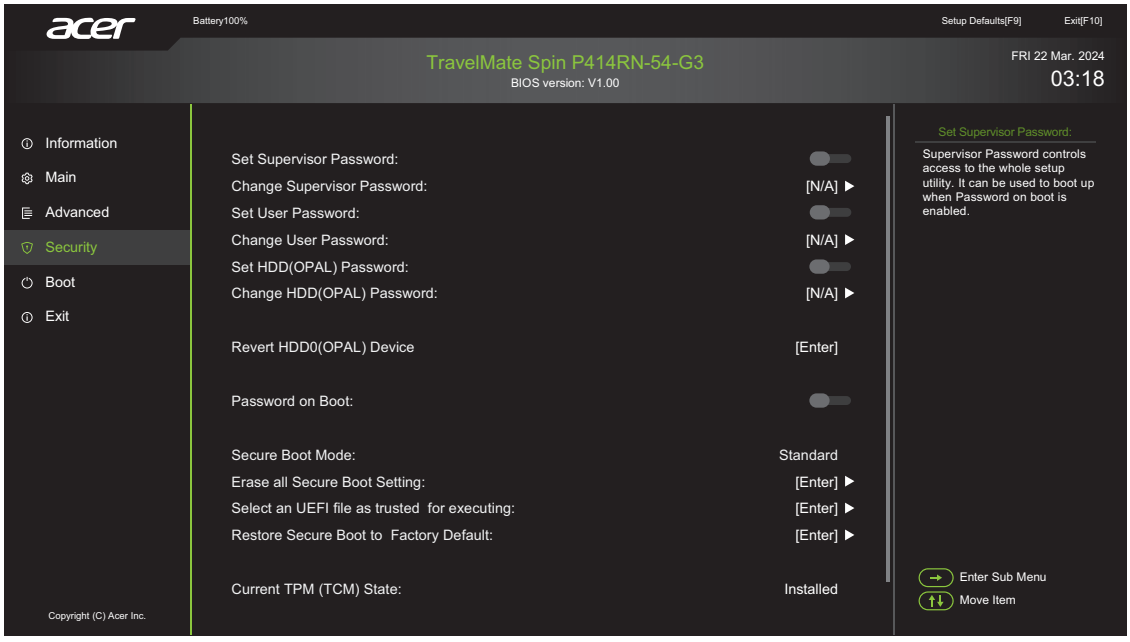



**Figure 1-73. BIOS Security**

Table 1-4 describes the parameters shown in Figure 1-73.

**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 | N/A |

Table 1-4. BIOS Security (Continued)

| Parameter | Description | Option |
|---|---|---|
| Password on Boot | Shows if password is required during system boot<br><br>⚠ **CAUTION:**<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>• **Standard**: Default Option. No manual change has been done to secure boot setting or users have previous restored security boot to factory default.<br>• **Custom**: Contents of the Secure Boot signature database has been modified with "Erase All Secure Boot Setting" or "Select an UEFI File as Trusted Executing". | Standard or Custom |
| Erase all Secure Boot Setting | Option to erase all secure boot setting | N/A |
| 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 |
| Clear TPM (TCM) | Remove all TPM context associated with a specific owner | N/A |

Table 1-4. BIOS Security (Continued)

| Parameter | Description | Option |
|---|---|---|
| Absolute Persistence Module | Indicate the Absolute Persistence Module state.<br>• **Enabled**: Default Option. The Persistence interface is enabled. Persistence may now be activated or deactivated.<br>• **Disabled**: The Persistence interface is disabled. The Persistence Module does not run and Persistence is deactivated.<br>• **Permanently Disabled**: Persistence is disabled and can only be enabled via a full reset at the factory. If user chooses Permanently Disabled, a "red" warning dialog box will appear on the screen with the message "Absolute Persistence Module will be disabled permanently and cannot be enabled again, are you sure?". | Disabled, Enabled, or Permanently Disabled |

**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.

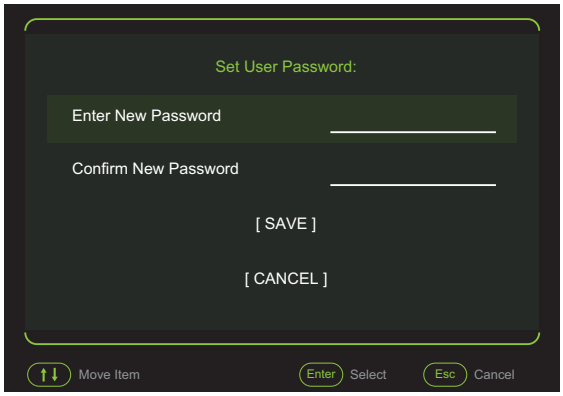



**Figure 1-74. Set User Password**

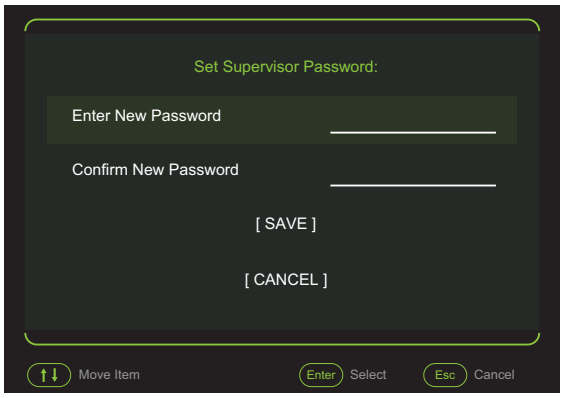



**Figure 1-75. Set Supervisor Password**

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

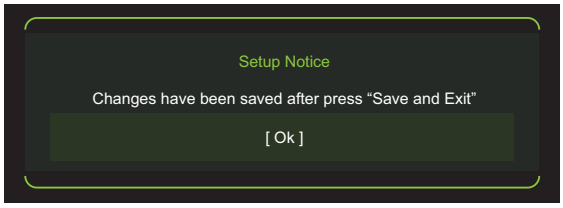



**Figure 1-76. Setup Notice**

**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*.

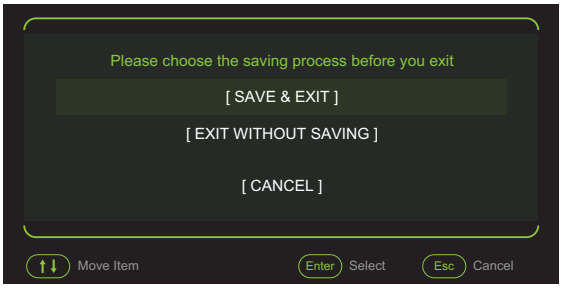



**Figure 1-77. Save Configuration Changes and Exit**

## Changing a Password

Perform the following:

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

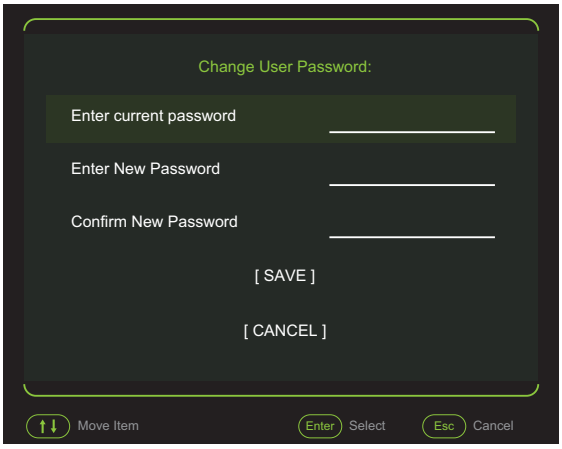



**Figure 1-78. Change User Password**

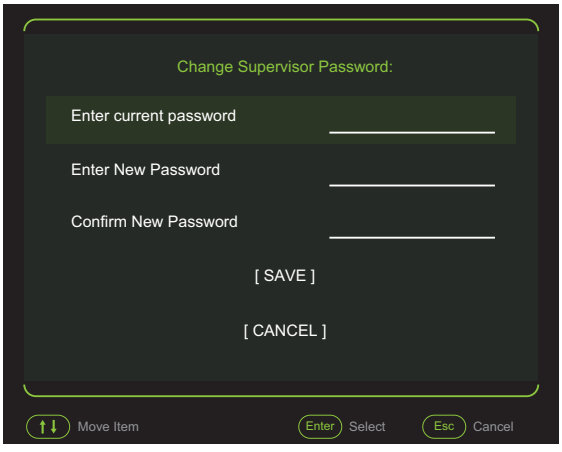



**Figure 1-79. Change Supervisor Password**

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

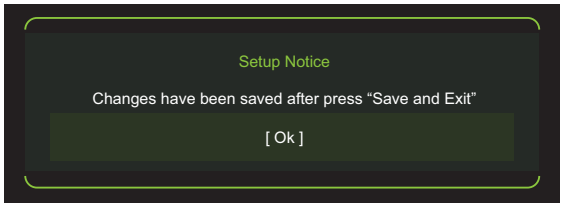



**Figure 1-80. Setup Notice**

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

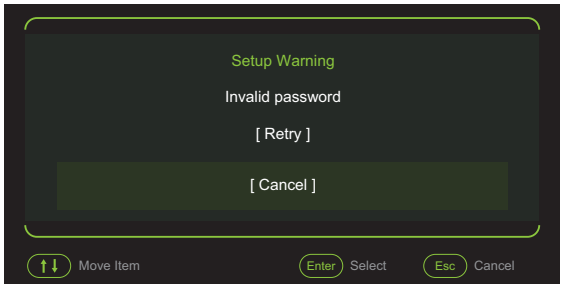



**Figure 1-81. Setup Warning**

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*.

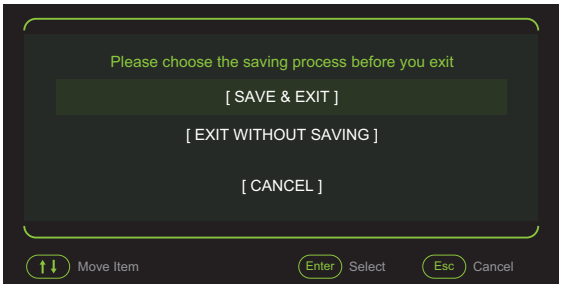



**Figure 1-82. Save Configuration Changes and Exit**

## 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***.

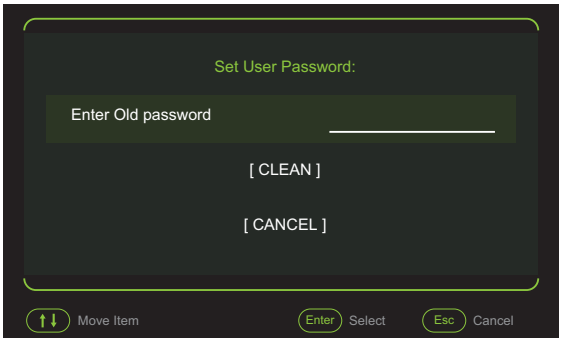



**Figure 1-83. Remove User Password**

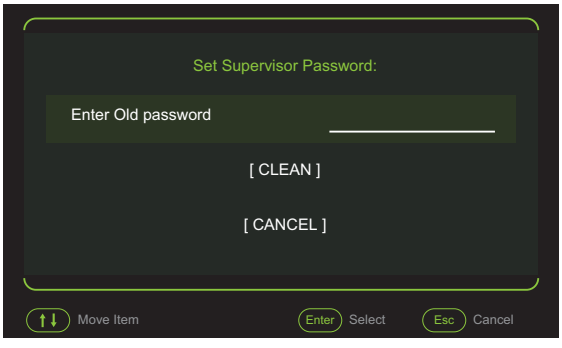



**Figure 1-84. Remove Supervisor Password**

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

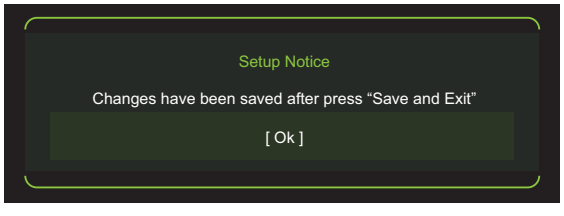



**Figure 1-85. Setup Notice**

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*.

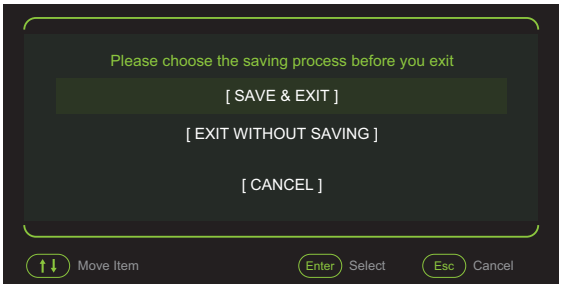



**Figure 1-86. Save Configuration Changes and Exit**

# Boot

The Boot tab allows changes to the order of boot devices used to load the operating system. Bootable devices include the:

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

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

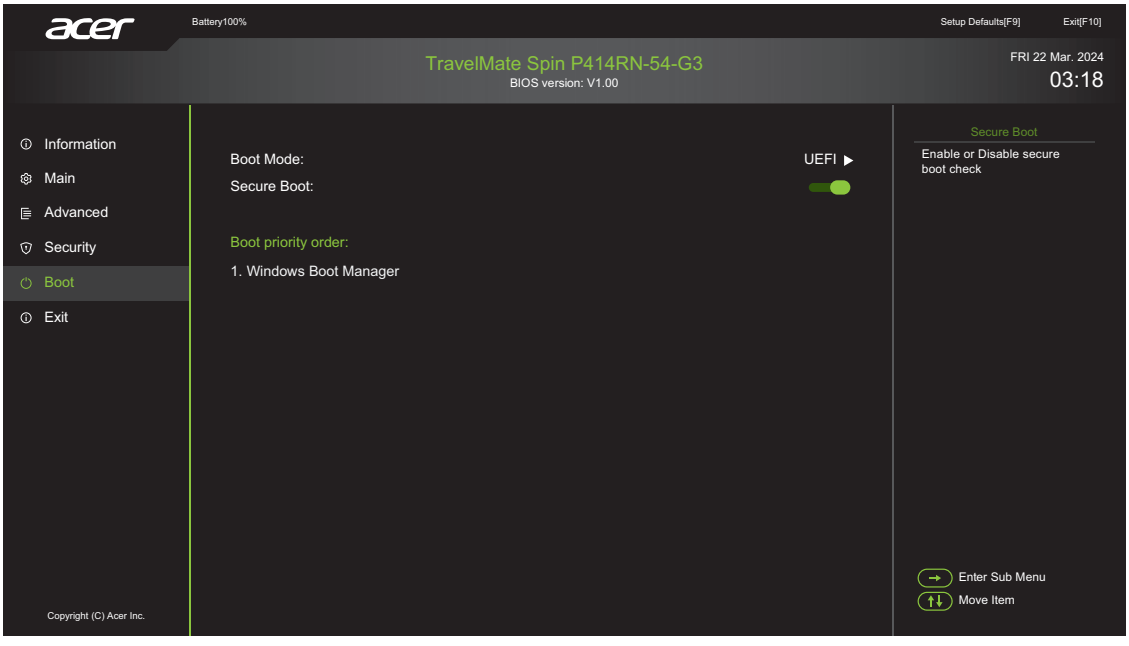



**Figure 1-87. BIOS Boot**

Table 1-5 describes the parameters in Figure 1-87.

**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 1-88. BIOS Exit**

Table 1-6 describes the parameters in Figure 1-88.

**Table 1-6. BIOS Exit**

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

# Troubleshooting

This chapter shows you how to deal with common system problems. Read it before calling a technician if a problem occurs. Solutions to more serious problems require opening up the computer. **By performing any of these procedures you acknowledge that any remaining warranty applicable to your computer will be voided if any damage is done to the unit or components during the repair.**

## Introduction

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

## General Information

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

**NOTE:**

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

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

**Table 1-7. Common Problems**

| Symptoms (Verified) |
|---|
| Power On Issues |
| No Display Issues |
| LCD Picture Failure |
| Internal Keyboard Failure |
| Touch Pad Failure |
| Internal Speaker Failure |
| Audio and Card Reader Failure |
| Other Functions Failure |
| Intermittent Problems |
| Undetermined Problems |

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

**NOTE:**

Do not replace non-defective FRU parts.

# Power On Issues

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

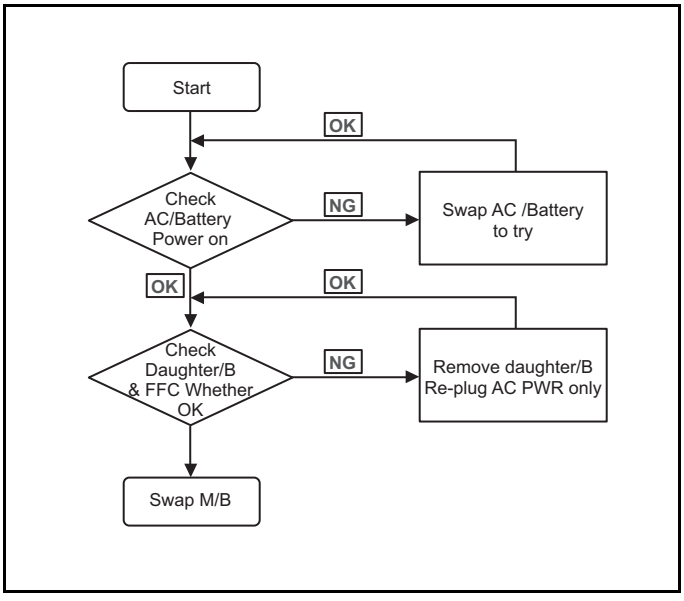



**Figure 1-89. Power On Issue**

## Computer Shuts Down Intermittently

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

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

# No Display Issues

If the Display does not work, perform the following:

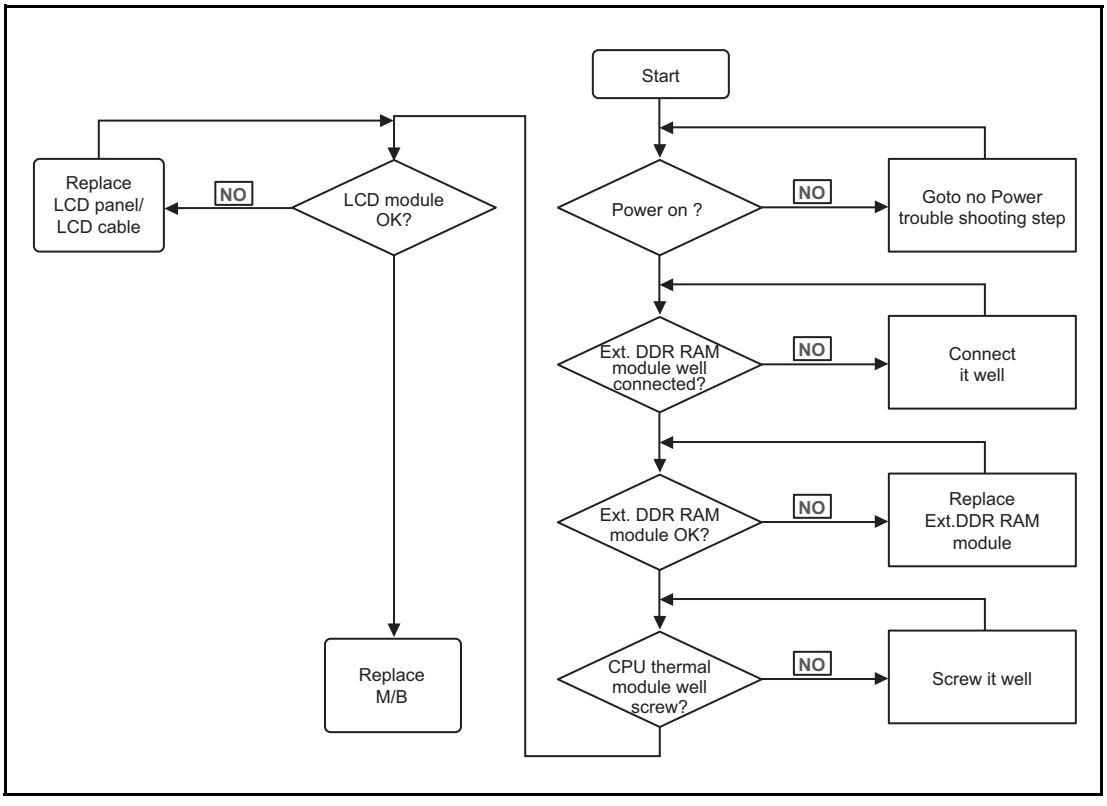



**Figure 1-90. No Display Issue**

## 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 Process.
   - 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 Process*.
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:

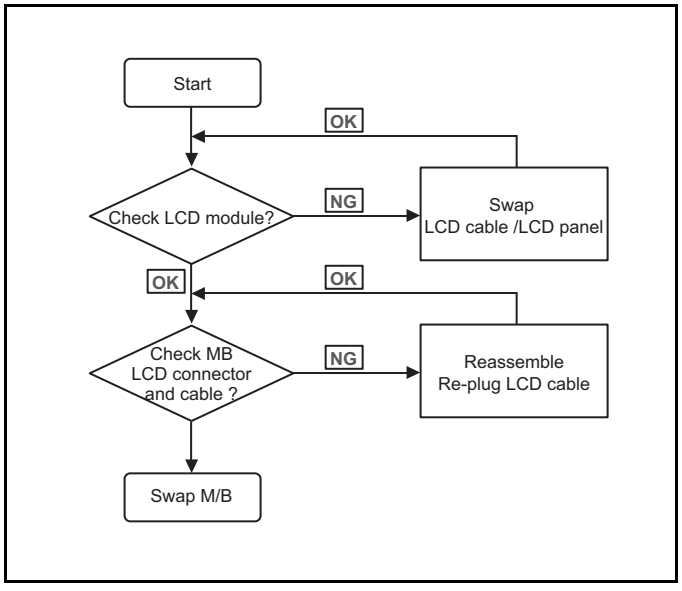



**Figure 1-91. LCD Failure**

# Internal Keyboard Failure

If the internal keyboard fails, perform the following:

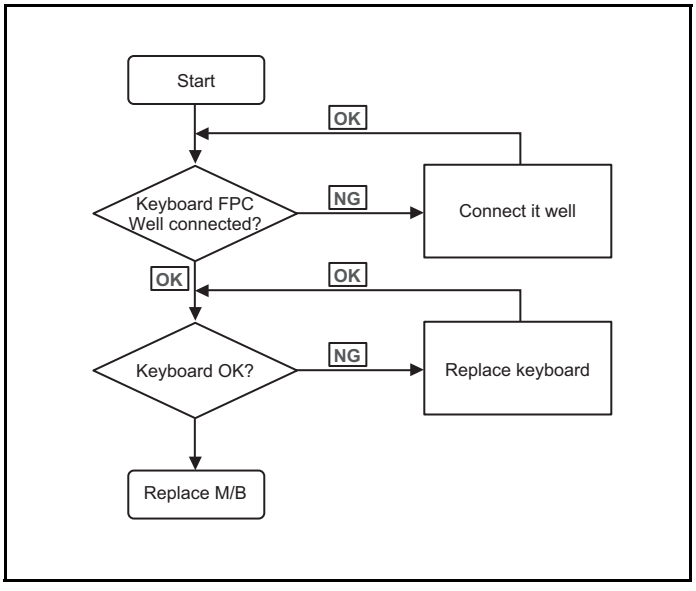



**Figure 1-92. Internal Keyboard Failure**

# Touch Pad Failure

If the touch pad fails, perform the following:

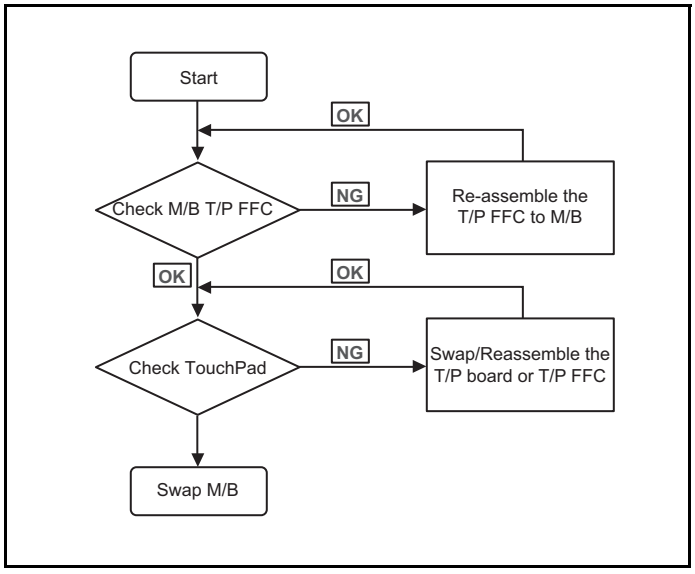



**Figure 1-93. Touch Pad Failure**

# Internal Speaker Failure

If the internal speakers fail, perform the following:

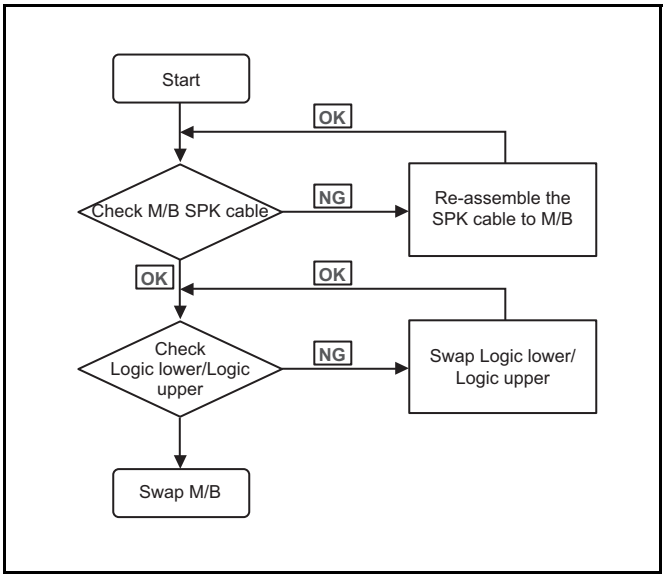



**Figure 1-94. Internal Speaker Failure**

## 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 the audio and card reader fail, perform the following:

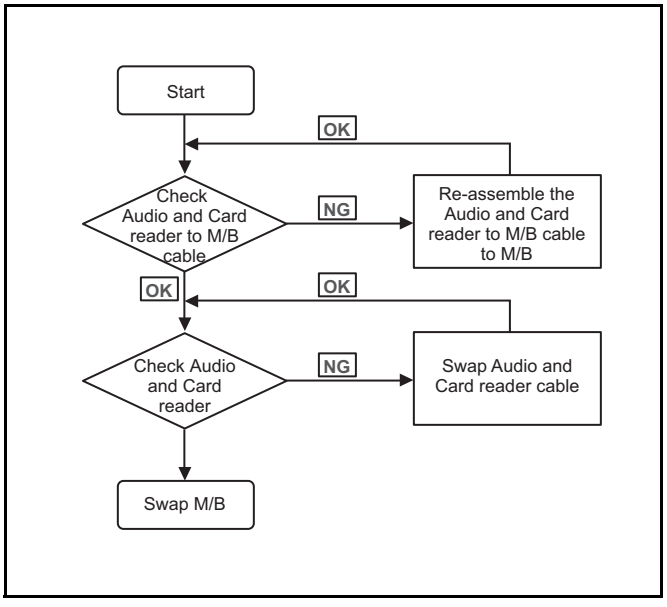



**Figure 1-95. Audio and Card Reader Failure**

## Other Functions Failure

1. Check if the drives are functioning correctly.
2. Check if the external modules are functioning correctly.
3. Change the mainboard to check if 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

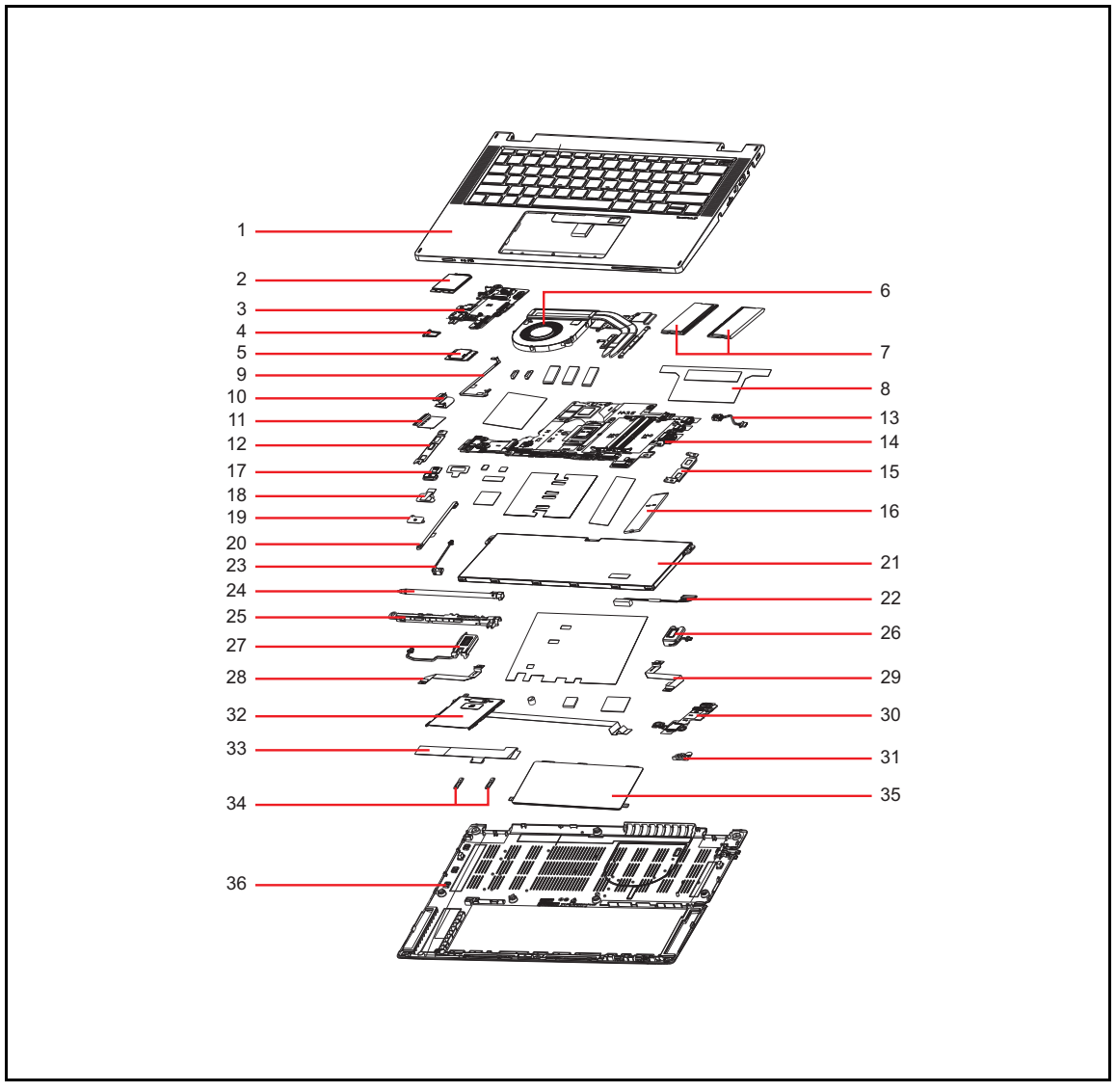



**Figure 1-96. System Exploded Diagram**

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

| No. | Description |
|---|---|
| 1 | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Arabic NK.I1313.373/NK.I1317.0TR |
| 2 | LTE Quectel LTE EM120K-GL EM120K-GL |
| 3 | BOARD IO FOR LTE |
| 4 | NANO SIM TRY |

Table 1-8. System Exploded Diagram (Continued)

| No. | Description |
|---|---|
| 5 | Wireless LAN Intel Wi-Fi 6E BT5.2 AX211.NGWG.NV Intel 2x2 M.2 2230 CNVi GFP2 No vPro |
| 6 | THERMAL MODULE ASSY UMA |
| 7 | Memory MICRON SO-DIMM DDRV 5600 8GB MTC4C10163S1SC56BD1 LF+HF 1Rx16, 1b Y52K, D-die |
| 8 | FOIL COMPOSITE W/ PAD |
| 9 | CABLE IO BOARD FOR LTE(6P 137.5MM) |
| 10 | CABLE IO BOARD FOR LTE |
| 11 | CABLE IO BOARD FOR LTE(5P 39MM) |
| 12 | BRACKET IO R |
| 13 | CABLE DC-IN 65W |
| 14 | Mainboard TMP414RN-54 Intel CU5125U UMA dTPM_ToF |
| 15 | BRACKET IO L |
| 16 | Flash Disk KINGSTON SSD NAND 256GB OM8PGP4256Q-AA LF+HF |
| 17 | FINGERPRINT MODULE Carewe FP on power key FPC12XXDP MOC on power key.Black coating |
| 18 | CONDUCTIVE FABRIC W/MYLAR ASSY FP |
| 19 | FINGER PRINT BOARD BRACKET |
| 20 | CABLE FINGERPRING MODULE |
| 21 | Battery CosMx Typ.65Wh 5570mAh 3S1P AP22ABN 248x90x5.5(mm) AP22A 11.67V 75W Li-Ion |
| 22 | CABLE BATTERY EXTERNAL |
| 23 | STYLUS CHARGER CABLE |
| 24 | Acer Active Stylus Pen TBC AES 1.0 |
| 25 | HOLDER STYLUS |
| 26 | SPEAKER LEFT 2.55HZ |
| 27 | SPEAKER RIGHT 2.55HZ |
| 28 | CABLE TOUCHPAD |
| 29 | CABLE LED BOARD |
| 30 | BOARD LED W/ GMR SENSOR |
| 31 | RUBBER FOR LED BOARD |
| 32 | BOARD SMARTCARD |
| 33 | CONDUCTIVE FABRIC W/MYLAR ASSY TP |
| 34 | TOUCHPAD ASSY BRACKET |

Table 1-8. System Exploded Diagram (Continued)

| No. | Description |
|---|---|
| 35 | TOUCHPAD MODULE NC.24611.07R |
| 36 | LOWER CASE |

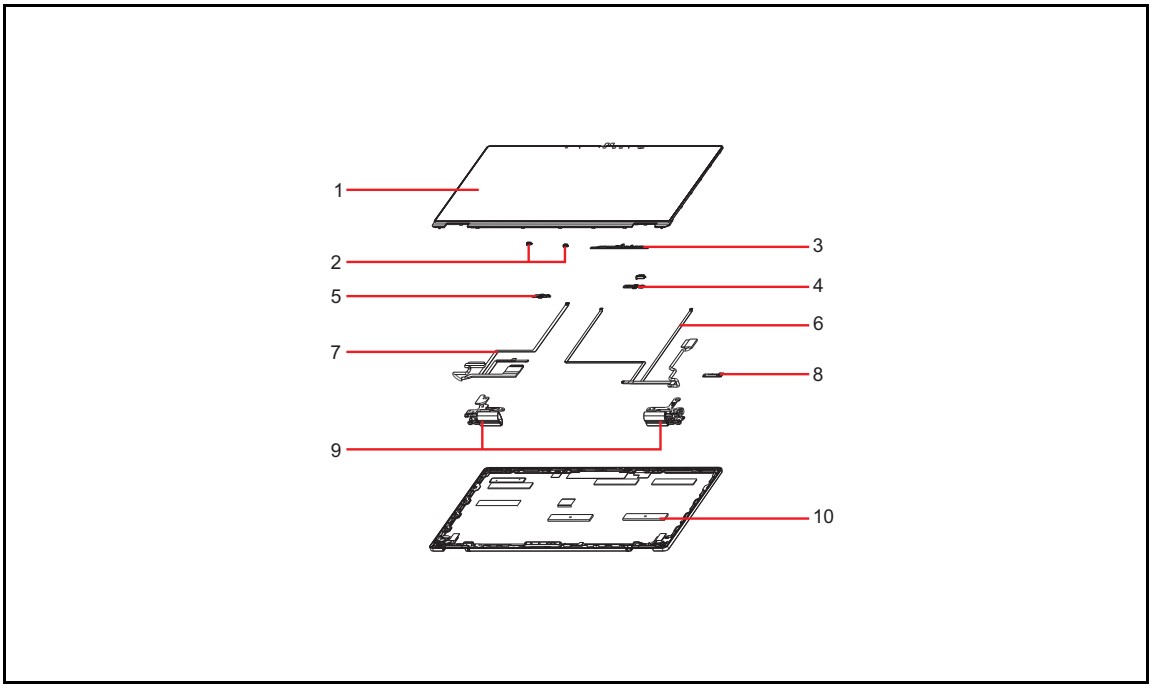



Figure 1-97. LCD Assembly Exploded Diagram

Table 1-9. LCD Assembly Exploded Diagram

| No. | Description |
|---|---|
| 1 | LCD MODULE W/ BEZEL, LED Touch Panel TPK 14" WUXGA IPS None Glare TBC/ NV140WUM-N41 V8.4 KL.1400P.018 |
| 2 | RUBBER FOR CCD FOR TOUCH SKU |
| 3 | Camera CHICONY FHD FF CKFNE34 OV2740 RTS5861 1L4C066F2(BG) ZTS6234A USB IR-HM1092(940nm) |
| 4 | TOF SENSOR BOARD |
| 5 | BOARD AMBIENT LIGHT SENSOR |
| 6 | CABLE AMBIENT LIGHT & TOF SENSOR BOARD FOR TOUCH SKU |
| 7 | CABLE LCD N14WUXGASSRIB3/TP1A6AG FOR IR SKU |
| 8 | BOARD G-SENSOR |
| 9 | HINGE L W/RUBBER |
| | HINGE R W/RUBBER |
| 10 | LCD COVER N14WUXGASUPILB3/TP1A6AG |
| 1 | LCD MODULE W/ BEZEL, LED Touch Panel TPK 14" WUXGA IPS None Glare TBC/ NV140WUM-N41 V8.4 KL.1400P.018 |

# FRU List

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

**Table 1-10. FRU List**

| Category | Pictures | Description |
|---|---|---|
| ADAPTER |  | Adapter LITE-ON 65W 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Type C PA-1650-58AD LF Black Meet CoC-Tier2 & IEC 62368 |
| | | Adapter LITE-ON PA-1650-58AP 65W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V_3.25A Black PCR 50%, TCO9.0 |
| | | Adapter DELTA ADP-100XB BB 100W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V/5A Black PCR 50%, TCO9.0 |
| | | Adapter Chicony Power A22-100P2A 100W Type C Brick 5V/3A_9V/3A_12V/3A_15V/3A_20V/5A Black PCR 50%, TCO9.0 |
| BATTERY |  | Battery CosMx Typ.65Wh 5570mAh 3S1P AP22ABN 248x90x5.5(mm) AP22A 11.67V 75W Li-Ion |
| | | Battery LGES Typ.65Wh 4180mAh 4S1P AP22A8N 248x90x5.5(mm) AP22A 11.52V 75W Li-Ion |
| | | Battery PANASONIC Typ.53Wh 4590mAh 3S1P AP23A5L 248x84.4x5.5(mm) AP23A 11.55V 70W Polymer |
| | | Battery LGES Typ.53Wh 4700mAh 3S1P AP23A8L 248x84.4x5.5(mm) AP23A 11.28V 70W Li-Ion |
| BOARD |  | BOARD IO |

Table 1-10. FRU List (Continued)

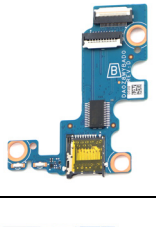
| Category | Pictures | Description |
|---|---|---|
| BOARD |  | BOARD IO FOR LTE |
| |  | BOARD IO FOR WIFI/VPRO |
| |  | BOARD AMBIENT LIGHT SENSOR |
| |  | BOARD G-SENSOR |
| |  | BOARD LED W/ GMR SENSOR |
| |  | TOF SENSOR BOARD |
| |  | BOARD SMARTCARD |
| |  | FINGERPRINT MODULE Carewe FP on power key FPC12XXDP MOC on power key.Black coating |
| | | Egis FP on power key Egis ETU905JS MOC solution on power key. Black coating |
| CABLE |  | STYLUS CHARGER CABLE |
| |  | CABLE DC-IN 65W |
| |  | CABLE BATTERY EXTERNAL |

Table 1-10. FRU List (Continued)

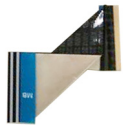
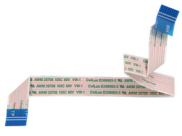
| Category | Pictures | Description |
|---|---|---|
| CABLE |  | CABLE IO BOARD FOR LTE |
| |  | CABLE IO BOARD FOR LTE(5P 39MM) |
| |  | CABLE IO BOARD |
| |  | CABLE TOUCHPAD |
| |  | CABLE LED BOARD |
| |  | CABLE FINGERPRING MODULE |
| |  | CABLE IO BOARD FOR LTE(6P 137.5MM) |
| |  | CABLE AMBIENT LIGHT SENSOR BOARD FOR TOUCH SKU |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| CABLE |  | CABLE AMBIENT LIGHT & TOF SENSOR BOARD FOR TOUCH SKU |
| |  | CABLE LCD N14WUXGASUPILB3/TP1A6AG |
| |  | CABLE LCD N14WUXGASUPILB3/TP1A6AG FOR IR SKU |
| |  | CABLE LCD N14WUXGASSRIB3/TP1A6AG |
| |  | CABLE LCD N14WUXGASSRIB3/TP1A6AG FOR IR SKU |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| CAMERA |  | Camera CHICONY HD Camera C7FMH12 GC1009 RTS5855 1L3B059G1(BG) SPG18P4HM4H-1 TNR |
| | | Camera Tech-Front HD Camera YHVC-3 OV9734 SPCA2112N 1L3B059F1(BG) SPG18P4HM4H-1 TNR , FW:V0004 |
| | | Camera CHICONY FHD FF CKFNE34 OV2740 RTS5861 1L4C066F2(BG) ZTS6234A USB IR-HM1092(940nm) |
| HDD |  | Flash Disk KINGSTON SSD NAND 256GB OM8PGP4256Q-AA LF+HF |
| | | Flash Disk WD SSD NAND 512GB SN740 SDDQNQD-512G-1014 LF+HF |
| | | Flash Disk WD SSD NAND 1024GB SN740 SDDQNQD-1T00-1014 LF+HF |
| | | Flash Disk HYNIX SSD NAND 256GB M.2 2280 BC901 256G HFS256GEJ9X110N LF+HF |
| KB ASSEMBLY |  | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Arabic NK.I1313.373/NK.I1317.0TR |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS FR/Arabic NK.I1313.37L/NK.I1317.0U8 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Belgium NK.I1313.37G/NK.I1317.0U4 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Brazilian Portuguese NK.I1313.37H/NK.I1317.0U5 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Bulgaria NK.I1313.37E/NK.I1317.0U2 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Canadian French NK.I1313.37D/NK.I1317.0U1 |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS SLO/CRO NK.I1313.37U/NK.I1317.0UG |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS CZ/SK NK.I1313.37J/NK.I1317.0U6 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Danish NK.I1313.37K/NK.I1317.0U7 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS French NK.I1313.37M/NK.I1317.0U9 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS German NK.I1313.37N/NK.I1317.0UA |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Greek NK.I1313.375/NK.I1317.0TT |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Hebrew NK.I1313.37C/NK.I1317.0U0 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Hungarian NK.I1313.37P/NK.I1317.0UB |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Persian NK.I1313.379/NK.I1317.0TX |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Italian NK.I1313.37Q/NK.I1317.0UC |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 83KS Japanese NK.I1313.380 |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Korean NK.I1313.376/NK.I1317.0TU |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS ALA-Spanish NK.I1313.37F/NK.I1317.0U3 |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Norwegian NK.I1313.37S/NK.I1317.0UE |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Portuguese NK.I1313.37T/NK.I1317.0UF |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Russian NK.I1313.377/NK.I1317.0TV |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Nordic NK.I1313.37R/NK.I1317.0UD |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Spanish NK.I1313.37V/NK.I1317.0UH |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Sweden NK.I1313.37W/NK.I1317.0UJ |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Swiss/G NK.I1313.37X/NK.I1317.0UK |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Thailand NK.I1313.37A/NK.I1317.0TY |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Turkish NK.I1313.37Y/NK.I1317.0UL |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Traditional Chinese NK.I1313.374/NK.I1317.0TS |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International NK.I1313.37B/NK.I1317.0TZ |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS UK NK.I1313.37Z/NK.I1317.0UM |
| | | KEYBOARD ASSY WIFI SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Ukrainian NK.I1313.378/NK.I1317.0TW |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Arabic NK.I1313.373/NK.I1317.0TR |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS FR/Arabic NK.I1313.37L/NK.I1317.0U8 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Belgium NK.I1313.37G/NK.I1317.0U4 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Brazilian Portuguese NK.I1313.37H/NK.I1317.0U5 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Bulgaria NK.I1313.37E/NK.I1317.0U2 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Canadian French NK.I1313.37D/NK.I1317.0U1 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS SLO/CRO NK.I1313.37U/NK.I1317.0UG |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS CZ/SK NK.I1313.37J/NK.I1317.0U6 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Danish NK.I1313.37K/NK.I1317.0U7 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS French NK.I1313.37M/NK.I1317.0U9 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS German NK.I1313.37N/NK.I1317.0UA |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Greek NK.I1313.375/NK.I1317.0TT |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Hebrew NK.I1313.37C/NK.I1317.0U0 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Hungarian NK.I1313.37P/NK.I1317.0UB |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Persian NK.I1313.379/NK.I1317.0TX |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Italian NK.I1313.37Q/NK.I1317.0UC |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 83KS Japanese NK.I1313.380 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Korean NK.I1313.376/NK.I1317.0TU |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS ALA-Spanish NK.I1313.37F/NK.I1317.0U3 |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Norwegian NK.I1313.37S/NK.I1317.0UE |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Portuguese NK.I1313.37T/NK.I1317.0UF |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Russian NK.I1313.377/NK.I1317.0TV |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Nordic NK.I1313.37R/NK.I1317.0UD |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Spanish NK.I1313.37V/NK.I1317.0UH |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Sweden NK.I1313.37W/NK.I1317.0UJ |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Swiss/G NK.I1313.37X/NK.I1317.0UK |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Thailand NK.I1313.37A/NK.I1317.0TY |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Turkish NK.I1313.37Y/NK.I1317.0UL |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Traditional Chinese NK.I1313.374/NK.I1317.0TS |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International NK.I1313.37B/NK.I1317.0TZ |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS UK NK.I1313.37Z/NK.I1317.0UM |
| | | KEYBOARD ASSY WIFI/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Ukrainian NK.I1313.378/NK.I1317.0TW |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Arabic NK.I1313.373/NK.I1317.0TR |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS FR/Arabic NK.I1313.37L/NK.I1317.0U8 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Belgium NK.I1313.37G/NK.I1317.0U4 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Brazilian Portuguese NK.I1313.37H/NK.I1317.0U5 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Bulgaria NK.I1313.37E/NK.I1317.0U2 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Canadian French NK.I1313.37D/NK.I1317.0U1 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS SLO/CRO NK.I1313.37U/NK.I1317.0UG |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS CZ/SK NK.I1313.37J/NK.I1317.0U6 |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Danish NK.I1313.37K/NK.I1317.0U7 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS French NK.I1313.37M/NK.I1317.0U9 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS German NK.I1313.37N/NK.I1317.0UA |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Greek NK.I1313.375/NK.I1317.0TT |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International w/ Hebrew NK.I1313.37C/NK.I1317.0U0 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Hungarian NK.I1313.37P/NK.I1317.0UB |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Persian NK.I1313.379/NK.I1317.0TX |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Italian NK.I1313.37Q/NK.I1317.0UC |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 83KS Japanese NK.I1313.380 |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Korean NK.I1313.376/NK.I1317.0TU |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS ALA-Spanish NK.I1313.37F/NK.I1317.0U3 |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Norwegian NK.I1313.37S/NK.I1317.0UE |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Portuguese NK.I1313.37T/NK.I1317.0UF |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Russian NK.I1313.377/NK.I1317.0TV |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Nordic NK.I1313.37R/NK.I1317.0UD |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Spanish NK.I1313.37V/NK.I1317.0UH |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Sweden NK.I1313.37W/NK.I1317.0UJ |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Swiss/G NK.I1313.37X/NK.I1317.0UK |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Thailand NK.I1313.37A/NK.I1317.0TY |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS Turkish NK.I1313.37Y/NK.I1317.0UL |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Traditional Chinese NK.I1313.374/NK.I1317.0TS |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS US International NK.I1313.37B/NK.I1317.0TZ |

Table 1-10. FRU List (Continued)

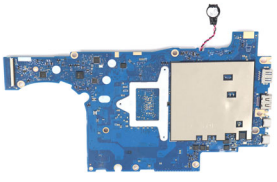
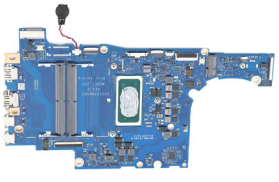
| Category | Pictures | Description |
|---|---|---|
| KB ASSEMBLY |  | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 80KS UK NK.I1313.37Z/NK.I1317.0UM |
| | | KEYBOARD ASSY LTE/SC SKU W/ UPPER CASE ANTENNA COPILOT BL Keyboard VF03P_B41BWL 79KS Ukrainian NK.I1313.378/NK.I1317.0TW |
| LCD COVER |  | LCD COVER N14WUXGASUPILB3/TP1A6AG |
| | | LCD COVER N14WUXGASSRIB3/TP1A6AG |
| LCD MODULE |  | LCD MODULE W/ BEZEL, LED Touch Panel TPK 14" WUXGA IPS None Glare TBC/ NV140WUM-N41 V8.4 KL.1400P.018 |
| | | LCD MODULE W/ BEZEL, LED Touch Panel TPK 14" WUXGA IPS None Glare TBC/ B140UAN02.2 H/W 1A KL.1400P.019 |
| LOWER CASE |  | LOWER CASE |
| MAINBOARD |   | Mainboard TMP414RN-54 Intel CU5125U UMA dTPM_ToF |
| | | Mainboard TMP414RN-54 Intel CU7155U UMA dTPM_ToF |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| MEMORY |  | Memory MICRON SO-DIMM DDRV 5600 8GB MTC4C10163S1SC56BD1 LF+HF 1Rx16, 1b Y52K, D-die |
| | | Memory HYNIX SO-DIMM DDRV 5600 8GB HMCG66AGBSA LF+HF 1anm, A-die 1Rx16 |
| | | Memory MICRON SO-DIMM DDRV 5600 16GB MTC8C1084S1SC56BD1 LF+HF 1Rx8, Y52K D-die |
| | | Memory HYNIX SO-DIMM DDRV 5600 32GB HMCG88AGBSA LF+HF 1anm, A-die 2Rx8 |
| METAL |  | HINGE L W/RUBBER |
| | | HINGE R W/RUBBER |
| |  | PRIMETEK PRIMETEK Sim Card Ejector with Packing |
| |  | FINGER PRINT BOARD BRACKET |
| |  | BRACKET IO L |
| |  | BRACKET IO R |
| |  | TOUCHPAD ASSY BRACKET |
| PLASTICS |  | HOLDER STYLUS |
| |  | HOLDER BATTERY SUPPORT |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| POWER CORD |  | POWER CORD 1M 125V JAP BLACK |
| | | POWER CORD 1M 125V ARG BLACK |
| | | POWER CORD 1M 125V AUS BLACK |
| | | POWER CORD 1M 125V BRAZIL BLACK |
| | | POWER CORD 1M 125V CHINA BLACK |
| | | POWER CORD 1M 125V DENMARK BLACK |
| | | POWER CORD 1M 125V INDIA BLACK |
| | | POWER CORD 1M 125V ISRAEL BLACK |
| | | POWER CORD 1M 125V ITL BLACK |
| | | POWER CORD 1M 125V S.AFRICA BLACK |
| | | POWER CORD 1M 125V SWISS BLACK |
| | | POWER CORD 1M 125V EUR+KOR BLACK |
| | | POWER CORD 1M 125V US BLACK |
| | | POWER CORD 1M 125V UK BLACK |
| | | POWER CORD 1M 125V TAIWAN BLACK |
| SIM |  | LTE Quectel LTE EM120K-GL EM120K-GL |
| SPEAKER/ MICROPHONE |  | SPEAKER LEFT 2.55HZ |
| |  | SPEAKER RIGHT 2.55HZ |
| |  | SPEAKER LEFT 2.95HZ |
| |  | SPEAKER RIGHT 2.95HZ |
| STYLUS |  | Acer Active Stylus Pen TBC AES 1.0 |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| THERMAL |  | THERMAL MODULE ASSY UMA |
| TOUCHPAD |  | TOUCHPAD MODULE NC.24611.07R |
| WIRELESS LAN |  | Wireless LAN Intel Wi-Fi 6E BT5.2 AX211.NGWG.NV Intel 2x2 M.2 2230 CNVi GFP2 No vPro |
| | | Wireless LAN Intel Wi-Fi 6E BT5.2 AX211.NGWG Intel 2x2 M.2 2230 CNVi GFP2 vPro |
| MISCELLANEOUS |  | CONDUCTIVE FABRIC W/MYLAR ASSY TP |
| |  | CONDUCTIVE FABRIC W/MYLAR ASSY FP |
| |  | NANO SIM TRY |
| |  | RUBBER FOR CCD FOR TOUCH SKU |
| |  | RUBBER FOR LED BOARD |
| |  | SPONGE FOR SSD |
| |  | FOIL COMPOSITE W/ PAD |
| |  | GASKET FOR LTE SKU |

Table 1-10. FRU List (Continued)

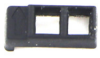
| Category | Pictures | Description |
|---|---|---|
| MISCELLANEOUS |  | FOIL CU W/ MYLAR,GRAPHITE SHEET |
| |  | RUBBER W/SPONGE ASSY FOR BATTERY SUPPORT |
| |  | MYLAR FOR BATTERY SUPPORT |
| |  | RUBBER FOR TOF SENSOR BOARD |
| |  | MYLAR FOR KEYBOARD |
| |  | MYLAR FFC CONNECTOR |
| |  | ACETATE TAPE FOR BATTERY(21*21mm) |
| |  | GASKET THERMA |
| |  | MYLAR FOR KEYBOARD ASSY |
| |  | INSULATOR MYLAR ON BATTERY CABLE |
| |  | MYLAR FOR FINGER PRINT BOARD |
| |  | KAPTON TAPE MB KB |
| |  | INS MYLAR FOR LCD PANEL |

Table 1-10. FRU List (Continued)

| Category | Pictures | Description |
|---|---|---|
| SCREW |  | SCREW M2.0*5.0-I |
| |  | SCREWM2.5*3.5-INI |
| |  | SCREW M1.4*1.6-I STL |
| |  | SCREW M2.0*4.0-I(BZN)(NYLOK)(IRON) |
| |  | SCREW W/WASHER KIT (M2.5*7.0) |
| |  | SCREW M2.0*2.0-I(NI,NYLOK)STL |
| |  | SCREW M2.0*2.0- I(BNI)(NY)IRON |
| |  | SCREW M2.0*2.5-IBZNNYLOKD7.0 IRON |
| |  | SCREW M2.5*5.0-I(BNI)(NYLOK) IRON |

# Software Update

## System BIOS & Driver Updates

Visit http://www.acer.com/support to discover the available system BIOS and Drivers for this product. After selecting the desired country/language, either enter the model name or product serial number, or select the product from the list of suggested models in order to get access to product-specific software and documentation.

To update the system BIOS:

- Download the desired system BIOS version from the website
- Unzip the downloaded file to your computer
- Double-click the extracted file in order to initiate the update process
- The update process itself is fully automated and its progress is visualized by means of a progress indicator
- A visual notification is shown when the update is complete

**NOTE:**
Upgrading the system BIOS incorrectly, or intermittence of the system BIOS update process could harm the product.

**NOTE:**
System BIOS upgrades or downgrades, if not performed by an Acer Service Center or authorized Service Partner, are at own risk.

To update Drivers:

Run Windows Update in order to get the latest drivers from Acer:

- Select the Start button
- Go to **Settings** > **Update & Security** > **Windows Update**
- Available Drivers will automatically be listed on the screen. Press **Download** to start the download of the respective driver
- Installation of the driver will start automatically once the download is completed

## Software Recovery

This product has embedded software recovery tools which can be used to either perform a partial or full software recovery, but also to create a Factory Default recovery media.

For more information about the software recovery options, how to perform a software recovery or creating a Factory Default recovery media, please refer to the chapter "Recovery" which is available in the User Manual of the product.

**NOTE:**
In the event of not being able to create a Factory Default recovery media, it is possible to obtain a copy of the recovery media through Acer Customer Service (http://www.acer.com/support)

This is not a free of charge service.

# Updating your software

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

# Personal Data Removal

## Removing your personal data

There are three options to choose from:

- Option 1: Select **Start** > **Settings** > **Update & Security** > **Recovery**. Under **Reset this PC**, select **Get started**. Open **Recovery settings**.
- Option 2: Restart your PC to get to the sign-in screen, then press and hold down the **Shift key** while you select the **Power** icon > **Restart** in the lower-right corner of the screen. After your computer restarts, select **Troubleshoot** > **Reset this PC**.
- Option 3: Select **Start** , then press and hold down the **Shift key** while you select the **Power** icon > **Restart** to restart your computer into Recovery Mode. After your computer restarts, select **Troubleshoot** > **Reset this PC**.