

AndreyR Aspire TC-1785  
Lifecycle Extension Guide

Self-Repair .....	3
Disassembly Procedure .....	6
Troubleshooting.....	19
Exploded Diagrams.....	22
FRU (Field Replaceable Unit) List.....	26
To remove your personal data.....	27

# Self-Repair

---

This chapter highlights the limited self-repair capabilities of the product.

Prior to performing self-repair, familiarize yourself with the Safety Guidelines and Recommended Equipment sections first as described in the chapter "[Disassembly Procedure](#)".

Depending on model, the following key components are eligible for self-repair (if applicable);

- PSU module
- HDD / SSD module
- DIMM module(s)
- WLAN module
- ODD module

If a particular key component is listed and thus would be eligible for self-repair, but is not described in the "[Disassembly Procedure](#)" section, then this component is either not present on the respective model, or it is present but embedded on the motherboard and therefore not eligible for self-repair.

## ⇒ NOTE:

Do not attempt to replace other components than those listed above.

## ⇒ NOTE:

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

## ⇒ NOTE:

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

## Disassembly Procedures

---

Please refer to the "[Disassembly Procedure](#)" chapter for step by step disassembly instructions.

## System BIOS & Driver Updates

---

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

## Updating 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.

## Updating the 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 be automatically 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.

Should a particular driver not be installed via Windows Update then it is also available for download from the Acer Support website.

To download and install Drivers from the Acer Support website:

- Go to <http://www.acer.com> and navigate to **Support**
- Click on **Drivers and Manuals**
- Enter the device serial number, SNID or model number and press **Find**
- Click on **Drivers** to get access to all available drivers for the respective product
- Find the desired driver and click **Download**
- Extract the file and start the installation
- On-screen instructions will provide guidance through the installation process

After successful driver installation, reboot the device before using it to ensure that the new or updated driver is successfully loaded.

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

### **NOTE:**

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

# Disassembly Procedure

---

## Safety Guidelines

---

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

### CAUTION!

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

## Recommended Equipment

---

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

- Wrist grounding strap and conductivemat
- Flat screwdriver
- Philips screwdriver
- Polydrive screwdriver
- Plastic tweezers
- Flat plastic pry

## **WEEE Annex VII Component**

---

These components are classified as requiring selective treatment.

## **Pre-disassembly Instructions**

---

Do the following prior to starting any maintenance procedures:

1. Place the system on a stable work surface.
2. Remove AC power cord from the system and peripherals
3. Remove all cables from the system.

### **⇒ NOTE:**

Make sure the system is completely powered off.

## Chassis Door Removal

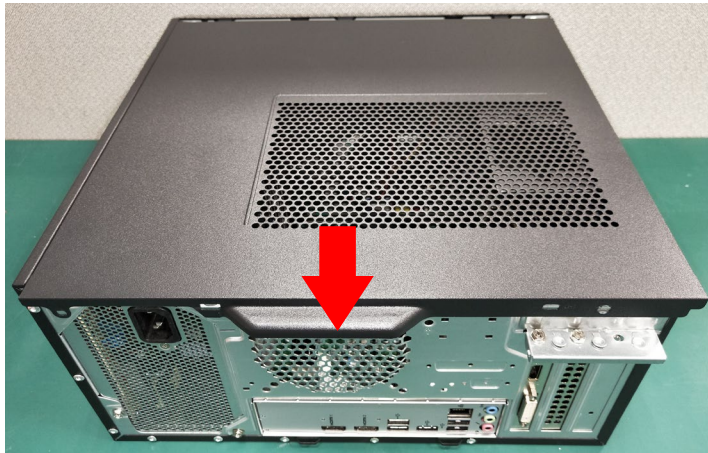
---

### 1. Remove the chassis door

1.1 Remove the two screws fixed from the side-panel.



1.2 Remove the left side cover

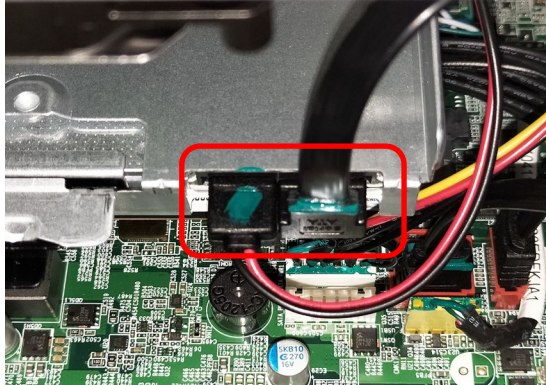


## ODD Removal

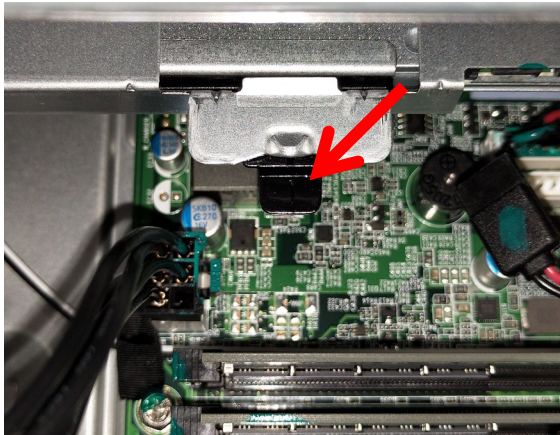
---

### 2. Remove the ODD

2.1 Disconnect the ODD SATA cable and SATA power-cable from slim ODD



2.2 Press the plastic cover of slim ODD



2.3 Remove the ODD



**NOTE:** ODD has been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

## HDD Removal

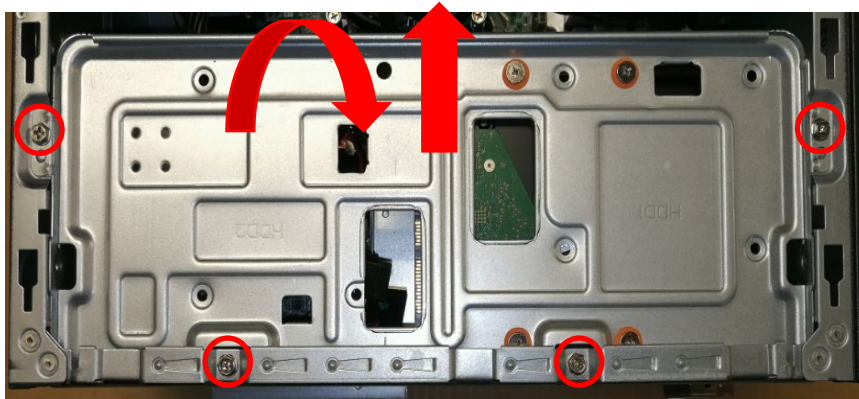
---

### 3. Remove HDD

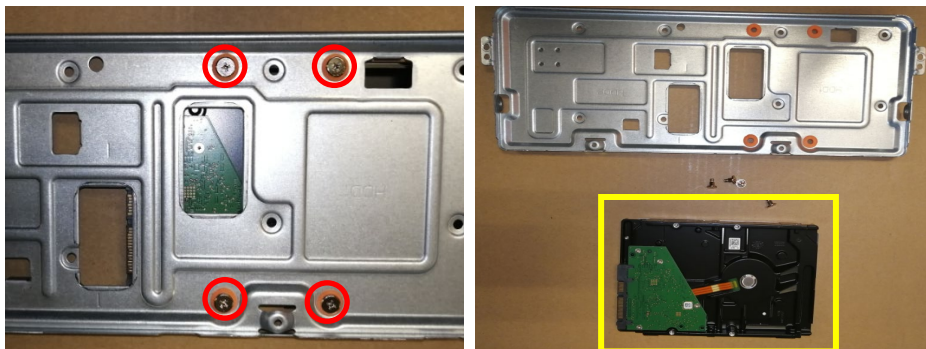
#### 3.1 Disconnect the SATA cable and SATA power-cable from HDD



#### 3.2 Remove four screws from the chassis and Pull out it from chassis



#### 3.3 Remove these four screws of HDD



**NOTE:** HDD has been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

## VGA card Removal

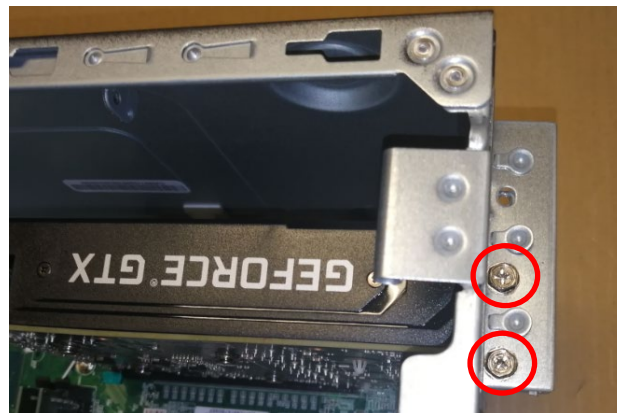
---

### 4. Remove VGA Card

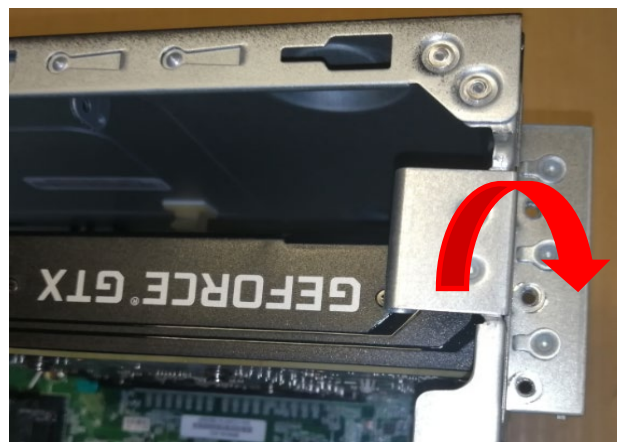
#### 4.1 Remove the VGA holder



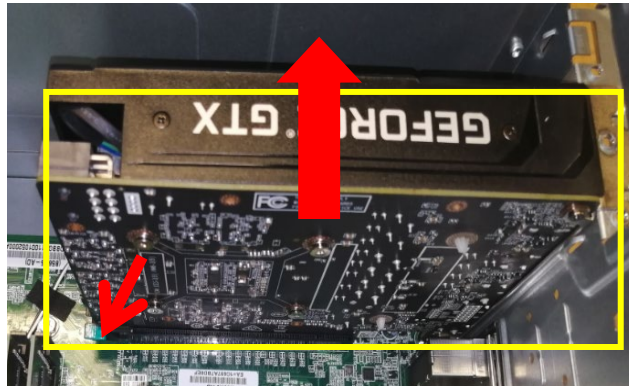
#### 4.2 Remove two screws of VGA



#### 4.3 Open the PCI cover



#### 4.4 Remove the VGA card from MB

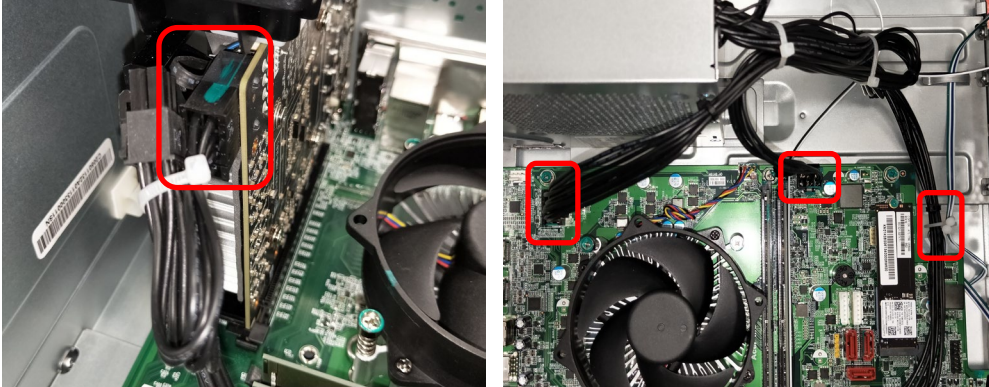


**NOTE:** VGA card has been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

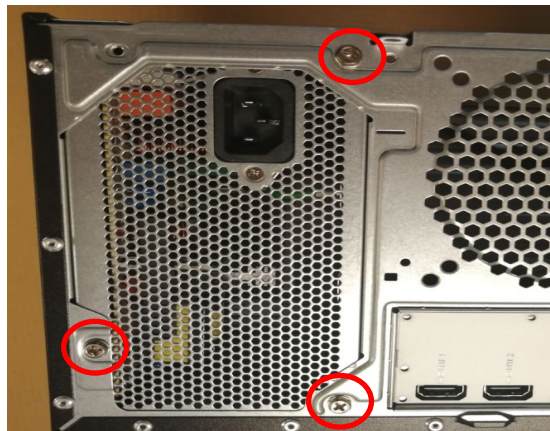
## PSU Removal (with ATX Power)

### 5. Remove internal PSU

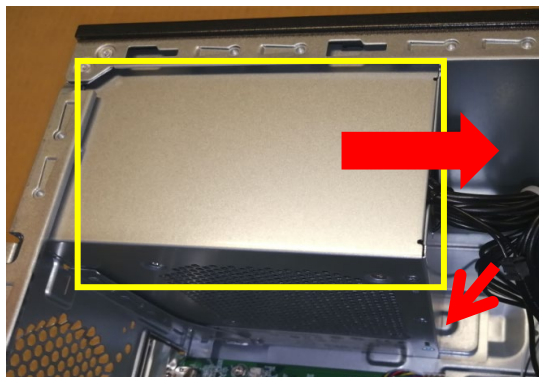
#### 5.1 Disconnect PSU cable



#### 5.2 Remove the three screws of PSU



#### 5.3 Take out the PSU from chassis



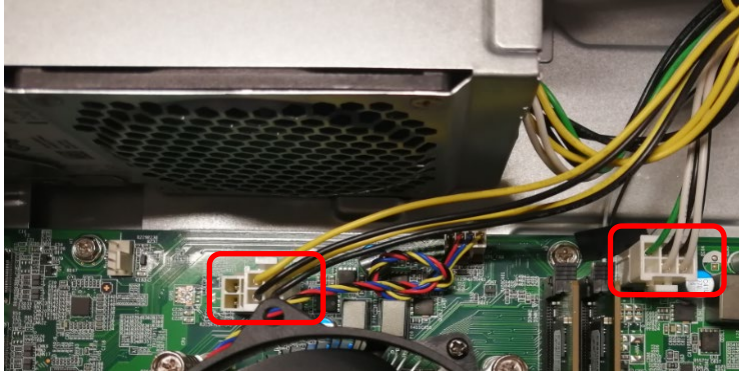
**NOTE:** PSU MB/PSU FAN/PSU CAPACITOR have been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

## PSU Removal (with TFX Power)

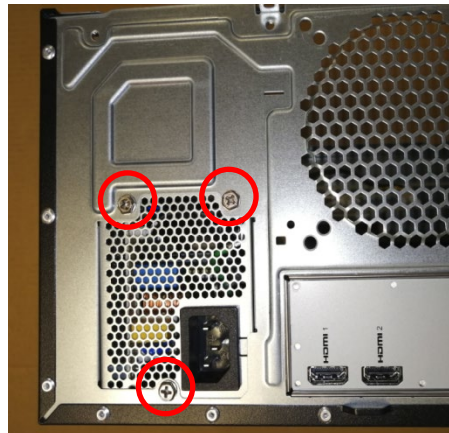
---

### 6. Remove internal PSU

#### 6.1 Disconnect PSU cable



#### 6.2 Remove the four screws of PSU



#### 6.3 Take out the PSU from chassis

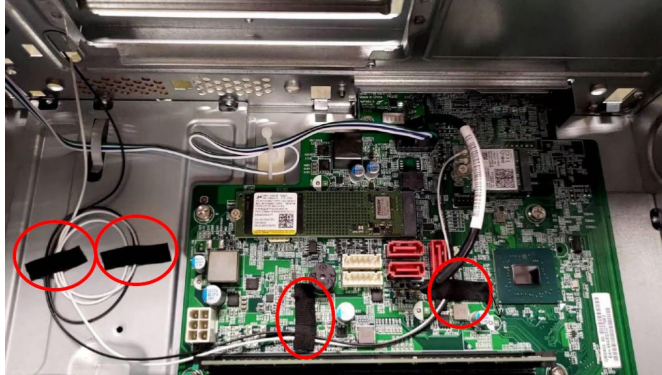


**NOTE:** PSU MB/PSU FAN/PSU CAPACITOR have been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

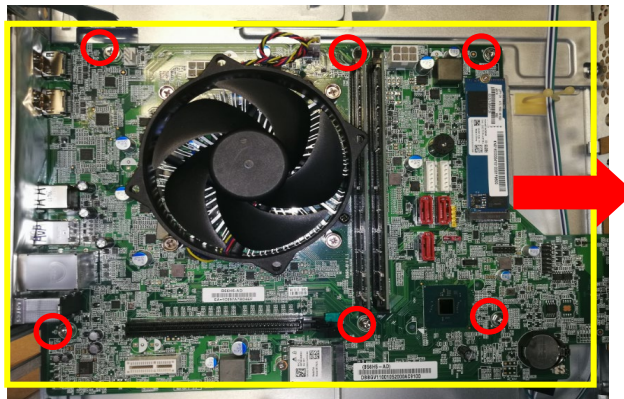
# Motherboard, MEM, CPU, Cooler, WLAN, SSD, RTC Battery Removal

## 7. Remove the Main Board

7.1 Remove the adhesive plaster of WLAN antenna

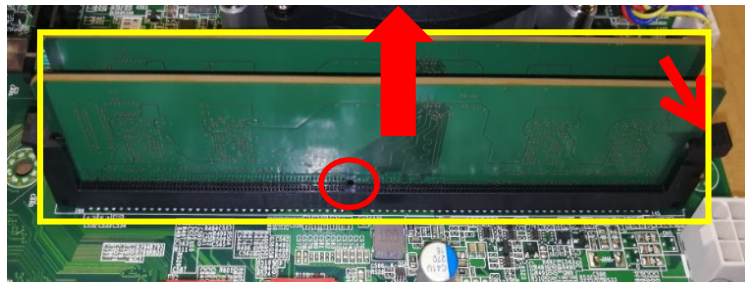


7.2 Remove these six screws from MB then take out MB from chassis



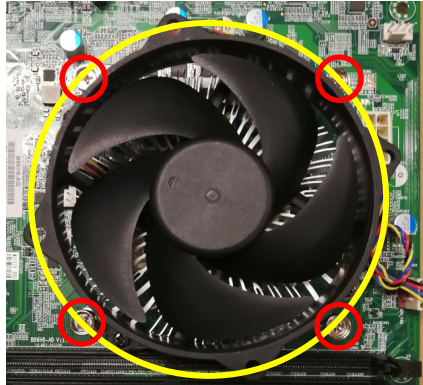
**NOTE:** Circuit boards  $>10\text{ cm}^2$  has been highlighted with the yellow rectangle as above image shows. Please detach the Circuit boards and follow local

7.3 Remove the memory card



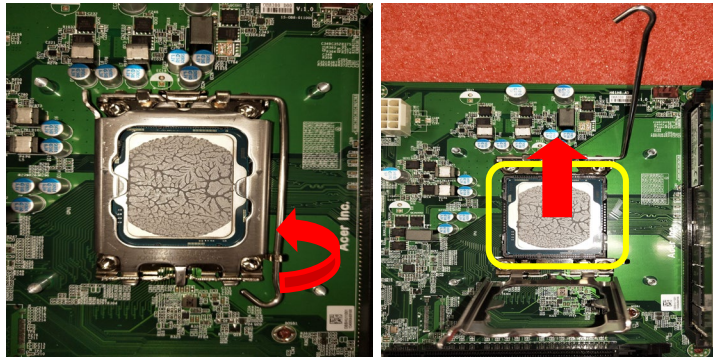
**NOTE:** MEMORY has been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

7.4 Remove the four screws and disconnect the CPU cooler power-cable from the MB



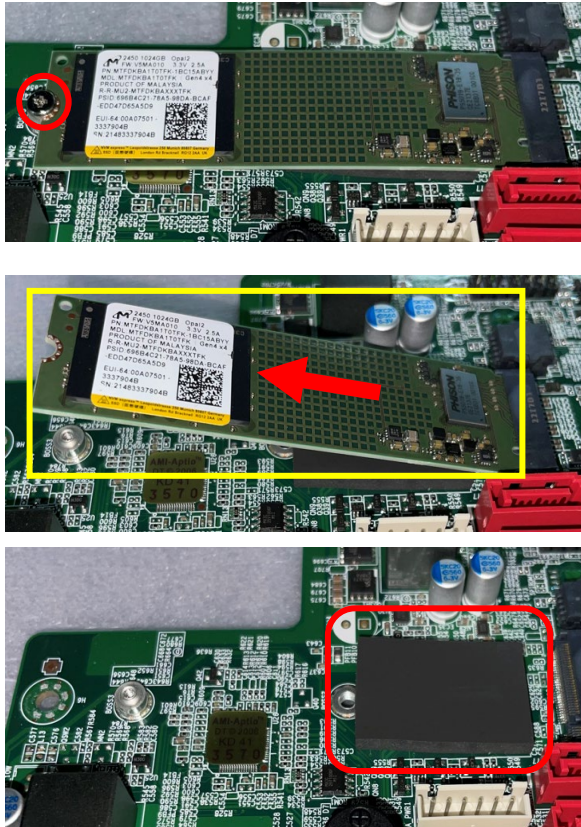
**NOTE:** CPU cooler has been highlighted with the yellow circle as above image shows. WEEE Annex VII component.

7.5 Remove the CPU



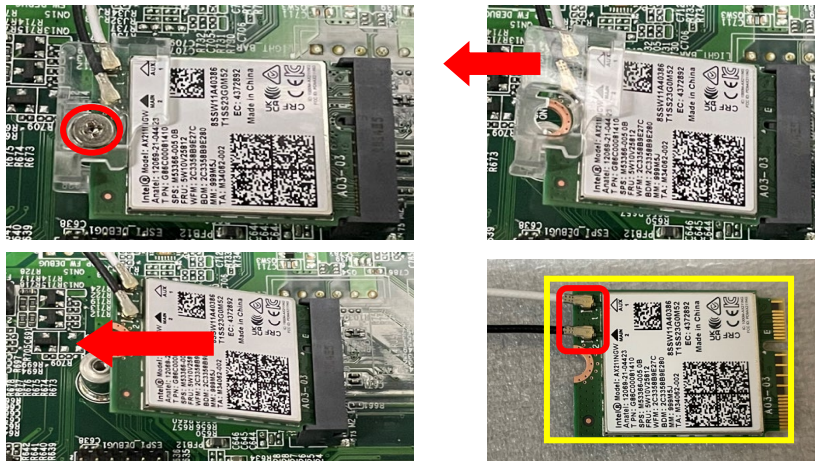
**NOTE:** CPU has been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

7.6 Remove a screw fastening the M.2 SSD and pull it out of slot



**NOTE:** SSD has been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.

7.7 Remove the screw and take out the WLAN card from MB



**NOTE:** WLAN card has been highlighted with the yellow rectangle as above image shows. WEEE Annex VII component.



# Troubleshooting

---

This chapter provides troubleshooting information for the TC-1785 Service Guide

- Power-On Self-Test (POST)
- POST Error Messages List

## Power-On Self-Test (POST)

---

Each time you turn on the system, the Power-on Self Test (POST) is initiated. Several items are tested during POST, but for the most part transparent to the user.

The Power-On Self Test (POST) is a BIOS procedure that boots the system, initializes and diagnoses the system components, and controls the operation of the power-on password option. If POST discovers errors in system operations at power-on, it displays error messages on screen, generates a check point code at port 80h or even halts the system if the error is fatal.

The main components on the main board that must be diagnosed and/or initialized by POST to ensure system functionality are as follows:

- Microprocessor with built-in numeric co-processor and cache memory subsystem
- Direct Memory Access (DMA) controller
- Interrupt system
- Three programmable timers
- ROM subsystem
- RAM subsystem
- CMOS RAM subsystem and real time clock/calendar with battery backup
- Onboard parallel interface controller
- Embedded hard disk interface and one diskette drive interface
- Keyboard and auxiliary device controllers
- I/O ports
  - One parallel port
  - One PS/2-compatible mouse port
  - One PS/2-compatible keyboard port

## POST Error Messages List

If you cannot run the diagnostics program tests but did receive a POST error message, use "POST Error Messages List" to diagnose system problems. If you did not receive any error message, look for a description of your error symptoms in "Error Symptoms List".

If you are unable to correct the problem by using the "BIOS Messages List" table and "Error Symptoms List" table, go to "Undetermined Problems".

To diagnose a problem, first find the BIOS error messages in the left column. If directed to a check procedure, replace the FRU indicated in the check procedure. If no check procedure is indicated, the first Action/FRU listed in right column is the most likely cause.

BIOS Messages	Action/FRU
BIOS ROM checksum error - System halted	The checksum of the BIOS code in the BIOS chip is incorrect, indicating the BIOS code may have become corrupt. Contact your system dealer to replace the BIOS.
CMOS Battery Failed	The CMOS battery is no longer functional. Contact your system dealer for a replacement the BIOS.
CMOS Checksum Error- defaults loaded	Checksum of CMOS is incorrect, so the system loads the default equipment configuration. A checksum error may indicate that CMOS has become corrupt. A weak battery may have caused this error. Check the battery and replace if necessary.
CPU at run	Displays the running speed of CPU.
Display switch is set incorrectly	The display switch on the motherboard can be set to either monochrome or color. This message indicates the switch is set to a different setting than indicated in Setup. Determine which setting is correct, and then either turn off the system and change the jumper, or enter Setup and change the Video selection.
Press ESC to skip memory test	The user may press Esc to skip the full memory test.
HARD DISK initializing - Please wait a	Some hard drives require extra time to initialize.
HARD DISK INSTALL FAILURE	Cannot find or initialize the hard drive controller or the drive. Make sure the controller is installed correctly. If no hard drives are installed, be sure the Hard Drive Selection in Setup is set to NONE.
Hard disk(s) diagnosis fail	The system may run specific disk diagnostic Routines. This message appears if one or more hard disks return an error when the diagnostics run.
Keyboard Error Or No Keyboard Present	Cannot initialize the keyboard. Make sure the keyboard is attached correctly and no keys are pressed during POST. To purposely configure the system without a keyboard, set the error halt condition in Setup to HALT ON ALL, BUT KEYBOARD. The BIOS then ignores the missing keyboard during POST.
Keyboard is locked out - Unlock the key	This message usually indicates that one or more keys have been pressed during the keyboard tests. Be sure no objects are resting on the keyboard.

BIOS Messages	Action/FRU
Memory Test:	This message displays during a full memory test, counting down the memory areas being tested.
Memory test fail	If POST detects an error during memory testing, additional information appears giving specifics about the type and location of the memory error.
Override enabled - Defaults loaded	If the system cannot boot using the current CMOS configuration, the BIOS can override the current configuration with a set of BIOS defaults designed for the most stable, minimal-performance system operations.
Press TAB to show POST screen	System OEMs may replace the Phoenix Technologies Award BIOS POST display with their own proprietary display. Including this message in the OEM display permits the operator to switch between the OEM display and the default POST display.
Primary master hard disk fail	POST detects an error in the primary master hard drive.
Primary slave hard disk fail	POST detects an error in the secondary master hard drive.
Secondary master hard disk fail	POST detects an error in the primary slave hard drive.
Secondary slave hard disk fail	POST detects an error in the secondary slave hard drive.

# Exploded Diagrams

For ATX PSU

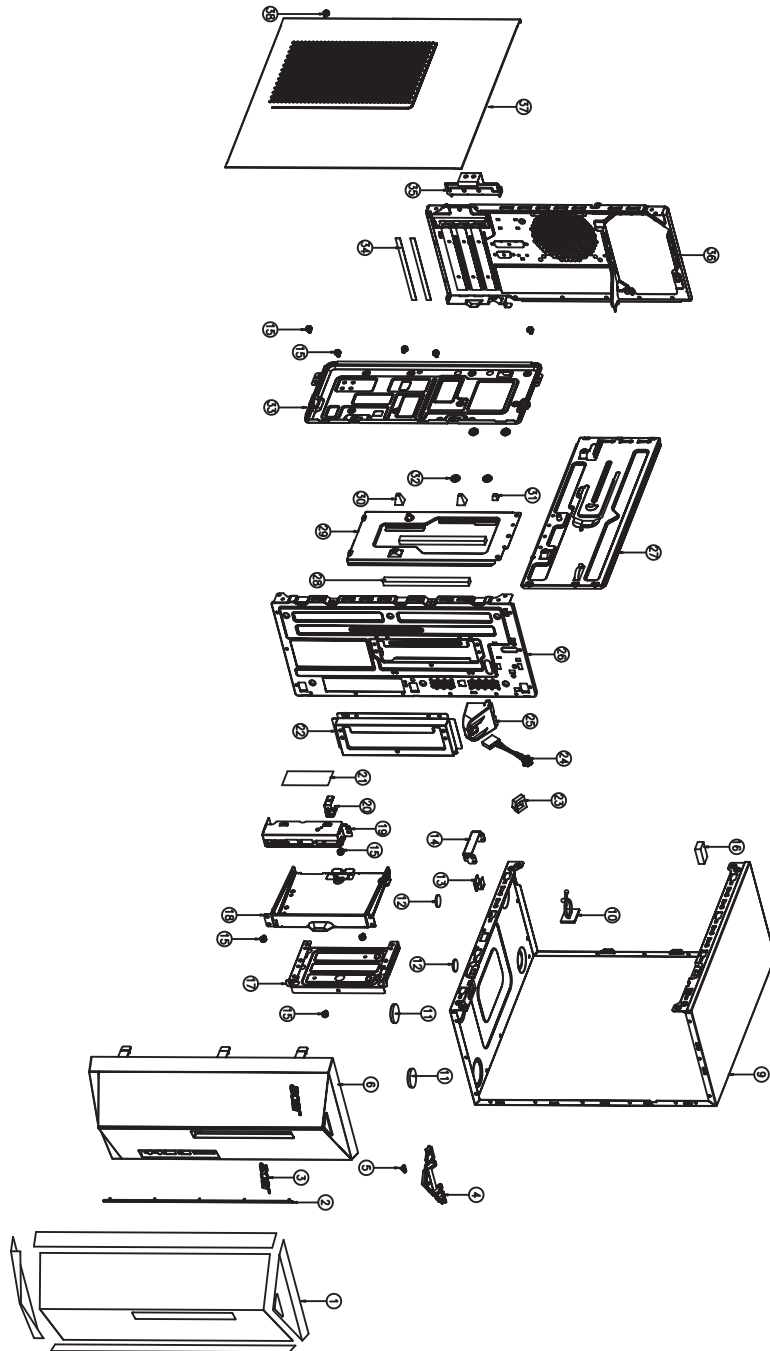


Figure 1 System Exploded Diagram

Item	Description	Item	Description
1	Panel protective film	27	MB SGCC bracket 1
2	Article decoration	28	EVA sponge
3	acer logo	29	MB SGCC bracket 2
4	Power switch	30	MB rubber 11*11*13mm
5	Power lens	31	MB rubber 7*4.5*6mm
6	Main bezel	32	HDD rubber
		33	HDD SGCC bracket
		34	PCI gasket 105*6*0.5mm
9	Fixed base	35	PCI SGCC cover
10	Clip 13*22*14.3mm	36	Rear SGCC plate
11	Rubber D27mm*H4mm	37	Side SGCC cover
12	Rubber D15.8mm*2mm	38	#6-32*5mm screw of side SGCC cover
13	Clip 14*15.5*10mm		
14	SGCC Bracket for VGA holder		
15	#6-32*5mm screw of FIO SGCC bracket		
16	PSU Rubber 25*15*8mm		
17	ODD bottom SGCC bracket		
18	ODD top SGCC bracket		
19	FIO SGCC bracket1		
20	FIO SGCC bracket2		
21	FIO Mylar		
22	ODD front SGCC bracket		
23	Sponge of Power LED		
24	Power switch cable		
25	Holder of Power switch cable		
26	Front SGCC Plate		

For TFX PSU

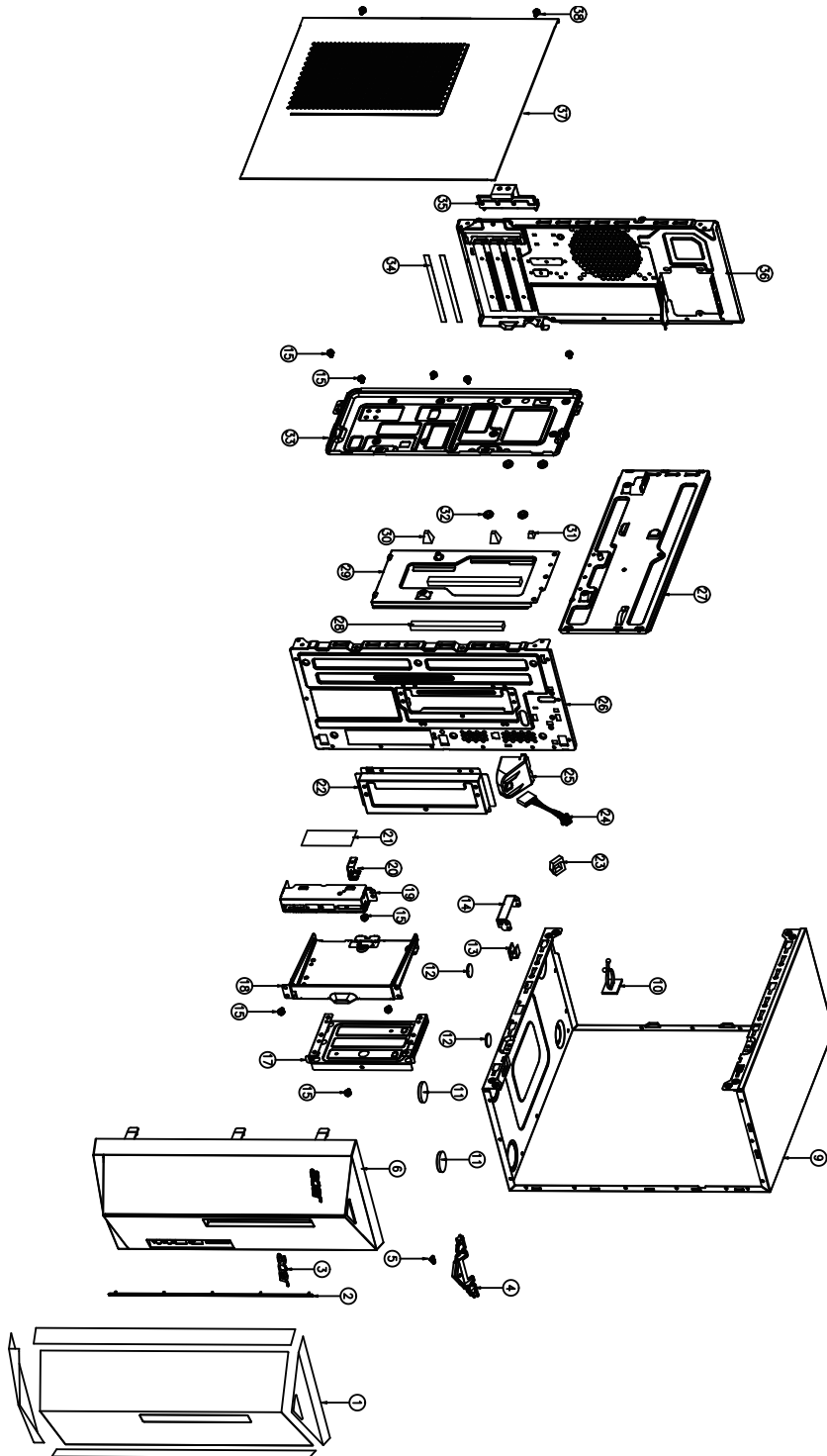


Figure 2 System Exploded Diagram

Item	Description	Item	Description
1	Panel protective film	27	MB SGCC bracket 1
2	Article decoration	28	EVA sponge
3	acer logo	29	MB SGCC bracket 2
4	Power switch	30	MB rubber 11*11*13mm
5	Power lens	31	MB rubber 7*4.5*6mm
6	Main bezel	32	HDD rubber
		33	HDD SGCC bracket
		34	PCI gasket 105*6*0.5mm
9	Fixed base	35	PCI SGCC cover
10	Clip 13*22*14.3mm	36	Rear SGCC plate
11	Rubber D27mm*H4mm	37	Side SGCC cover
12	Rubber D15.8mm*2mm	38	#6-32*5mm screw of side SGCC cover
13	Clip 14*15.5*10mm		
14	SGCC Bracket for VGA holder		
15	#6-32*5mm screw of FIO SGCC bracket		
17	ODD bottom SGCC bracket		
18	ODD top SGCC bracket		
19	FIO SGCC bracket1		
20	FIO SGCC bracket2		
21	FIO Mylar		
22	ODD front SGCC bracket		
23	Sponge of Power LED		
24	Power switch cable		
25	Holder of Power switch cable		
26	Front SGCC Plate		

## **FRU (Field Replaceable Unit) List**







---

Please contact your local service center to find out how to obtain the part or replace your device

## To remove your personal data

---

Whichever option chosen, you are then asked if you want to keep your files or delete everything. To delete your files select **Remove Everything**, click **Next**, then click **Reset**.

- 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**.