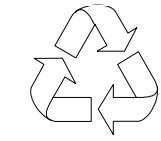
Acer Aspire 4732Z/4332
Notebook Computer Service Guide



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Revision History

Refer to the table below for changes made on this version of the Acer Aspire 4732Z/4332 Notebook Computer Service Guide.

	Chapter	Updates

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Conventions

The following textual conventions are used in this service guide.

SCREEN MESSAGES	Denotes actual messages that appear on screen.
NOTE	Gives additional information related to the current topic.
WARNING	Alerts you to any physical risk or system damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actions relevant to the accomplishment of procedures.

Service Guide Coverage

This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for our "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.

FRU Information

Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed service guide. For AUTHORIZED SERVICE PROVIDERS, your office may have a DIFFERENT part number code to those given in the FRU list of this printed service guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

Table of Contents

Chapter 1

Features and Specifications

This chapter lists the features and specifications of the Acer Aspire 4732Z/4332 computer.

Features

This tables in this section list the system features and environmental requirements of the computer.

NOTE: The specifications listed in this section are for reference only. The exact configuration of your PC depends on the model purchased.

Hardware

	Description
Processor	Intel Pentium Processors for Mobile or Mobile Intel Celeron Processors
System chipset	• Mobile Intel GL40 Express Chipset • Intel I/O Controller Hub 9M (ICH9M)
Memory	• Two DIMM slots supporting DDR2 677 MHz modules • Maximum memory of 2 GB for 32-bit OS or 4 GB for 64-bit OS • 2 MB Flash BIOS; shadow RAM support
Expansion options	• 5-in-1 card reader slot • Supports MultiMediaCard (MMC), Secure Digital (SD), xD-Picture Card (xD), Memory Stick (MS), and Memory Stick PRO (MS PRO) cards
Media storage	• 2.5-inch 9.5 mm SATA hard disk drive (HDD) • Slim type Super Multi optical disc drive (ODD)
Connectivity	• Atheros AR8114 PCI-E Ethernet Controller • WLAN module compliant with 802.11 b/g and a/b/g/n standards • External V.92 56 Kbps USB 1.5 modem • Broadcom Blutonium BCM2045 Bluetooth module (optional)
I/O ports	• VGA port • Ethernet port (RJ-45) • Two USB 2.0 ports • Microphone-in jack • Headphones/speaker/Line-out jack • DC-in jack for AC adapter
Audio	• High-definition audio system • MS-Sound compatible • Two built-in stereo speakers • Microphone-in and line-out jacks
Power supply	• 6-cell 48.8 W 4400 mAh Lithium Ion battery pack • 3-pin 65 W 19V AC adapter • Charging period:1.5–2 hours for 0–80%, 3–3.5 hours for 0–99%, 3.5–4 hours for 0–100% (charge-in-use) • ENERGY STAR
Physical specifications	• Dimension (W×D×H): 337 x 227 x 26/39.9 mm (13.27 x 8.94 x 1.02/1.6 in) • Weight: 2.4 kg (5.29 lb)

Display and Camera

	Description
Display type	• 14” WXGA LCD panel • Supported resolutions: 1366×768, 1360×768, 1280×768, 1280×720, 1024×768, and 800×600 • 16:9 aspect ratio • Simultaneous multi-window viewing via Acer GridVista • Function control keys for manual adjustment of the display panel brightness level
Webcam	0.3M pixel webcam

Keyboard and Pointing Device

Component	Description
Keyboard	• 86-/87-/91-key EM4T series keyboard with embedded numeric keypad, inverted-T cursor keys, Internet scroll key, and 12 function keys (hotkeys) • Multilanguage support • Spill-proof
Pointing device	• Up/down scroll segment • Touchpad on/off function • Adjustable touchpad sensitivity function • Spill-resistant

LED Indicators and Buttons

Component	Description
LED indicators	• Power (blue) • Battery (blue/amber) • HDD access (blue) • Num Lock (blue) • Caps Lock (blue)
Buttons with LED indicator	• Touchpad on/off (blue/orange) • Power (blue) • WLAN (blue/orange)

Software

Aspect	Description
Operating system support	Microsoft Genuine Windows Vista
Antivirus software	Norton Internet Security
Power management	ACPI 3.0 (Advanced Configuration Power Interface) standard

Ergonomics and Security

	Description
Ergonomics	• Spill-resistant keyboard and touchpad • Status LED indicators allows constant monitoring of basic system functions • Function control keys allows convenient control of various system operations • User-programmable launch button for priority applications • DIY HDD and memory upgrade options • High-capacity, rechargeable battery pack • ACPI-compliant power management system
Security	• BIOS-based user, supervisor, and HDD passwords • Kensington lock

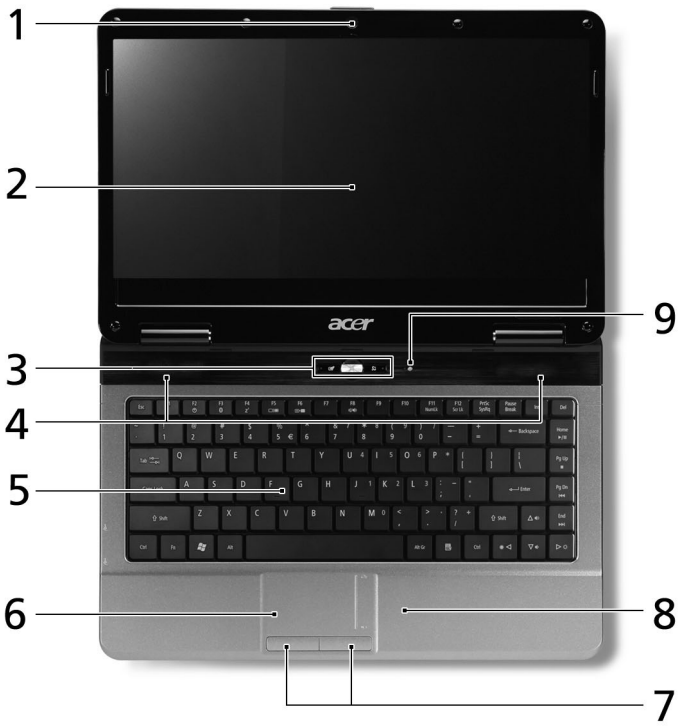
Environmental Requirements

Aspect	Description
Temperature	Operating: 5 to 35 °C (41 to 95 °F) Non-operating: -20 to 65 °C
Humidity (non-condensing)	Operating: 20% to 80% RH non-condensing Non-operating: 20% to 80% RH non-condensing

System Tour

The pictures and tables in this section illustrate the physical outlook of the computer.

Top View



Item	Icon	Component	Function
1		Integrated webcam	Web camera for video communication. (only for certain models)
2		Display screen	Also called Liquid Crystal Display (LCD), displays computer output.
3		Touchpad button	Toggles the touchpad on and off.
		Power button	Turns the computer on and off.
		Wireless LAN (WLAN) communication button/ indicator	Enables/disables the WLAN function and indicates its status.
4		Speakers	Left and right speakers deliver stereo audio output.
5		Keyboard	For entering data into your computer.
6		Touchpad	Touch-sensitive pointing device which functions like a computer mouse.
7		Click buttons	The left and right buttons function like the left and right mouse buttons.
8		Palmrest	Comfortable support area for your hands when you use the computer.

Item	Icon	Component	Function
9		HDD indicator	Lights up when there is hard drive access.

Hotkeys

The computer employs hotkeys or key combinations to access most of the computer's controls like screen brightness and volume output.

To activate hotkeys, press and hold the <**Fn**> key before pressing the other key in the hotkey combination.

	Icon	Function	Description
<Fn> + <F4>		Sleep	Puts the computer in Sleep mode.
<Fn> + <F5>		Display toggle	Switches display output between the display screen, an external monitor (if connected) and both.
<Fn> + <F6>		Screen blank	Turns the display screen backlight off to save power. Press any key to turn it back on.
<Fn> + <F8>		Speaker toggle	Turns the speakers on and off.
<Fn> + <▲>		Volume up	Increases the sound volume.
<Fn> + <▼>		Volume down	Decreases the sound volume.
<Fn> + <▲>		Brightness up	Increases the screen brightness.
<Fn> + <▼>		Brightness down	Decreases the screen brightness.

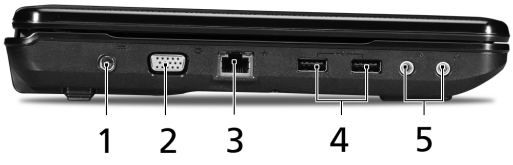
Closed Front View

Item	Icon	Component	Function
1		Power indicator	Lights up blue when the computer is turned on
		Battery indicator	Indicates the computer's battery status. • **Blue** - The computer is in AC mode. • **Amber** - The battery is charging. • **Flashing amber** - The battery charge is below critical level; battery requires charging.
2		5-in-1 card reader	Supports MMC, SD, xD, MS, and MS PRO cards.

Rear View

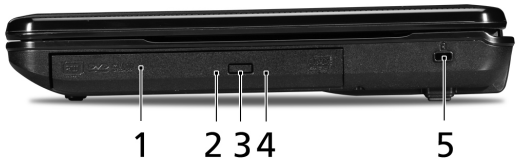
	Component	Function
1	Ventilation slots	Enable the computer to stay cool, even after prolonged use.

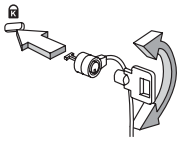
Left View



Item	Icon	Component	Function
1		DC-in jack	Connects to the AC adapter.
2		External display (VGA) port	Connects to a display device (e.g., external monitor, LCD projector).
3		Ethernet port (RJ-45)	Connects to an Ethernet 10/100-based network
4		USB 2.0 ports	Connect to USB 2.0 devices (e.g., USB mouse, USB camera).
5		Microphone-in jack	Accepts inputs from external microphones.
		Headphone/speaker/ Line-out jack	Connects to audio line-out devices such as speakers, or headphones.

Right View



	Icon	Component	Function
1		Optical disc drive (ODD)	Internal optical drive; accepts CDs or DVDs.
2		ODD access indicator	Lights up when the optical drive is active.
3		ODD eject button	Ejects the optical disc from the drive.
4		Emergency eject hole	Ejects the optical drive tray when the computer is turned off. **Note:** Insert a paper clip to the emergency eject hole to eject the ODD tray when the computer is off.
5		Kensington lock notch 	Connects to a Kensington-compatible computer security lock. **Note:** Wrap the computer security lock cable around an immovable object such as a fixed table or the handle of a locked drawer. Insert the lock into the notch and turn the key to secure the lock. Some keyless models are also available.

Base View

Item	Icon	Component	Function
1		Battery bay	Houses the computer's battery pack.
2		Battery release latch	Releases the battery pack for removal.
3		Battery lock	Locks the battery pack in position.
4		HDD bay	Houses the computer's hard disk.
5		Memory compartment	Houses the computer's memory modules.
6		Ventilation slots and cooling fan	Enable the computer to stay cool, even after prolonged use. **Note**: Do not cover or obstruct the fan opening.

Specifications

Processor

	Processors Type						
	Intel Pentium Processors for Mobile		Mobile Intel Celeron Processors				
	T4200	T3400	900	T1600	T1700	575	585
CPU speed	2.0 GHz	2.16 GHz	900 MHz	1.66 GHz	1.83 GHz	2.0 GHz	2.16 GHz
Bus speed	800 MHz	667 MHz	100 MHz	667 MHz	667 MHz	667 MHz	667 MHz
L2 cache	1 MB	1 MB	128 KB	1 MB	1 MB	1 MB	1 MB
Package type	Micro-FCPGA	Micro-FCPGA	Micro-PGA2	Micro-FCPGA	Micro-FCPGA	Micro-FCPGA	Micro-FCPGA
Core stepping	M0	M0	PD0	M0	M0	M0	M0
Thermal design power	35W	35W	24W	35W	35W	31W	31W

System Chipsets

Item	Specification
North bridge	Mobile Intel GL40/GM45 Express Chipset
South bridge	82801IBM I/O Controller Hub (ICH9M)

System Controllers

Item	Specification
Hard drive	Integrated in the ICH9M
Memory	Integrated in the Mobile Intel GL40/GM45 Express Chipset
Video	Integrated in the Mobile Intel GL40/GM45 Express Chipset
VGA memory	Intel UMA
Audio	Conexant HD-Audio SmartAudio 221 (CX20561)
Wireless LAN	Intel WiFi Link 512AG_MMW / Atheros XB63 / Broadcom BCM4312
Ethernet	Atheros AR8114 PCI-E Ethernet Controller
Modem	External USB Lite + LSI modem
Bluetooth (optional)	Broadcom Blutonium BCM2045
Keyboard	Winbond KBC773L
Card reader	Realtek RTS5159

Video

Item	Specification
Video controller	Integrated in the Mobile Intel GL40 / GM45 Express Chipset
FSB speed	GL40: 667 MHz GM45: 667 MHz / 800 MHz / 1066 MHz
Dual Independent Display support	Yes
Graphics output	GL40: LVDS, SDVO, TV Out, CRT GM45: LVDS, SDVO, TV Out, CRT, DVI, HDMI, DisplayPort

Audio

Item	Specification
Audio controller	Conexant HD-Audio SmartAudio 221 (CX20561)
Features	High-definition audio system, MS-Sound compatible, built-in stereo speakers; microphone-in and line-out jacks

Wireless LAN

Item	Specification
Model	Intel WiFi Link 512AG_MMW / Atheros XB63 / Broadcom BCM4312
Connector interface	Mini Card form factor, based on PCIe electrical interface
IEEE WLAN standard	802.11a/b/g

Ethernet

Item	Specification
Ethernet controller	Atheros AR8114 PCI-E Ethernet Controller
LAN protocol	10/100 Mbps
LAN connector type	RJ-45
Features	Onboard Fast Ethernet, Wake on LAN ready

Bluetooth

Item	Specification
Model	Broadcom Blutonium BCM2045
Version	Bluetooth 2.0 (backward compatible with 1.1, 1.2)
EDR support	Yes
Practical data rate	2.1 Mbit/s

Keyboard

Item	Specification
Keyboard controller	Winbond KBC773L
Brand	Darfon
Features	• 86-/87-/91-key EM4T series keyboard with embedded numeric keypad, inverted-T cursor keys, Internet scroll key, and 12 function keys (hotkeys) • Multilanguage support • Spill-proof

Card Reader

Item	Specification
Card reader controller	Realtek RTS5159
Card compatibility	MMC, SD, xD, MS, and MS PRO

Memory

System Memory

Item	Specification
Memory controller	Integrated in the Mobile Intel GL40/GM45 Express Chipset
Number of DIMM slot	2
Maximum memory size	32-bit OS: 1 GB per slot; 2 GB maximum system memory 64-bit OS: 2 GB per slot; 4 GB maximum system memory
DIMM speed	667 MHz (PC2-5300), 800 MHz (PC2-6400)
DIMM type	200-pin SO-DIMM
Memory module combinations	You can install memory modules in any combination as long as they match the above specifications.

Memory Module

Item	Specification							
Brand	**Elpida**	**Hynix**	**Micron**		**Nanya**		**Samsung**	
Part name	EBE11UE6ACUA-6E-E	HYMP112S64CP6-Y5 LF HMP112S6EFR6C-Y5	MT8HTF12864HDY-667	MT8HTF12864HDY-800	NT1GT64UH8D0FN-3C	NT1GT64UH8D0FN-AD	M470T2864EH3-CE6	M470T2864EH3-CF7
Density	1 GB							
Data rate	667 MHz	667 MHz	667 MHz	800 MHz	667 MHz	800 MHz	667 MHz	800 MHz
RoHS compliant	Yes							
Part name	EBE21UE8ACUA-6E-E LF	HYMP125S64CP8-Y5 HMP125S6EFR8C-Y5	MT16HTF25664HY-667	MT16HTF25664HY-800G1	NT2GT64U8HD0BN-3C	NT2GT64U8HD0BN-AD	M470T5663EH3-CE6	
Density	2 GB							
Data rate	667 MHz	667 MHz	667 MHz	800 MHz	667 MHz	800 MHz	667 MHz	
RoHS compliant	Yes							

Hard Disk Drive

160-GB HDD

Item	Specification			
Product	HGST Travelstar 5K320	Seagate Momentus 5400.5	Toshiba MKxx55GSX	WD Scorpio Blue
Model	HTS543216L9A300	ST9160310AS	MK1655GSX	WD1600BEVT
Form factor	2.5 inch			
Interface	SATA 3.0			
Sector size (bytes)	512			
Data buffer (MB)	8			
Rotational speed (RPM)	5400			
Interface transfer rate	300 MB/s			
Seek time, typical (ms)	12	14	12	12

250-GB HDD

Item	Specification				
Product	Hitachi Travelstar 5K500.B	Seagate Momentus 5400.5	Seagate Momentus 5400.6	Toshiba MKxx55GSX	WD Scorpio Blue
Model	HTS545025B9A300	ST9250320AS	ST9250315AS	MK2555GSX	WD2500BEVT
Form factor	2.5 inch				
Interface	SATA 3.0				
Sector size (bytes)	512				
Data buffer (MB)	8				
Rotational speed (RPM)	5400				
Interface transfer rate	300 MB/s				
Seek time, typical (ms)	12	14	14	12	12

320-GB HDD

Item	Specification			
Product	Hitachi Travelstar 5K500.B	Seagate Momentus 5400.5	Toshiba MKxx55GSX	WD Scorpio Blue
Model	HTS545032B9A300	ST9320320AS	MK3255GSX	WD3200BEVT
Form factor	2.5 inch			
Interface	SATA 3.0			
Sector size (bytes)	512			
Data buffer (MB)	8			
Rotational speed (RPM)	5400			
Interface transfer rate	300 MB/s			
Seek time, typical (ms)	12	14	12	12

500-GB HDD

Item	Specification			
Product	Hitachi Travelstar 5K500.B	Seagate Momentus 5400.6	Toshiba MKxx55GSX	WD Scorpio Blue
Model	HTS545050B9A300	ST9500325AS	MK5055GSX	WD5000BEVT
Form factor	2.5 inch			
Interface	SATA 3.0			
Sector size (bytes)	512			
Data buffer (MB)	8			
Rotational speed (RPM)	5400			
Interface transfer rate	300 MB/s			
Seek time, typical (ms)	12	14	12	12

Optical Disc Drive

	Specification			
Brand	LG	Panasonic	PLDS	Sony NEC
Model	GT20N	UJ880A	DS-8A3S	Optiarc AD-7580S
Drive type	Super Multi Slim DVD Rewriter			
Write/read speed	8x			
Temperature, operating	5 to 50 °C			
Tray height (mm))	12.7			
Dimension (W x D, mm)	128 × 127	128 × 129	128 × 126.1	128 × 129
Weight (g)	168	175	170	160
Interface	SATA			

LCD Panel

Item	Specification			
Brand	AUO	CMO	LG Display	Samsung
Model	B140XW01	N140B6	LP140WH1	LTN140AT01
Screen size (diagonal, inch)	14			
Display area	**309.399mm(H) X 173.952mm(V) (14.0” diagonal)**			
Type	Wide XGA			
Brightness (nits)	220			
View angle (U/D/R/L)	15/35/45/45	20/45/45/45	60/60/70/70	45/45/15/30
Backlight	LED			
Display resolution (pixels)	1366×768			
Number of colors	262K			
Contrast ratio	500:1	600:1	600:1	500:1
Aspect ratio	16:9			
Response time (ms)	8			
Optical coating	Anti-glare			
Interface	LVDS			
Supply voltage (v)	3.3			
Outline dimensions (mm)	324 × 192.5 × 5.2	324 × 192.5 × 5.2	324 × 192.5 × 5.5	323.5 × 192 × 5.2
Weight (g)	340	340	340	350

Webcam

Item	Specification	
Brand	Chicony	Suyin
Model	Calla	Camellia
Resolution	0.3M	
Lens	2G	
DV capability	Yes	

AC Adapter

Item	Specification		
Brand	**Delta**	**Hipro**	**Lite-On**

Item	Specification			
Model	SADP-65KB DFJ ADP-65JH DB A	HP-OK065B13	HP-A0652R3B	PA-1650-02AC PA-1650-22AC
Output rating	19 V	19.5 V	19 V	19 V
Output power	65 W	65 W	90 W	65 W
Input voltage (Vac)	100–240	90–264	90–264	100–240
Input frequency	50–60 Hz	47–63 Hz	47–63 Hz	50–60 Hz

Battery Pack

	Specification
Brand	Panasonic, Samsung, Sanyo, Simplo, Sony
Capacity	4400 mAh
Pack capacity	6 cells, 2.0 mAh
Type	Lithium-ion, 3S2P

Power Management

ACPI mode	Description
G3	• Mechanical Off - All devices in the system are turned off completely. No electrical current is running through the system. Except for the real-time clock, power consumption is zero. The machine can be worked on without damaging the hardware or endangering service personnel.
G2/S5	• Soft Off - The computer consumes a minimal amount of power. No user mode or system mode code is run. It is not safe to disassemble the machine in this state.
G1	• Sleeping - The computer consumes a small amount of power, user mode threads are not being executed, and the system “appears” to be off (from the end user’s perspective, the display is off, and so on). It is not safe to disassemble the machine in this state.
G0	• Working - The system dispatches user mode (application) threads and they execute. In this state, peripheral devices are having their power state changed dynamically. The user can select, through some UI, various performance/power characteristics of the system to have the software optimize for performance or battery life. The system responds to external events in real time. It is not safe to disassemble the machine in this state.

BIOS

Item	Specification
BIOS chip	Winbond W25X16
Setup utility	Phoenix SecureCore Setup Utility

Antivirus Protection

Item	Specification
Product	Norton Internet Security 2009 (v16.0)

Chapter 2

System Utilities

Phoenix SecureCore Setup Utility

Phoenix SecureCore Setup Utility is a hardware configuration program built into your system's Basic Input/ Output System (BIOS). Since most systems are already properly configured and optimized, there is normally no need to run this utility.

You will need to run this utility under the following conditions:

- When changing the system configuration including:
  - Setting the system time and date
  - Configuring the hard drives
  - Specifying the boot device sequence
  - Configuring the power management modes
  - Setting up system passwords or making other changes to the security setup
- When a configuration error is detected by the system and you are prompted ("**Run Setup**" message) to make changes to the BIOS settings.

IMPORTANT: If you repeatedly receive "**Run Setup**" messages, the RTC battery located on the mainboard (RTC1) may be defective. In this case, the system cannot retain configuration values in CMOS. Replace the RTC battery with a new one.

NOTE: For ease of reading, Phoenix SecureCore Setup Utility will be simply referred to as "Setup" or "Setup Utility" in this Service Guide.

In the descriptive tables following each of the menu screen illustrations, settings in **boldface** are the default and suggested parameter settings.

The Setup Utility loads the configuration values in a battery-backed nonvolatile memory called CMOS RAM. This memory area is not part of the system RAM, which allows configuration data to be retained when power is turned off. The values take effect when the system is booted. POST uses these values to configure the hardware. If the values and the actual hardware do not agree, POST generates an error message. You must run this utility to change the BIOS settings from the default or current configuration.

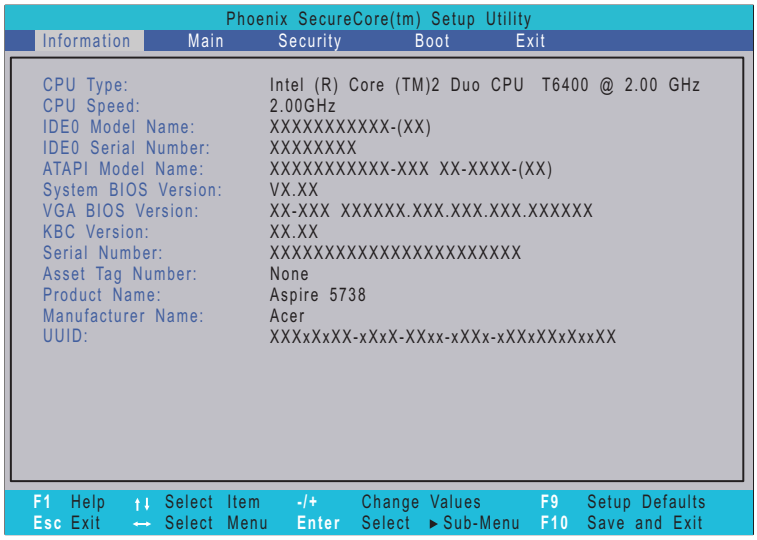
Accessing the Setup Utility

1. Turn on the computer.

   If the computer is already turned on, save your data and close all open applications, then restart the computer.

2. During POST, press **F2**.

   If you fail to press **F2** before POST is completed, you will need to restart the computer. Use the left (←) and right (→) arrow keys to move between selections on the menu bar.



Navigating through the Setup Utility

Use the keys listed in the legend bar on the bottom of the Setup screen to work your way through the various menu and submenu screens of the Setup Utility. The table below lists these legend keys and their respective functions.

	Function
← and →	To move between selections on the menu bar.
↑ and ↓	To move the cursor to the field you want.The currently selected field will be highlighted. The right side of each menu screen displays a field help panel—Item Specific Help panel. This panel displays the help text for the currently selected field. It updates as you move the cursor to each field.
F5 and F6	To select a value for the currently selected field (only if it is user-configurable). Press these keys repeatedly to display all possible entries. A parameter that is enclosed in square brackets [ ] is user-configurable. Grayed-out parameters are not user-configurable for one of the following reasons: q The field value is auto-configured or auto-detected.· q The field value is informational only. q The field is password-protected.
Enter	To select a field value (a pop-up menu displays) or submenu screen.
▶	Indicates a submenu field. To view a submenu screen, use the ↑ and ↓ keys to move the cursor to the submenu you want, then press **Enter**.
Esc	If you press this key: q On one of the primary menu screens, the Exit menu displays. q On a submenu screen, the previous screen displays. q When you are making selections from a pop-up menu, closes the pop-up without making a selection.
F1 or Alt-H	To bring up the General Help window. The General Help window describes other Setup navigation keys that are not displayed on the legend bar.
F9	Press to load default system values.
F10	Press to save changes and close the Setup Utility.

Setup Utility Menus

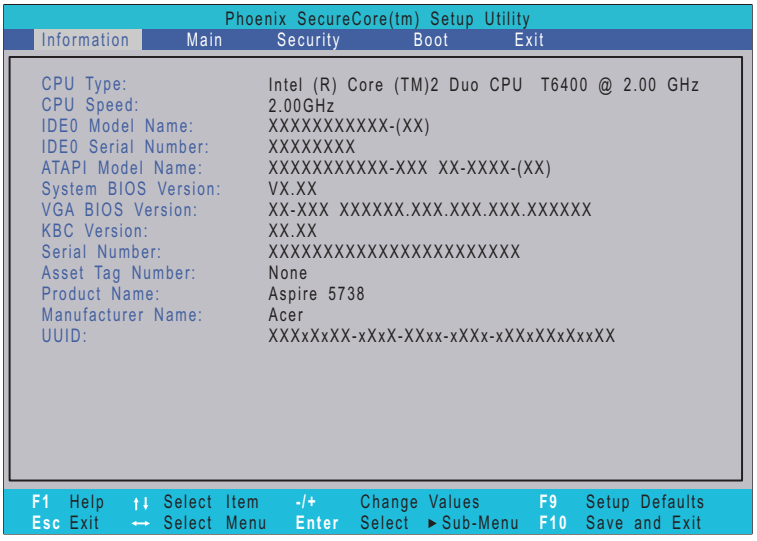
The Setup Utility has five menus for configuring the various system functions. These include:

- Information
- Main
- Security
- Boot
- Exit

NOTE: The screenshots used in this section are for illustration only. The values displayed may not be the same as those in your computer.

Information

The Information menu screen displays a summary of your computer hardware information. These information are necessary for troubleshooting and may be required when asking for technical support.

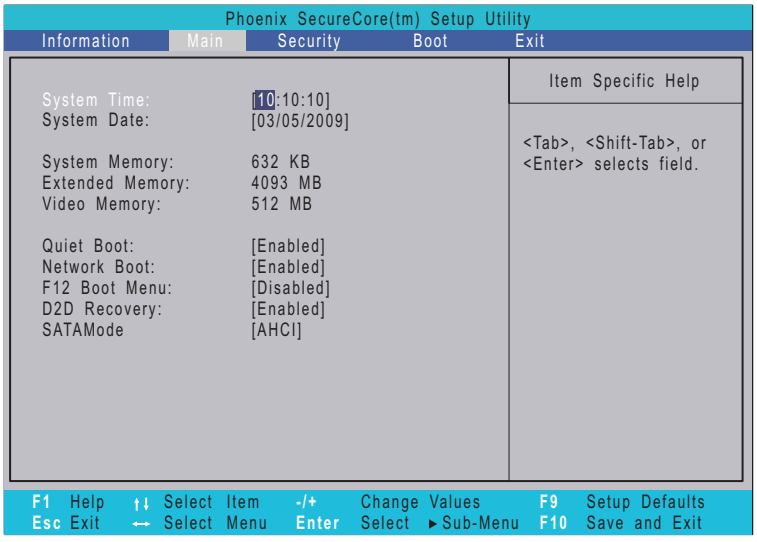


The following table describes the information displayed in the Information menu screen.

	Description
CPU Type	Displays the processor model.
CPU Speed	Displays the processor speed.
IDE0 Model Name	Displays the model name of the hard drive installed on the primary IDE master.
IDE0 Serial Number	Displays the serial number of the hard drive installed on the primary IDE master.
ATAPI Model Name	Displays the model name of the optical disc drive installed in the system.
System BIOS Version	Displays the current system BIOS version.
VGA BIOS Version	Displays the current VGA BIOS version.
KBC Version	Displays the keyboard controller version.
Serial Number	Displays the system serial number.
Asset Tag Number	Displays the system asset tag number
Product Name	Displays the official model name of the computer.
Manufacturer Name	Displays the manufacturer of the computer.
UUID	Displays your computer's UUID (universally unique identifier). UUID is an identifier standard used in software construction, standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE).

Main

The Main menu screen allows you to configure the basic system settings.



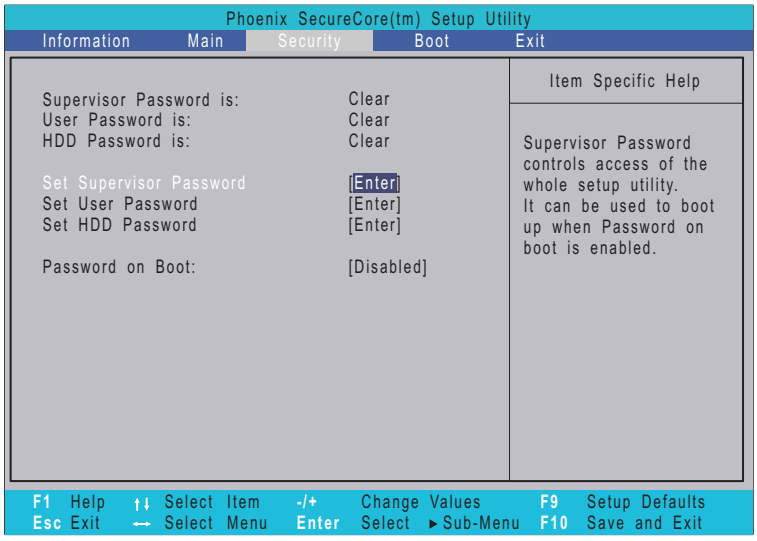
The following table describes the parameters in this screen.

Field	Description	Value
System Time	Sets the system time.	HH:MM:SS (hour:minute:second)
System Date	Sets the system date.	MM/DD/YYYY (month/day/year)
System Memory	Displays the size of system memory detected during boot-up.	
Extended Memory	Displays the size of extended memory detected during boot-up. Extended memory = Total memory –1MB	
Video Memory	Displays the size of video memory detected during boot-up.	
Quiet Boot	Enables or disables the Quiet Boot function. When enabled, BIOS setup is in graphical mode and displays only an identification logo during POST and while booting. After booting, the screen displays the operating system prompt (such as DOS) or logo (such as Windows 95). If any error occurs while booting, the system automatically switches to text mode. When disabled, BIOS setup is in the conventional text mode where you see the system initialization details on the screen.	Disabled **Enabled**
Network Boot	When enabled, a remote host with appropriate boot image can boot this computer. (only works with an Ethernet device.)	Disabled **Enabled**
F12 Boot Menu	Enables or disables the Boot menu during POST.	**Disabled** Enabled
D2D Recovery	Enables or disables D2D Recovery function. This function allows the user to create a hidden partition on the hard drive to store the operation system. User can then use this partition to restore the system to factory defaults.	Disabled **Enabled**

Field	Description	Value
SATA Mode	Select the SATA controller operating mode. When set to AHCI (Advanced Host Controller Interface), the SATA controller enables its AHCI and RAID features when the computer boots up. When set to IDE, the SATA controller disables its AHCI and RAID functions when the computer boots up. **NOTE:** The Acer eMachine D525/D725 computer does not support AHCI or RAID functions so set this parameter to IDE to speed up the boot-up time.	**AHCI** IDE

Security

The Security menu screen contains parameters that help safeguard and protect your computer from unauthorized use.



The following table describes the parameters in the Security menu screen.

	Description	Value
Supervisor Password is	Displays the supervisor password status.	Clear Set
User Password is	Displays the user password status.	
HDD Password is	Displays the HDD password status.	
Set Supervisor Password	Press **Enter** to configure the supervisor password. When set, this password will allow the user to access and change all settings in the Setup Utility.	
Set User Password	Press **Enter** to configure the user password. When set, this password will restrict a user's access to the Setup menus. Only the following menus will be accessible: • System Time and System Date • All Exit menu options excluding Load Setup Defaults A supervisor password must first be set before creating this user password.	
Set HDD Password	Press **Enter** to configure the HDD password. When set, this password will restrict a user's access to the hard disk drive. It will be required during boot-up or when waking from hibernation mode.	
Password on Boot	Referred to as power-on password. When set, the user or supervisor password will be required to boot up the system. A supervisor password must first be set before creating this password.	**Disabled** Enabled

Setting a system password

Note the following before you define a system password:

- The maximum length of password contains 8 alphanumeric characters—A - Z, 0 - 9, and ‘;’ (for French keyboard).
- System passwords are case-insensitive.
- When you are prompted to enter a password, you have three tries before the system halts. Do not forget your password. If you forget your password, you may have to return your computer to your dealer to reset it.

To set a system password:

1. Select a password parameter, then press **Enter**.

   The password box appears.

2. Type a password then press **Enter**.

IMPORTANT: Be very careful when typing your password because the characters do not appear on the screen. Only shaded blocks representing each typed character are visible.

3. Retype the password to verify the first entry, then press **Enter**.

   You will be prompted to save the new password.

4. Press **Enter**.
5. Press **F10** to save the password and close the Setup Utility.

To change a system password:

1. Select a password parameter, then press **Enter**.

   The password box appears.

2. Type the original password, then press **Enter**.
3. Type a new password, then press **Enter**.

4. Retype the new password to verify the first entry, then press **Enter**.

   You will be prompted to save the new password.

5. Press **Enter**.
6. Press **F10** to save the password and close the Setup Utility.

To remove a system password:

1. Select a password parameter, then press **Enter**.

   The password box appears.
2. Type the original password, then press **Enter**.
3. Press **Enter** twice without entering anything in the new and confirm password fields.

   You will be prompted to confirm the password removal.

4. Press **Enter**.
5. Press **F10** to save the changes you made and close the Setup Utility.

Resetting a system password:

If you have forgotten the user password, the computer will continue to function normally but you will have limited access to the Setup Utility.

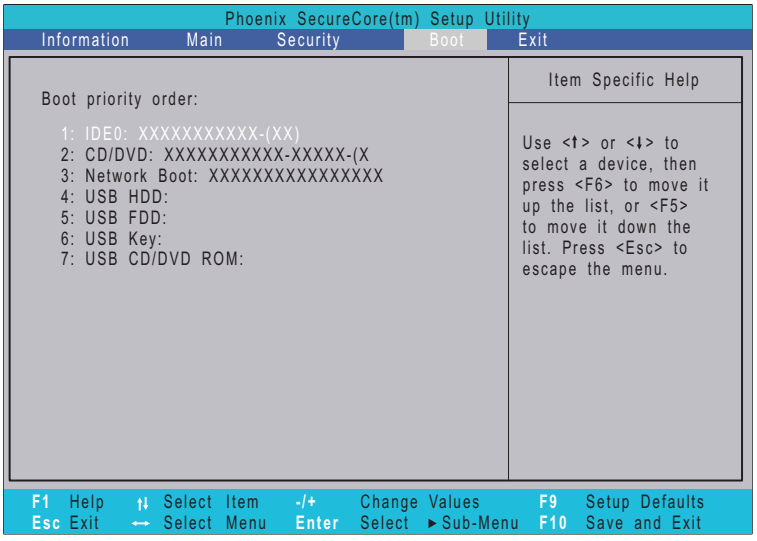
If you have enabled the Password on Boot field and you forget the supervisor password, you will not be able to boot up the computer. The same thing applies if you forget the HDD password.

To clear a lost BIOS password (user or supervisor password) you need to short the G61 hardware gap located near the processor socket (U33). Go to page 70 for instructions.

To regain access to your computer if you lose the HDD password, you need to generate a master password and unlock your hard drive. Go to page 71 for instructions.

Boot

The Boot menu screen allows users to set the preferred drive sequence in which the Setup Utility attempts to boot the operating system.



Setting the boot drive sequence

By default, the computer searches for boot devices in the following order:

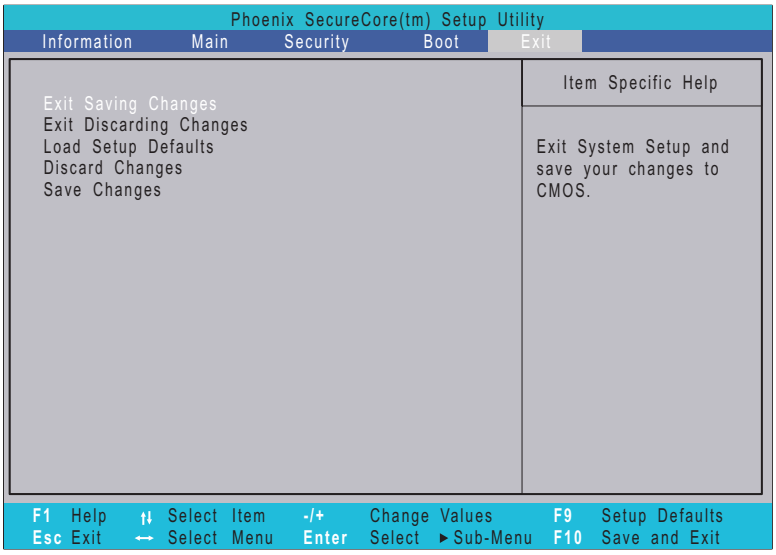
1. Hard disk drive
2. Optical disc drive
3. Network boot
4. External USB HDD
5. External USB floppy drive
6. External USB keyboard
7. External USB optical drive

To set the boot drive sequence:

1. Press ↑ or ↓ to highlight a bootable device.
2. Press **F5** or **F6** to move the selected device up or down the boot sequence.
3. Press **F10** to save the changes you made and close the Setup Utility.

Exit

The Exit menu screen lists the exit options to quit from the Setup Utility.



The following table describes the parameters in this screen.

	Description
Exit Saving Changes	Saves changes made and closes the Setup Utility. Keyboard shortcut: F10·
Exit Discarding Changes	Discards changes made and closes the Setup Utility.
Load Setup Defaults	Loads the factory-default settings for all Setup parameters. Keyboard shortcut: F9
Discard Changes	Discards all changes made to the Setup Utility and loads previous configuration settings.
Save Changes	Saves all changes made to the Setup Utility.

Chapter 3

System Disassembly

This chapter provides step-by-step instructions on how to disassemble the computer for maintenance and troubleshooting purposes.

Disassembly Tools

In performing the disassembly process, you will need the following tools:

- Wrist-grounding strap and conductive mat for preventing electrostatic discharge
- Philips screwdriver
- Flat screwdriver
- Plastic flat-blade screwdriver
- Plastic tweezers

Stages of the Disassembly Process

The disassembly process is divided into three stages:

1. External modules disassembly
2. Main unit disassembly
   a. Upper case disassembly
   b. Lower case disassembly
   c. LDC module disassembly

IMPORTANT: The disassembly procedure described in this chapter is a gradual process, as illustrated in the flowcharts preceding each disassembly stage section. This means that users need to observe the instructions in a step-by step manner. To illustrate, if you want to remove the mainboard, you must first remove the keyboard, then disassemble the inside assembly frame in that order. Failure to observe the gradual process may result in component damage.

NOTE: To reinstall the system components and assemble the unit, perform the disassembly procedures in reverse.

Equivalent Torque Values

Torque values indicated in this chapter are expressed in kgf-cm (kilogram force-centimetre). For equivalent values in in-lb (inch-pound force) and N mm (newton millimeter), refer to the table below.

	in-lb	N mm
1.6	1.39	156.93
3.0	2.60	294.25

System Screw List

Listed below are the screw types used in this system, plus their corresponding part numbers.

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with their corresponding components to avoid mismatches when putting back the components.

	Part Number	Type	Color
A	86.00E33.736	M2.5 x L6	Black
B	86.00A02.140	M2 x L4	Black
C	86.9A554.4R0	M3 x L3	Silver
D	86.9A552.4R0	M2 x L4	Black
E	86.00E25.723	M2 x L3	Black
F	86.00E34.738	M2.5 x L8	Black
G	86.00E13.524	M2 x L4	Black
H	86.00F87.735	M2.5 x L5	Black
I	86.00C07.220	M2 x L3	Silver

Pre-disassembly Procedure

Before proceeding with the disassembly procedure, perform the steps listed below:

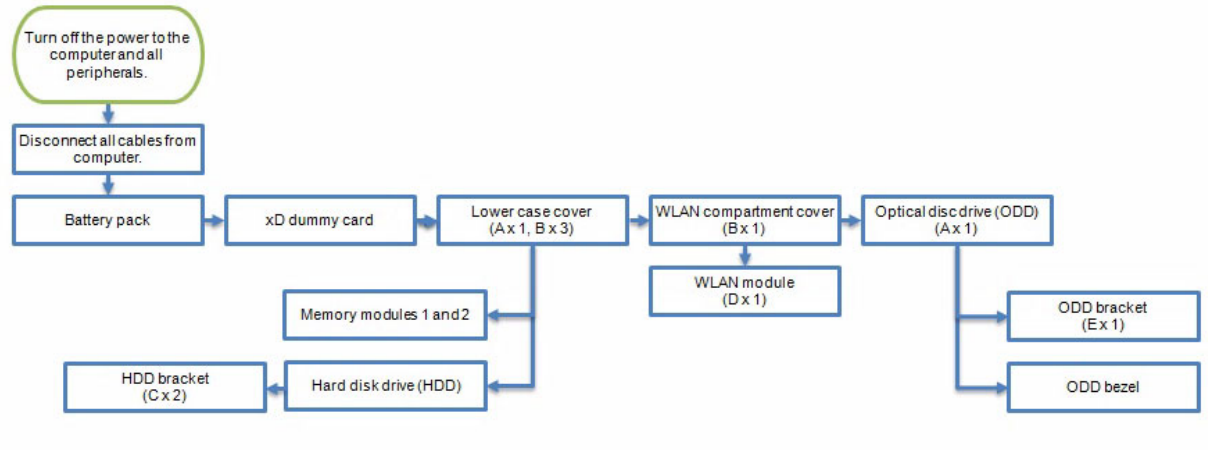
1. Turn off the power to the computer and all peripherals.
2. Unplug the power cord from the computer.

3. Unplug all other peripheral cables from the computer.
4. Close the notebook lid and place the computer on a flat, steady surface.
5. Turn the unit over with the base facing upward.

NOTE: Some images in chapter show eMachines logo, but this model is Aspire. For eMachines D725/D525 and Aspire 4732Z/4332 use the same housing (only middle cover, LCD cover, LCD bezel and upper case are different in appearance), Aspire 4732Z/4332 disassembling steps will be the same as eMachines D725/D525. Here we take eMachines D725/D525 as working sample for this chapter.

External Modules Disassembly

External Modules Disassembly Flowchart

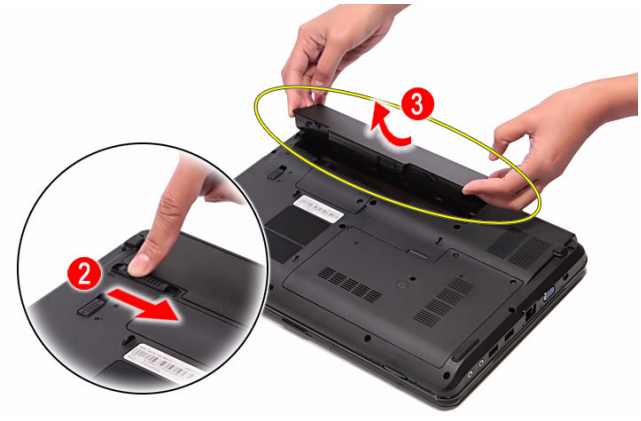


	Part Number	Type	Color
A	86.00E33.736	M2.5 x L6	Black
B	86.00A02.140	M2 x L4	Black
C	86.9A554.4R0	M3 x L3	Silver
D	86.9A552.4R0	M2 x L4	Black
E	86.00E25.723	M2 x L3	Black

Removing the Battery Pack

1. Slide the battery lock to the unlock position **(1)**.

2. Slide the battery latch all the way through to release the battery pack.
3. Remove the battery pack from its bay.



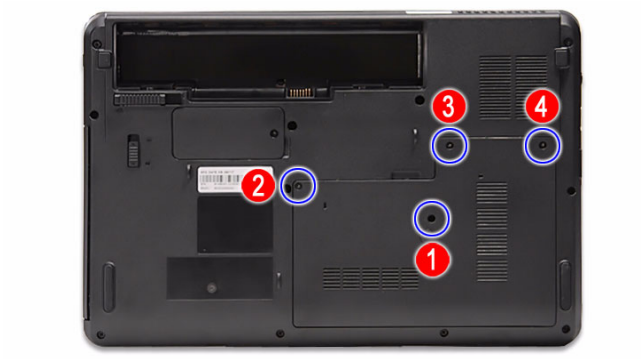
IMPORTANT: The battery has been highlighted with a yellow circle in the above image. Detach the battery and follow local regulations for disposing it.

Removing the xD Dummy Card

1. Push against the card, as if you were pushing it further into the slot, letting the card spring out.
2. Pull the xD dummy card out of its slot.

Removing the Lower Case Cover

1. Perform the “Removing the Battery Pack” procedure on the previous page.
2. Remove the screws securing the lower case cover.



	Quantity	Color	Torque	Part Number
M2.5 x L6	1 (#1)	Black	3.0 kgf-cm	86.00E33.736
M2 x L4	3 (#2-4)	Black	1.6 kgf-cm	86.00A02.140

3. Pry loose the lower case cover from the main unit to remove it.

Removing the Memory Modules

1. Perform the “Removing the Lower Case Cover” procedure on page 29.
2. Push out the latches on both sides of the DIMM 1 slot.

3. Remove the memory module from its slot.

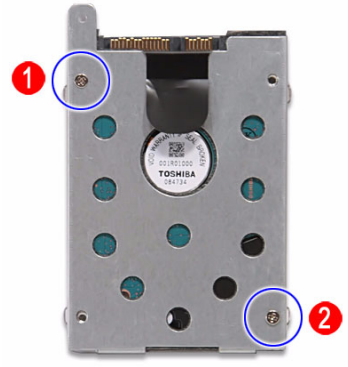
4. Repeat steps 2 and 3 to remove the DIMM 2 slot module.

Removing the Hard Disk Drive

1. Perform the “Removing the Lower Case Cover” procedure on page 29.
2. Grasp the black mylar tab and use it to slide the HDD assembly from its connector.

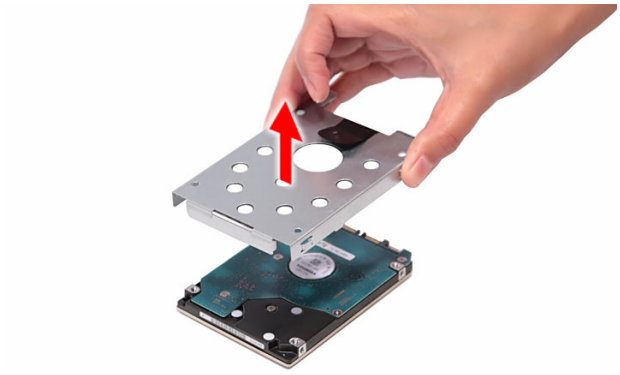
3. Remove the HDD assembly from its compartment.

4. Remove the screws on the HDD bracket.



	Quantity	Color	Torque	Part Number
M3 x L3	2	Silver	3.0 kgf-cm	86.9A554.4R0

5. Remove the bracket from the HDD module.



Removing the WLAN Module

1. Perform the “Removing the Battery Pack” procedure on page 28.
2. Remove the screw securing the WLAN module compartment cover.

	Quantity	Color	Torque	Part Number
M2 x L4	1	Black	1.6 kgf-cm	86.00A02.140

3. Pry loose the WLAN module compartment cover from the main unit to remove it.

4. Remove the WLAN module label sticker.

5. Disconnect the main and auxiliary antennas from the WLAN module.

6. Remove the screw securing the WLAN module.

	Quantity	Color	Torque	Part Number
M2 x L4	1	Black	1.6 kgf-cm	86.9A552.4R0

7. Remove the WLAN module from its slot.

Removing the Optical Disc Drive

1. Perform the “Removing the Lower Case Cover” procedure on page 29.
2. Remove the screw securing the ODD to the main unit.

	Quantity	Color	Torque	Part Number
M2.5 x L6	1	Black	3.0 kgf-cm	86.00E33.736

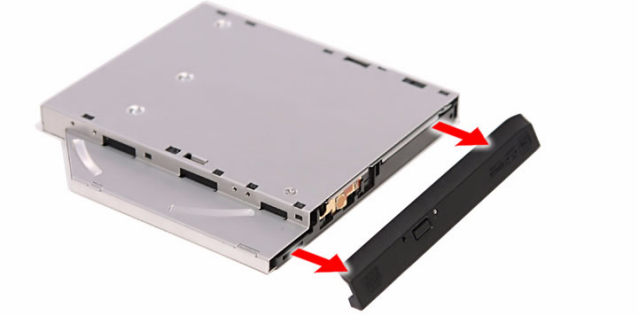
3. Use a plastic flat screwdriver to push the ODD out of the main unit, then pull it out of its bay.

4. Remove the screw securing the ODD bracket.

	Quantity	Color	Torque	Part Number
M2 x L3	1	Black	1.6 kgf-cm	86.00E25.723

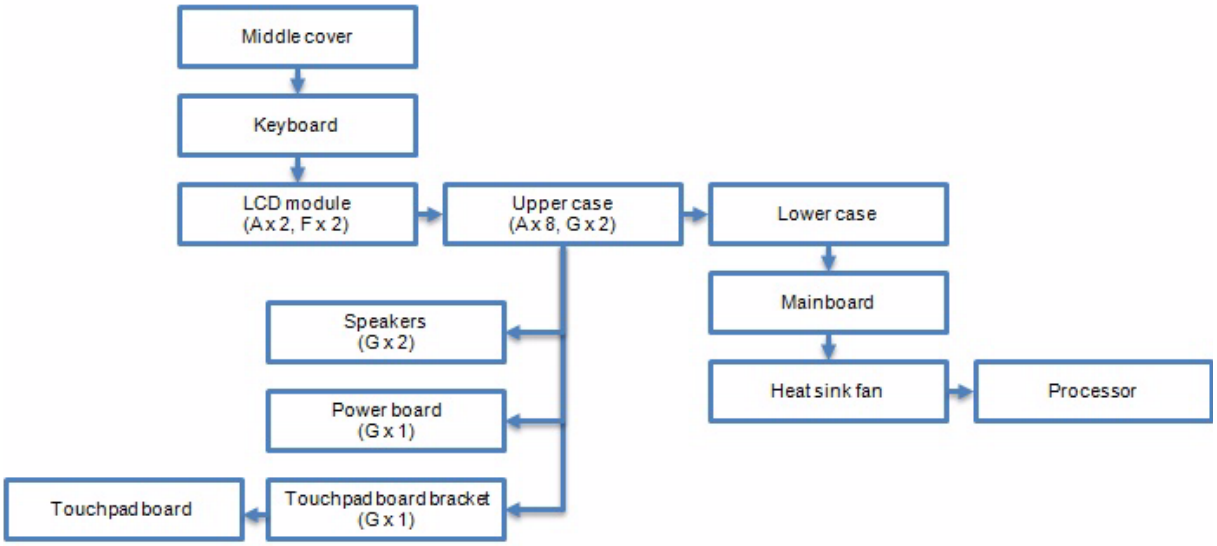
5. Detach the ODD bracket from the module.

6. Detach the ODD bezel from the module.



Main Unit Disassembly

Main Unit Disassembly Flowchart



	Part Number	Type	Color
A	86.00E33.736	M2.5 x L6	Black
F	86.00E34.738	M2.5 x L8	Black
G	86.00E13.524	M2 x L4	Black

CAUTION: To avoid scratching or damaging the LCD panel, cover it with a protective film before disassembling the main unit.

Removing the Middle Cover

1. Perform the “Removing the Lower Case Cover” procedure on page 29.
2. Perform the “Removing the WLAN Module” procedure on page 32.
3. Use a plastic flat screwdriver to pry loose the middle cover. Start on the right side, continue to the center side, move towards the left side, then finally on the hinge sides until the middle cover is released from the upper case.

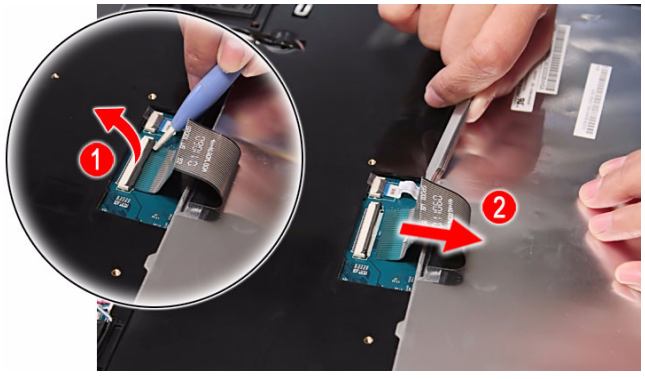
4. Open the LCD panel completely to facilitate the easy removal of the middle cover.
5. Remove the middle cover from the upper case.

Removing the Keyboard

1. Perform the “Removing the Middle Cover” procedure on page 37.
2. Use a plastic flat screwdriver to push the latches on the top side of the keyboard.

3. Slide the keyboard towards the LCD module, then once it's detached from the upper case, turn it over the palmrest to gain access to the keyboard cable.

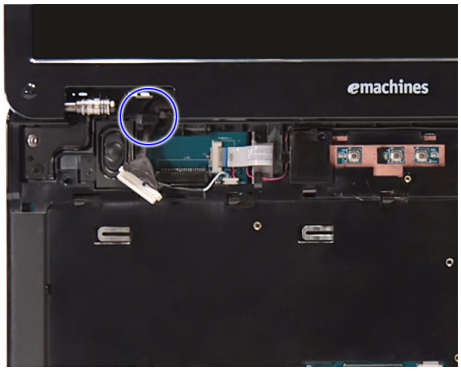
4. Disconnect the keyboard cable from its mainboard connector.



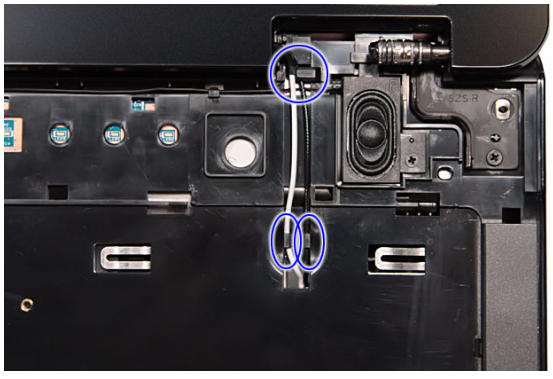
Removing the LCD Module

1. Perform the "Removing the Keyboard" procedure on page 37.
2. Disconnect the LCD cable from its mainboard connector.

3. Detach the LCD cable from its upper case latch.

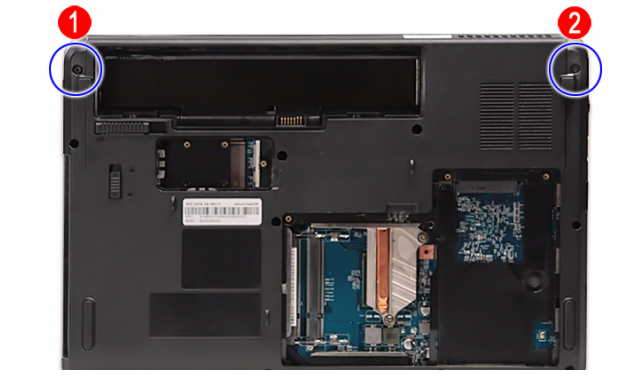


4. Detach the WLAN antennas from their upper case latches.



5. Pull out the WLAN antennas from underneath the computer.

6. Turn the unit over to the base side.
7. Remove the bottom hinge screws securing the LCD module.



	Quantity	Color	Torque	Part Number
M2.5 x L6	2	Black	3.0 kgf-cm	86.00E33.736

8. Turn the unit over again to remove the top LCD hinge screws.
9. Remove the top hinge screws securing the LCD module.

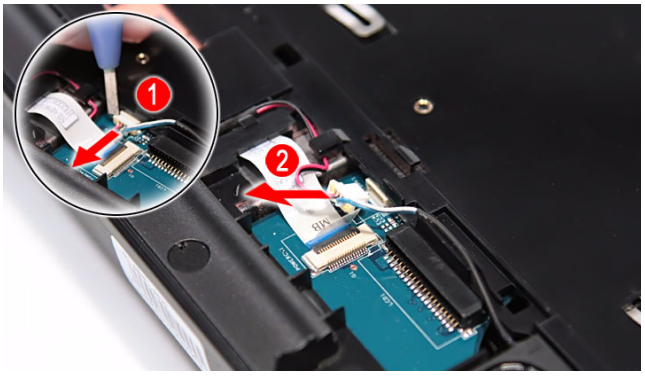
Type	Quantity	Color	Torque	Part Number
M2.5 x L8	2	Black	3.0 kgf-cm	86.00E34.738

10. Detach the LCD module from the main unit.

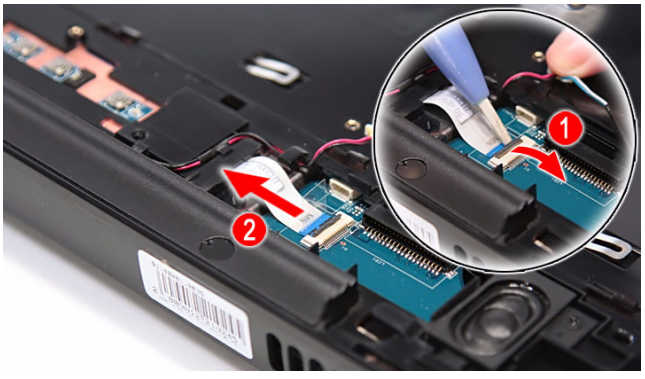
Proceed to page 50 for instructions on how to disassemble the LCD module.

Removing the Upper Case

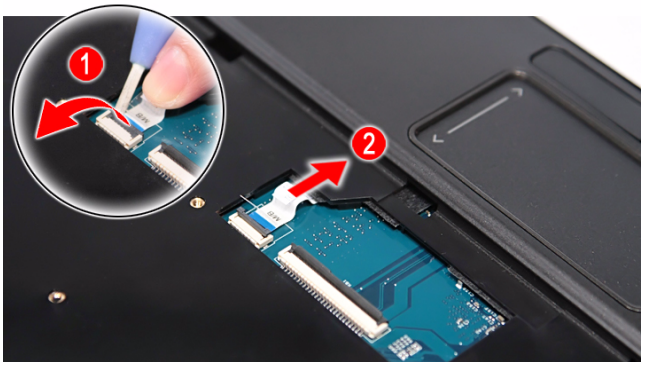
1. Perform the “Removing the LCD Module” procedure on page 38.
2. Disconnect the following system cables from their board connectors.
   - Speaker cable



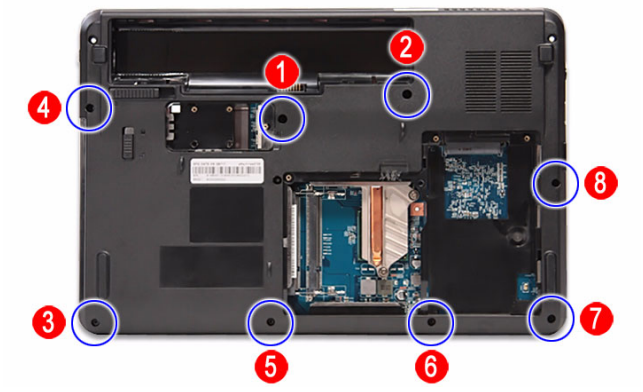
   - Power FFC



   - Touchpad board cable (TPAD1)

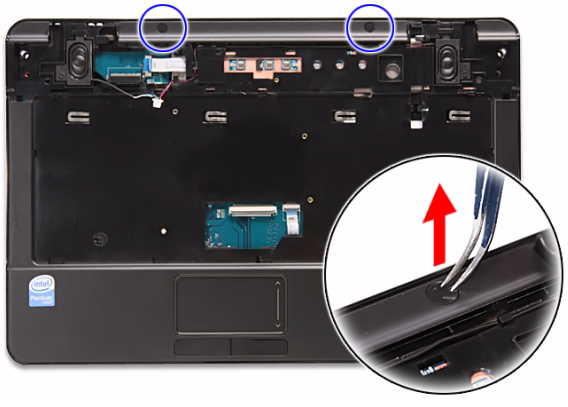


3. Turn the unit over to the base side.
4. Remove the bottom screws securing the upper case to the lower case.

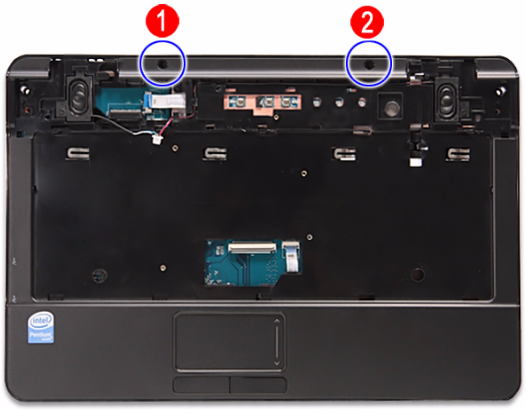


	Quantity	Color	Torque	Part Number
M2.5 x L6	8	Black	3.0 kgf-cm	86.00E33.736

5. Turn the unit over again to remove the top upper case screws.
6. Remove the upper case rubber pads.



7. Remove the top upper case screws.

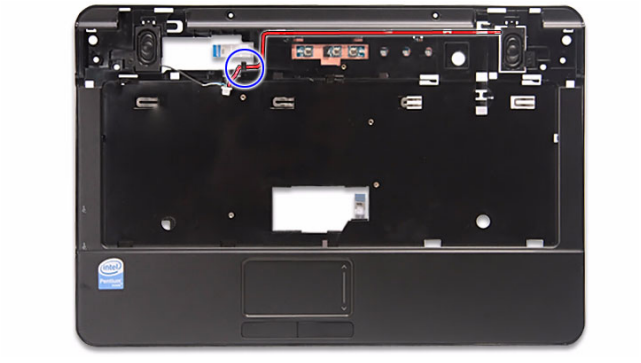


Type	Quantity	Color	Torque	Part Number
M2 x L4	2	Black	1.6 kgf-cm	86.00E13.524

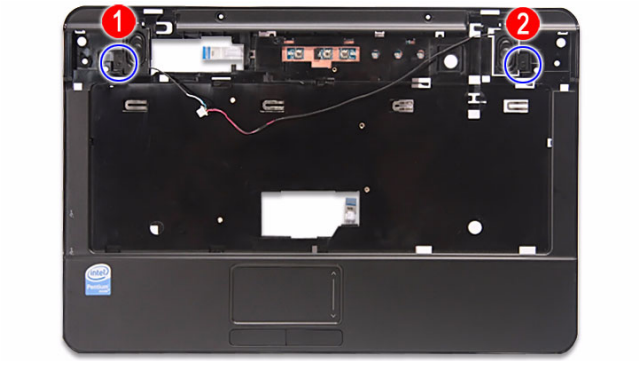
8. Pry loose the upper case from the lower case to detach the former.

Removing the Speakers

1. Perform the “Removing the Upper Case” procedure on page 41.
2. Detach the speaker cables from their upper case latches.

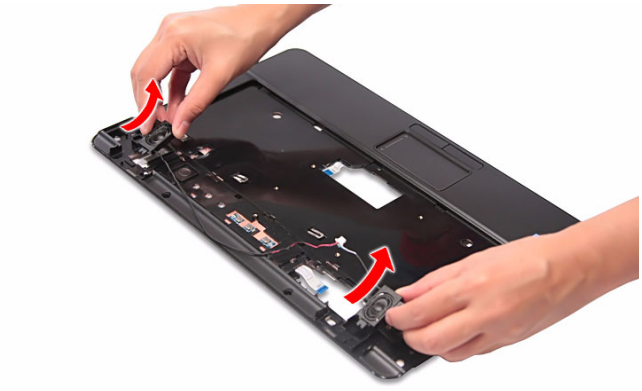


3. Remove the screws securing the left and right speakers.



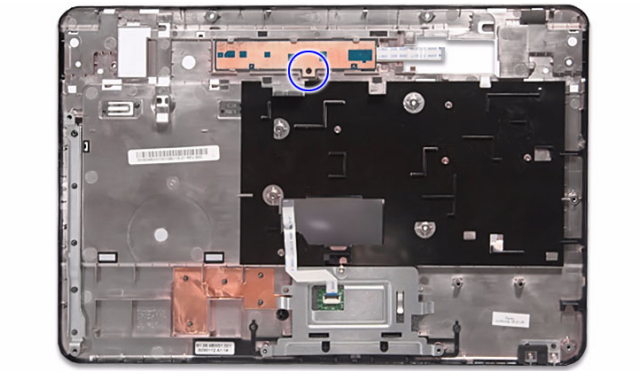
	Quantity	Color	Torque	Part Number
M2 x L4	2	Black	1.6 kgf-cm	86.00E13.524

4. Remove the left and right speakers from the upper case.



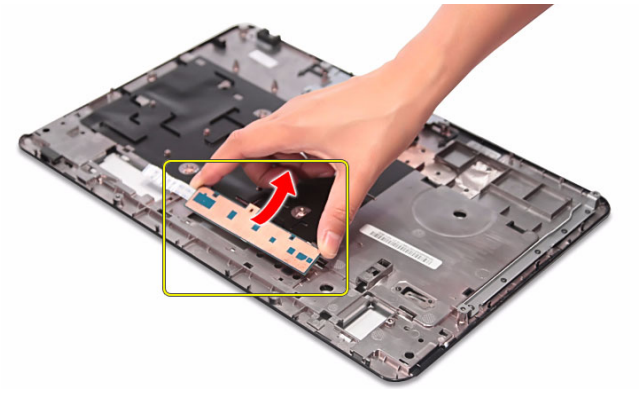
Removing the Power Board

1. Perform the “Removing the Upper Case” procedure on page 41.
2. Remove the screw securing the power board.



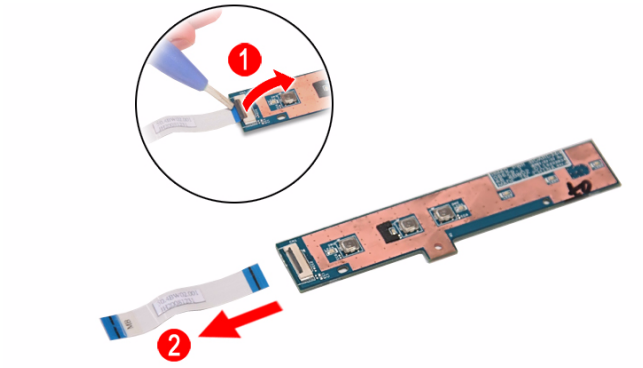
	Quantity	Color	Torque	Part Number
M2 x L4	1	Black	1.6 kgf-cm	86.00E13.524

3. Remove the power board from the upper case.



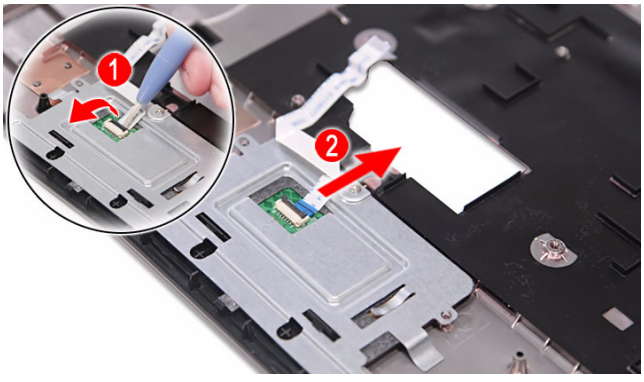
IMPORTANT: A circuit board that is >10 cm^2 has been highlighted with a yellow rectangle as shown in the above image. Follow local regulations for disposing this type of circuit board.

4. Disconnect the power FFC from the power board.

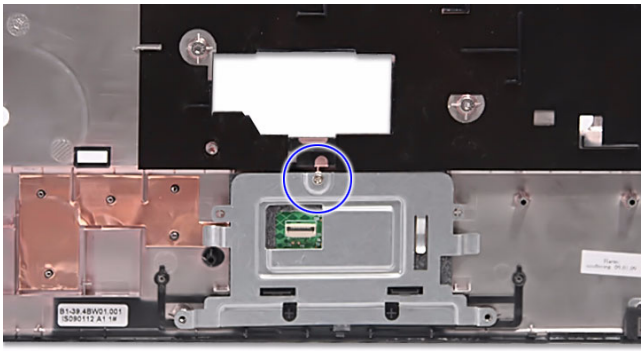


Removing the Touchpad Board

1. Perform the “Removing the Upper Case” procedure on page 41.
2. Disconnect the touchpad cable from the touchpad board.

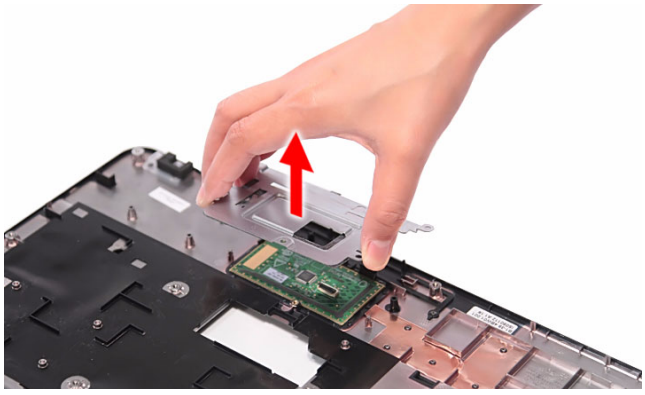


3. Remove the screw securing the touchpad board bracket.

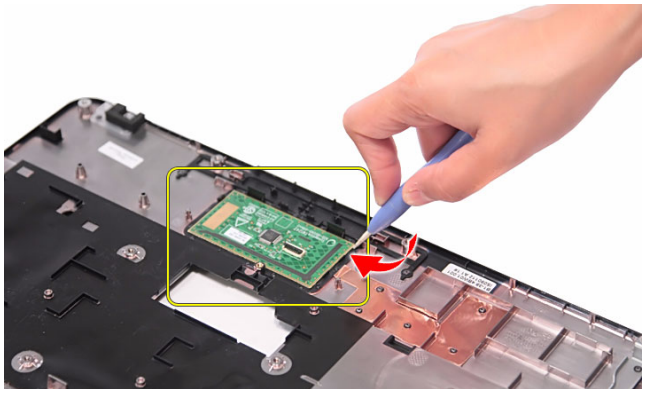


	Quantity	Color	Torque	Part Number
M2 x L4	1	Silver	1.6 kgf-cm	86.00E13.524

4. Remove the touchpad board bracket from the upper case.



5. Carefully pry loose the touchpad board from the upper case to detach it.

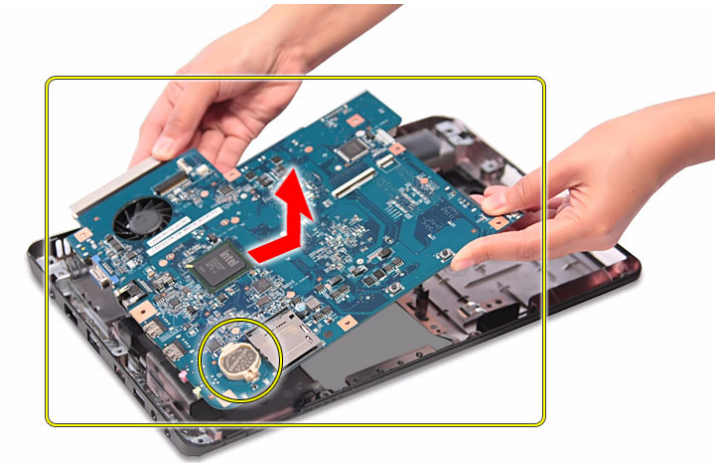


CAUTION: The touchpad board is glued to the upper case. Remove the touchpad board only if it is defective.

IMPORTANT: A circuit board that is >10 cm^2 has been highlighted with a yellow rectangle as shown in the above image. Follow local regulations for disposing this type of circuit board.

Removing the Mainboard

1. Perform the “Removing the Upper Case” procedure on page 41.
2. Remove the mainboard from the upper case.

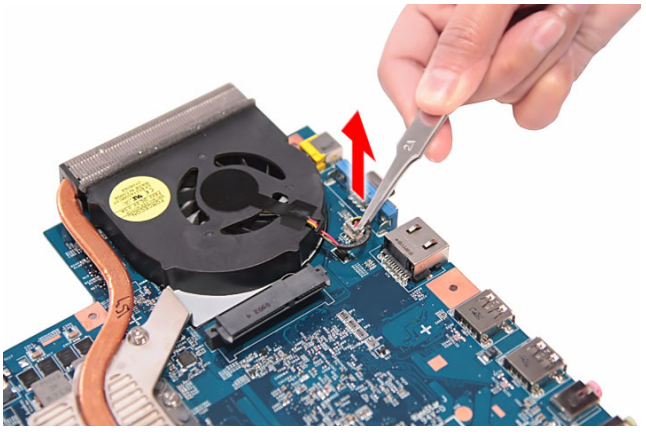


IMPORTANT: A circuit board that is >10 cm^2 has been highlighted with a yellow rectangle as shown in the above image. Follow local regulations for disposing this type of circuit board.

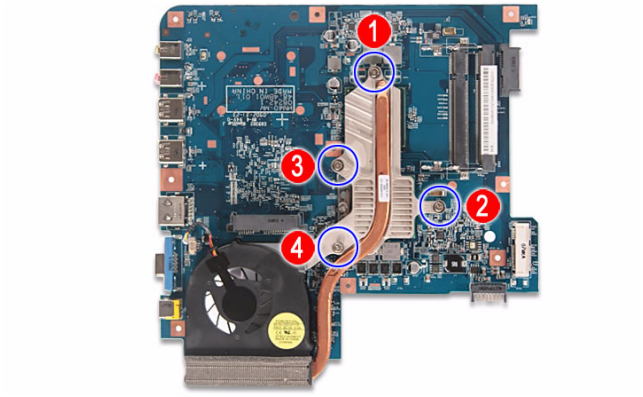
IMPORTANT: The RTC battery has been highlighted with a yellow rectangle in the above image. Detach the RTC battery and follow local regulations for disposing it.

Removing the Heat Sink Fan (HSF) Assembly

1. Perform the “Removing the Mainboard” procedure on page 47.
2. Disconnect the HSF cable from its mainboard connector.

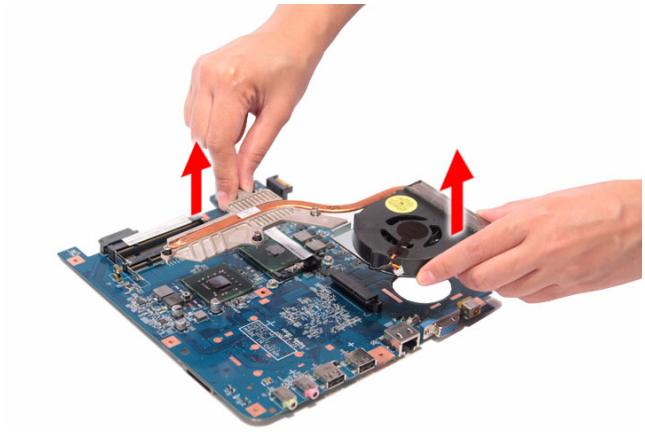


3. Loosen the heat sink screws.



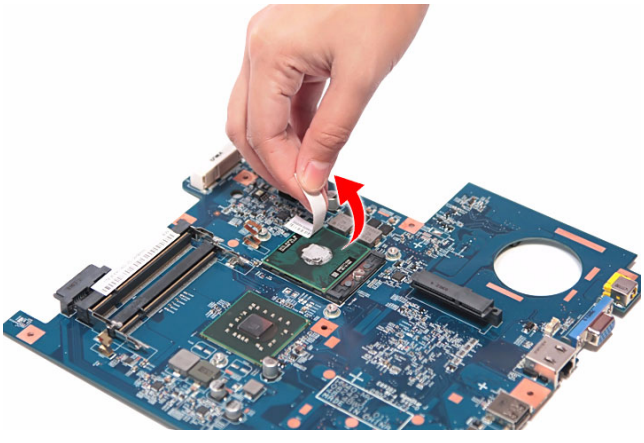
	Quantity	Color	Torque	Part Number
–	4	Silver	1.6 kgf-cm	–

4. Remove the heat sink fan from the mainboard.

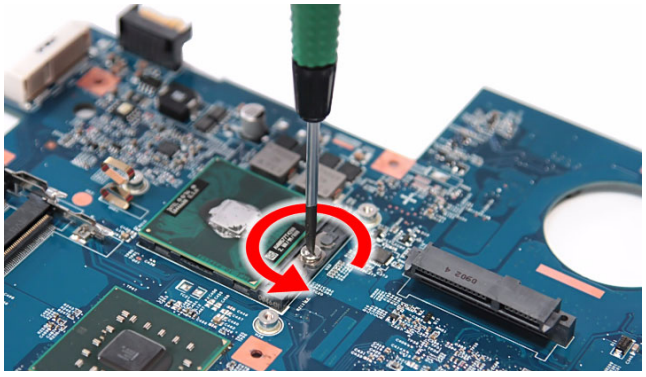


Removing the Processor

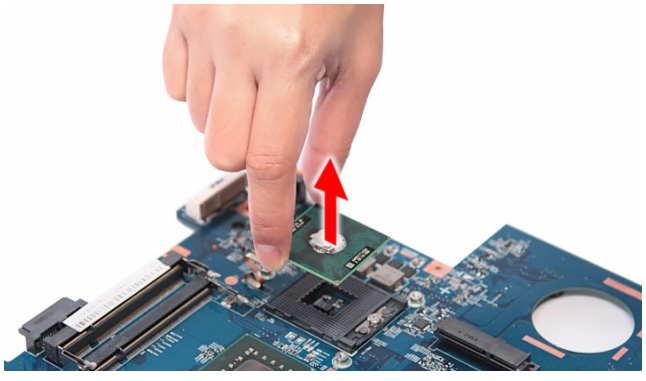
1. Perform the “Removing the Heat Sink Fan (HSF) Assembly” procedure on page 47.
2. Remove the CPU label sticker.



3. Use a flat screwdriver to turn the processor socket lock counter-clockwise to the unlock position.



4. Hold the processor by its edges and carefully remove it from its socket.



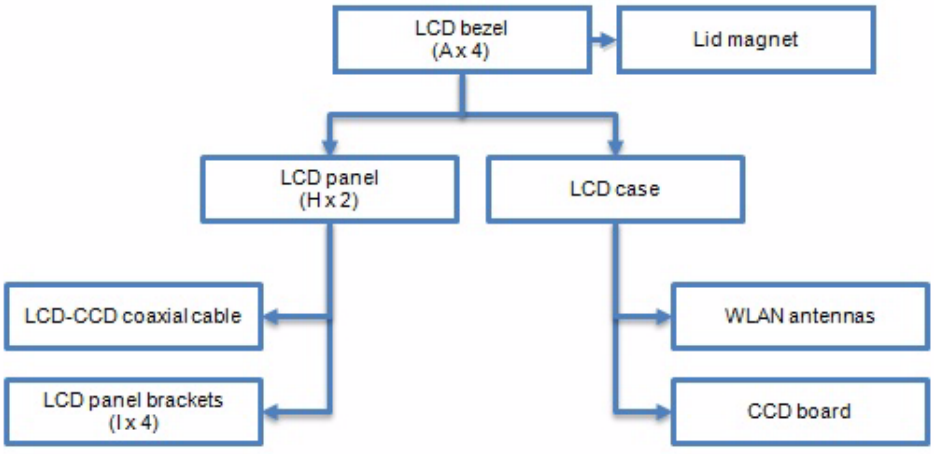
CAUTION: DO NOT lay the processor on its base to avoid bending or damaging the pins underneath it.

IMPORTANT: When installing a processor:

- Note the golden arrow on the corner to make sure the processor is properly oriented over the socket.
- Moisten a soft cloth with isopropyl alcohol and clean the processor die to remove any thermal grease residue. Wipe the die surface several times to make sure that no particles or dust contaminants are evident. Allow the alcohol to evaporate before continuing. Apply just enough thermal grease to evenly coat the surface of the processor die.

LCD Module Disassembly

LCD Module Disassembly Flowchart



	Part Number	Type	Color
A	86.00E33.736	M2.5 x L6	Black
H	86.00F87.735	M2.5 x L5	Black
I	86.00C07.220	M2 x L3	Silver

Removing the LCD Bezel

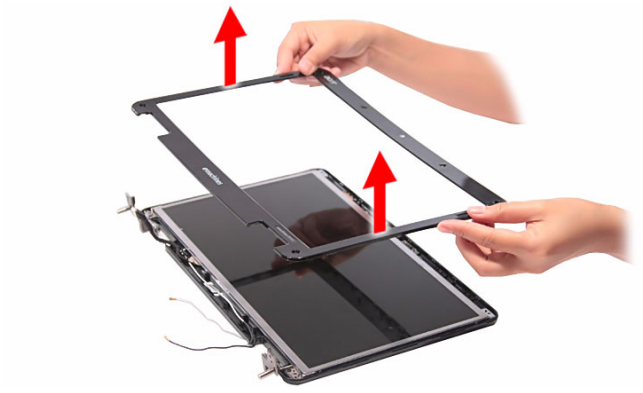
1. Perform the “Removing the LCD Module” procedure on page 38.
2. Remove the rubber pads covering the LCD bezel screws.

3. Remove the screws securing the LCD bezel.

	Quantity	Color	Torque	Part Number
M2.5 x L6	4	Black	3.0 kgf-cm	86.00E33.736

4. Carefully pry loose the bezel from the LCD case.

5. Detach the LCD bezel from the LCD case.



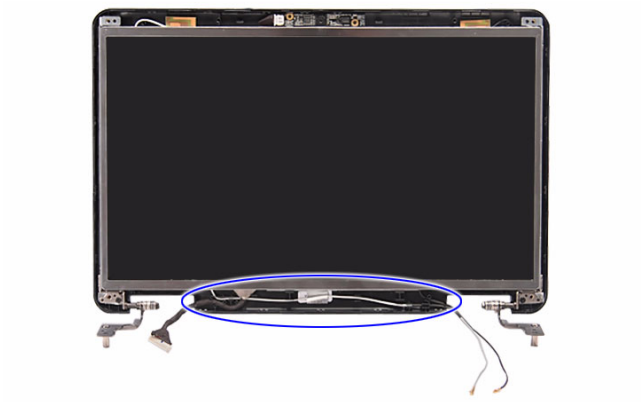
Removing the Lid Magnet

1. Perform the “Removing the LCD Bezel” procedure on page 51.
2. Remove the tape covering the lid magnet.

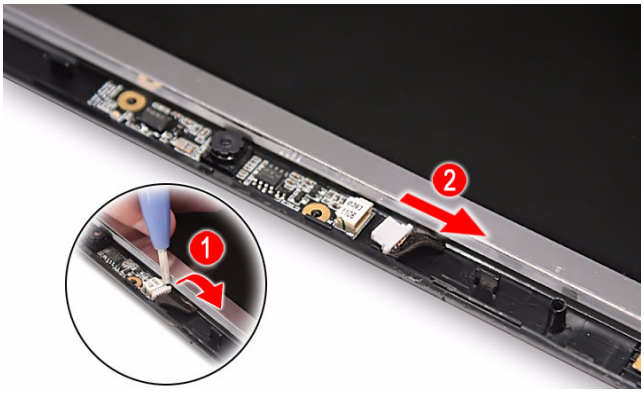
3. Remove the lid magnet from the LCD bezel.

Removing the LCD Panel

1. Perform the “Removing the LCD Bezel” procedure on page 51.
2. Detach the LCD cable and WLAN antennas from their LCD case latches.



3. Disconnect the CCD board cable.



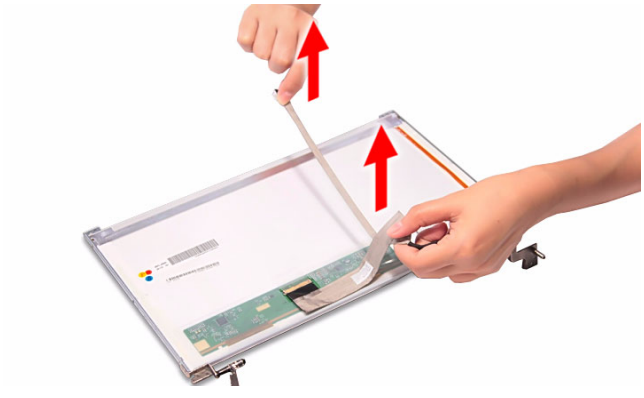
4. Remove the screws securing the LCD hinges to the LCD case.

	Quantity	Color	Torque	Part Number
M2.5 x L5	2	Black	3.0 kgf-cm	86.00F87.735

5. Remove the LCD panel from the LCD case.

Removing the LCD-CCD Coaxial Cable

1. Perform the “Removing the LCD Panel” procedure on page 53.
2. Detach the CCD end of the LCD-CCD coaxial cable from the LCD panel.



3. Detach the clear adhesive tape protecting the LCD FPC cable connector, then disconnect the cable from the LCD panel PCB.

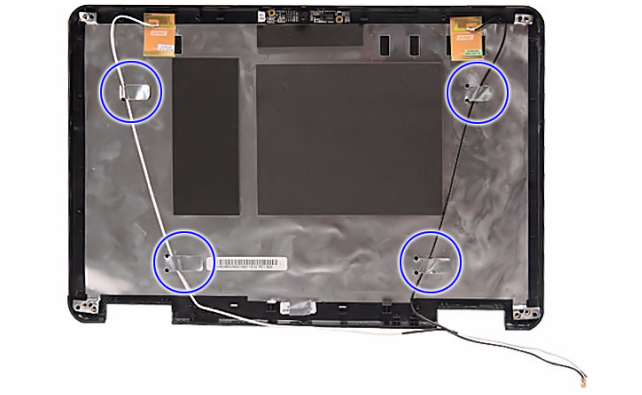
Removing the LCD Panel Brackets

1. Perform the “Removing the LCD Panel” procedure on page 53.
2. Remove the screws securing the LCD panel brackets.

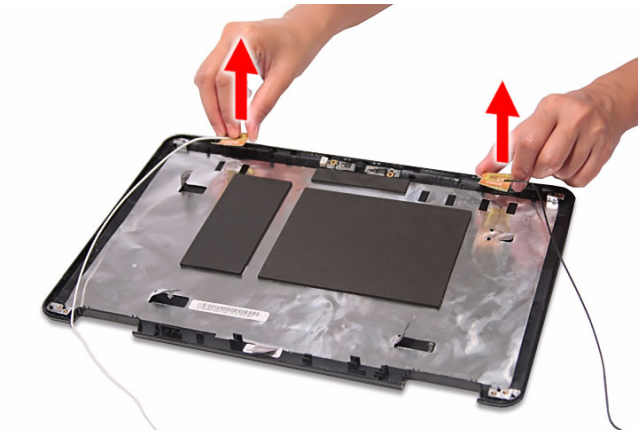
	Quantity	Color	Torque	Part Number
M2 x L3	8	Silver	1.6 kgf-cm	86.00C07.220

Removing the WLAN Antennas

1. Perform the “Removing the LCD Panel” procedure on page 53.
2. Detach the aluminum foil tabs securing the WLAN antennas.



3. Detach the WLAN antennas from the LCD case.



Removing the CCD Board

1. Perform the “Removing the LCD Panel” procedure on page 53.
2. Pry loose the CCD board from the LCD case to remove it.

CAUTION: The CCD board is glued to the LCD case. Remove the CCD board only if it is defective.

Chapter 4

Troubleshooting

This chapter list the POST error indicators and BIOS beep codes, as well general troubleshooting instructions.

POST Error Indicators

When a system error is detected during POST (Power On Self Text), the Setup Utility will switch to diagnostic mode and will either:

- Displays a POST error message, or
- Emits a series of beep codes

POST Error Messages

POST error messages tell users what failure the system has detected. Some error messages could be related to a hardware device. Others may indicate a problem with a device configuration. In some cases an error message may include recommendations for troubleshooting or require that you press the **Enter** key to display recommendations. Follow the instructions on the screen. It is recommended that you correct the error before proceeding, even if the computer appears to boot successfully.

The table below lists the messages that the BIOS has defined and can display.

If your system displays one of the messages marked below with an asterisk (*), write down the code and message and contact your Acer service provider.

IMPORTANT: If your system fails after you make changes in the Setup menus, reboot the computer, enter Setup again and load Setup defaults to correct the error.

Error Messages	Check or do the following in sequence:
Stuck Key	See “Keyboard or Auxiliary Input Device Check” section on page 63.
System CMOS checksum bad - Default configuration used	• RTC battery • Run the BIOS Setup Utility to reconfigure the system time, then reboot system.
Real time clock error	• RTC battery • Run the BIOS Setup Utility to reconfigure system time, then reboot system. • Mainboard
Previous boot incomplete - Default configuration used	• Select “Load Setup Defaults” in the BIOS Setup Utility’s Exit menu. • RTC battery • Mainboard
Invalid System Configuration Data	• Select “Load Setup Defaults” in the BIOS Setup Utility’s Exit menu. • Mainboard
Operating system not found	• Run the BIOS Setup Utility to check if the fixed disk and drive A are properly identified. • Optical disc drive • Hard disk drive • Mainboard

Error Messages	Check or do the following in sequence:
Power-on indicator turns off and LCD is blank.	• Power source (battery pack and power adapter.) See “Power System Check” section on page 64. • Make sure all connectors are connected tightly and correctly. • Reinstall the DIMM. • Mainboard
Power-on indicator turns on and LCD is blank.	• Power source (battery pack and power adapter.) See “Power System Check” section on page 64. • Reconnect the LCD cable • Hard disk drive • LCD panel • Mainboard
Power-on indicator turns on and LCD is blank. POST is visible when using an external CRT.	• Reconnect the LCD cable. • LCD panel • Mainboard
Power-on indicator turns on and a blinking cursor is during POST.	• Make sure all connectors are connected tightly and correctly. • Mainboard
Failure Fixed Disk	• Reconnect the HDD connector. • Select “Load Setup Defaults” in the BIOS Setup Utility’s Exit menu. • Hard disk drive • Mainboard
No beep, power-on indicator turns off and LCD is blank.	• Power source (battery pack and power adapter). See “Power System Check” on page 64 • Make sure all connectors are connected tightly and correctly. • Reconnect the DIMM. • Mainboard
No beep, power-on indicator turns on and LCD is blank.	• Power source (battery pack and power adapter). See “Power System Check” on page 64 • Reconnect the LCD cable. • Hard disk drive • LCD cable • LCD panel • Mainboard
No beep, power-on indicator turns on and LCD is blank. But you can see POST on an external CRT.	• Reconnect the LCD cable. • LCD panel • Mainboard
No beep, power-on indicator turns on and a blinking cursor shown on LCD during POST.	• Make sure all connectors are connected tightly and correctly. • Mainboard
No beep during POST but system runs correctly.	• Speaker • Mainboard

POST Beep Codes

When no POST error message is displayed but the computer stops during POST, listen for beep codes.

Code	Beeps	POST Routine Description
02h		Verify Real Mode
03h		Disable Non-Maskable Interrupt (NMI)
04h		Get CPU type
06h		Initialize system hardware
08h		Initialize chipset with initial POST values
09h		Set IN POST flag
0Ah		Initialize CPU registers
0Bh		Enable CPU cache
0Ch		Initialize caches to initial POST values
0Eh		Initialize I/O component
0Fh		Initialize the local bus IDE
10h		Initialize Power Management
11h		Load alternate registers with initial POST values
12h		Restore CPU control word during warm boot
13h		Initialize PCI Bus Mastering devices
14h		Initialize keyboard controller
16h	1-2-2-3	BIOS ROM checksum
17h		Initialize cache before memory autosize
18h		8254 timer initialization
1Ah		8237 DMA controller initialization
1Ch		Reset Programmable Interrupt Controller
20h	1-3-1-1	Test DRAM refresh
22h	1-3-1-3	Test 8742 Keyboard Controller
24h		Set ES segment register to 4 GB
26h		Enable A20 line
28h		Autosize DRAM
29h		Initialize POST Memory Manager
2Ah		Clear 215 KB base RAM
2Ch	1-3-4-1	RAM failure on address line xxxx*
2Eh	1-3-4-3	RAM failure on data bits xxxx* of low byte of memory bus
2Fh		Enable cache before system BIOS shadow
30h	1-4-1-1	RAM failure on data bits xxxx* of high byte of memory bus
32h		Test CPU bus-clock frequency
33h		Initialize Phoenix Dispatch Manager
36h		Warm start shut down
38h		Shadow system BIOS ROM
3Ah		Autosize cache
3Ch		Advanced configuration of chipset registers
3Dh		Load alternate registers with CMOS values
42h		Initialize interrupt vectors

Code	Beeps	POST Routine Description
45h		POST device initialization
46h	2-1-2-3	Check ROM copyright notice
48h		Check video configuration against CMOS
49h		Initialize PCI bus and devices
4Ah		Initialize all video adapters in system
4Bh		QuietBoot start (optional)
4Ch		Shadow video BIOS ROM
4Eh		Display BIOS copyright notice
50h		Display CPU type and speed
51h		Initialize EISA board
52h		Test keyboard
54h		Set key click if enabled
58h	2-2-3-1	Test for unexpected interrupts
59h		Initialize POST display service
5Ah		Display prompt “Press F2 to enter SETUP”
5Bh		Disable CPU cache
5Ch		Test RAM between 512 and 640 KB
60h		Test extended memory
62h		Test extended memory address lines
64h		Jump to User Patch1
66h		Configure advanced cache registers
67h		Initialize Multi Processor APIC
68h		Enable external and CPU caches
69h		Setup System Management Mode (SMM) area
6Ah		Display external L2 cache size
6Bh		Load custom defaults (optional)
6Ch		Display shadow-area message
6Eh		Display possible high address for UMB recovery
70h		Display error messages
72h		Check for configuration errors
76h		Check for keyboard errors
7Ch		Set up hardware interrupt vectors
7Eh		Initialize coprocessor if present
80h		Disable onboard Super I/O ports and IRQs
81h		Late POST device initialization
82h		Detect and install external RS232 ports
83h		Configure non-MCD IDE controllers
84h		Detect and install external parallel ports
85h		Initialize PC-compatible PnP ISA devices
86h		Re-initialize onboard I/O ports
87h		Configure Motherboard Configurable Devices (optional)
88h		Initialize BIOS Data Area
89h		Enable Non-Maskable Interrupts (NMIs)

Code	Beeps	POST Routine Description
8Ah		Initialize Extended BIOS Data Area
8Bh		Test and initialize PS/2 mouse
8Ch		Initialize floppy controller
8Fh		Determine number of ATA drives (optional)
90h		Initialize hard-disk controllers
91h		Initialize local-bus hard-disk controllers
92h		Jump to UserPatch2
93h		Build MPTABLE for multi-processor boards
95h		Install CD-ROM for boot
96h		Clear huge ES segment register
97h		Fixup Multiprocessor table
98h	1-2	Search for option ROMs. One long, two short beeps on checksum failure.
99h		Check for SMART drive (optional)
9Ah		Shadow option ROMs
9Ch		Set up Power Management
9Dh		Initialize security engine (optional)
9Eh		Enable hardware interrupts
9Fh		Determine number of ATA and SCSI drives
A0h		Set time of day
A2h		Check key lock
A4h		Initialize Typematic rate
A8h		Erase F2 prompt
AAh		Scan for F2 key stroke
ACh		Enter SETUP
AEh		Clear Boot flag
B0h		Check for errors
B2h		POST done- prepare to boot operating system
B4h	1	One short beep before boot
B5h		Terminate QuietBoot (optional)
B6h		Check password (optional)
B9h		Prepare Boot
BAh		Initialize DMI parameters
BBh		Initialize PnP Option ROMs
BCh		Clear parity checkers
BDh		Display MultiBoot menu
BEh		Clear screen (optional)
BFh		Check virus and backup reminders
C0h		Try to boot with INT 19
C1h		Initialize POST Error Manager (PEM)
C2h		Initialize error logging
C3h		Initialize error display function
C4h		Initialize system error handler

Code	Beeps	POST Routine Description
C5h		PnPnd dual CMOS (optional)
C6h		Initialize notebook docking (optional)
C7h		Initialize notebook docking late
C8h		Force check (optional)
C9h		Extended checksum (optional)
D2h		Unknown interrupt

BIOS Beep Codes for Boot Block in Flash ROM

	Beeps	For Boot Block in Flash ROM
E0h		Initialize the chipset
E1h		Initialize the bridge
E2h		Initialize the CPU
E3h		Initialize the system timer
E4h		Initialize system I/O
E5h		Check force recovery boot
E6h		Checksum BIOS ROM
E7h		Go to BIOS
E8h		Set Huge Segment
E9h		Initialize Multiprocessor
EAh		Initialize OEM special code
EBh		Initialize PIC and DMA
ECh		Initialize Memory type
EDh		Initialize Memory size
EEh		Shadow Boot Block
EFh		System memory test
F0h		Initialize interrupt vectors
F1h		Initialize Run Time Clock
F2h		Initialize video
F3h		Initialize System Management Mode
F4h	1	Output one beep before boot
F5h		Boot to Mini DOS
F6h		Clear Huge Segment
F7h		Boot to Full DOS

Troubleshooting Procedure

Perform the following procedure to determine the cause of a computer problem.

1. Obtain the failure symptoms in as much detail as possible.
2. Verify the symptoms by attempting to recreate the failure by running the diagnostic tests or repeating the same operation.
3. Disconnect all power source from the computer when performing an assembly or disassembly procedure.
4. Perform the following visual inspection before you continue.
   - Power cords are properly connected and secured.
   - There are no obvious shorts or opens.
   - There are no burned or heated components.
   - All components appear normal.

System Check Procedures

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

External CD/DVD-ROM Drive Check

Perform the following procedures to isolate the possible problem a controller, drive, or CD-ROM.

1. Boot from the diagnostic disc and start the diagnostic programs.
2. Check if the CD-ROM Test result is pass.
3. Follow the on-screen instructions.

If an error occurs, reconnect the drive to the connector on the mainboard. If the error persists, do the following:

1. Reconnect the CD/DVD-ROM drive.
2. Replace the CD/DVD-ROM drive.
3. Replace the mainboard.

Keyboard or Auxiliary Input Device Check

Remove the external keyboard if the internal keyboard is to be tested.

If the internal keyboard does not work or an unexpected error occurs, make sure that the flexible cable extending from the internal keyboard is correctly connected to the mainboard. If the keyboard cable connection is correct, run the Keyboard Test.

If the tests detect a keyboard problem, do the following procedures in sequence to correct the problems. Do not replace a non-defective FRU:

1. Reconnect the keyboard cable.
2. Replace the keyboard.
3. Replace the mainboard.

The following auxiliary input devices are supported by this computer:

- Numeric keypad
- External keyboard

If any of these devices do not function, reconnect the cable and repeat above procedures.

Memory Check

NOTE: Make sure that the DIMM is properly installed into the connector. A loose connection can cause an error.

Do the following:

1. Boot from the diagnostic diskette and start the diagnostic program.
2. Go to the diagnostic memory in the test items.
3. Press **F2** in the test items.
4. Follow onscreen instructions.

Power System Check

Do the following:

1. Remove the battery pack.
2. Connect the power adapter and check the power supply.
3. Disconnect the power adapter and install the battery pack; then check that power supply.

Check the Power Adapter

Unplug the power adapter cable from the system and measure the output voltage at the plug of the power adapter cable.

1. If the voltage is not correct, replace the power adapter.
2. If the voltage is within range, do the following:
   a. Replace the mainboard.
   b. If the problem is not resolved, see “Undetermined Problems” section on page 65.
   c. If the voltage is not correct, go to the next step.

NOTE: An audible noise from the power adapter does not always indicate a defect.

3. If the power-on indicator does not light up, check if the adapter’s power cord is properly connected to the system.
4. If the operational charge does not work, see “Check the Battery Pack” on page 64.

Check the Battery Pack

Do the following:

Using the Power Management program to identify whether a problem occurs while the battery pack during recharge or discharge:

1. Open Power Management in the Control Panel.
2. In the Power Meter tab, confirm if the parameters for Current Power Source and Total Battery Power Remaining are correct.
3. Repeat the steps 1 and 2 for both battery pack and adapter.

Using hardware to identify whether you should replace the battery pack or not:

1. Power off the system.
2. Remove the battery pack and measure the voltage between terminals one (+) and seven (-). There are seven terminals here.
3. If the voltage is still less than 7.5 Vdc after recharging, replace the battery pack.

If the battery status indicator does not light up, remove the battery pack. If the charge indicator still does not light up, replace the AC/DC charger board.

Touchpad Check

If the touchpad doesn't work, do the following procedures in sequence to correct the problem. Do not replace a non-defective FRU:

1. After rebooting, run the Tracking Pad PS2 Mode Driver. For example Syn touch driver.
2. Run the utility with the PS/2 mouse function and check if the mouse is working.
3. If the PS/2 mouse does not work, then click if the main board to switch board FPC is connected properly.
4. If the mainboard to switch board FPC is connected correctly, then check if the FFC on the touchpad board is connected properly.
5. If the FFC on the touchpad board is connected correctly, check if LS851 JP1 Pin6 = 5V are pules. If yes, then replace switch board. If not, then go to the next step.
6. Replace the touchpad board.
7. If the touchpad still does not work, then replace the FPC on trackpad board.

After you use the touchpad, the pointer drifts on the screen for a short time. This self-acting pointer movement will occur when a slight, steady pressure is applied to the touchpad pointer. This symptom is not a hardware problem. No actions are necessary to be taken if the pointer movement stops in a short period of time.

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, do the following:

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

Undetermined Problems

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. (See "Power System Check" on page 64)

Follow procedures below to isolate the failing FRU. Do not isolate non-defective FRU.

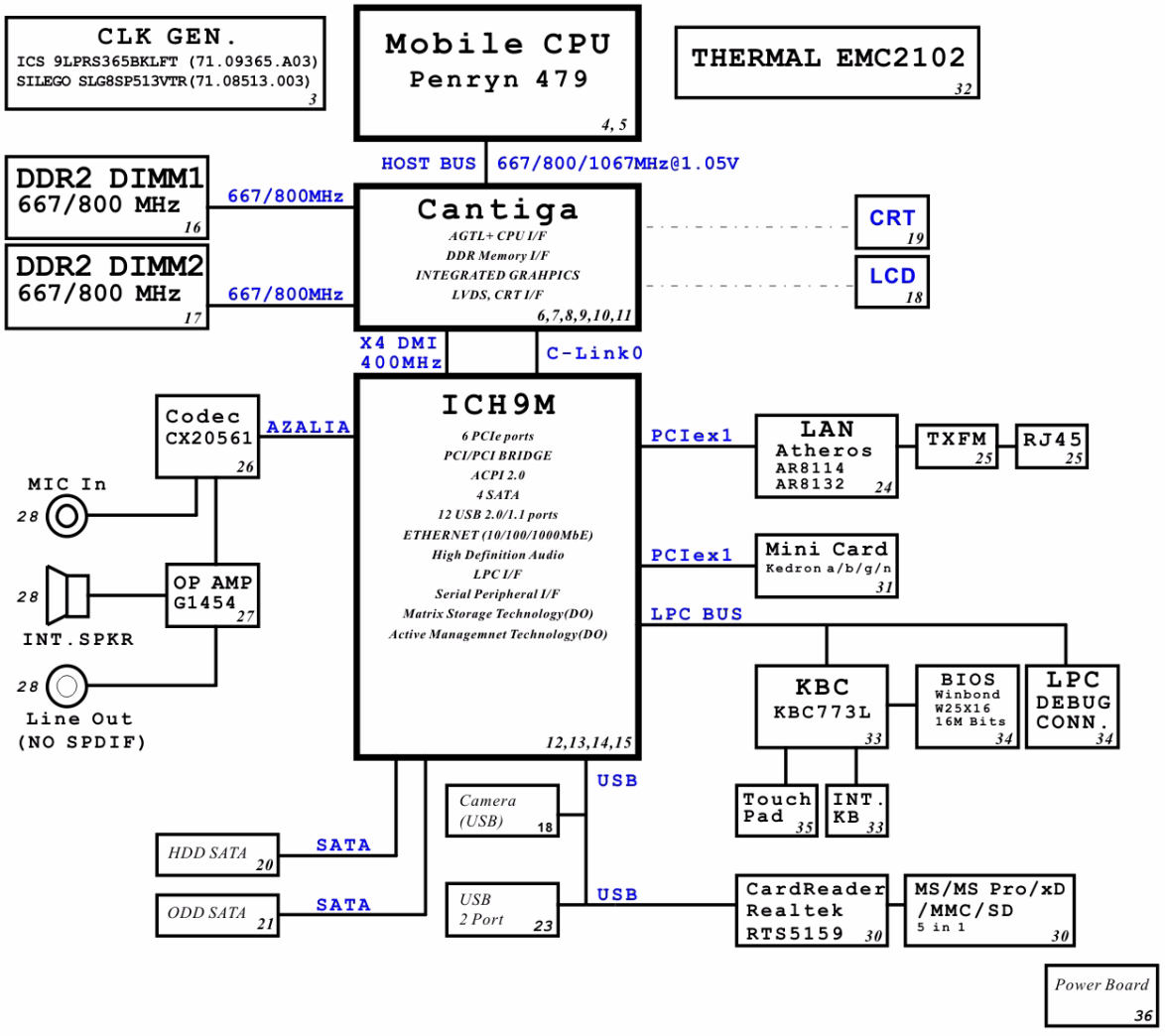
1. Power off the computer.
2. Visually check them for damage. If any problems are found, replace the FRU.
3. Remove or disconnect all of the following devices:
   - Non-Acer devices
   - Printer, mouse, and other external devices
   - Battery pack
   - Hard disk drive
   - DIMM
   - CD/DVD-ROM drive
4. Power on the computer.
5. Determine if the problem has been resolved.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failed FRU.
7. If the problem persists, replace the mainboard, and then LCD assembly (one at a time). Do not replace a non-defective FRU.

System Architecture

This chapter shows the block diagram and board layout of the Acer Aspire 4732Z/4332 computer. Procedures for clearing the BIOS and HDD passwords, as well as instructions for BIOS recovery are also provided.

Block Diagram

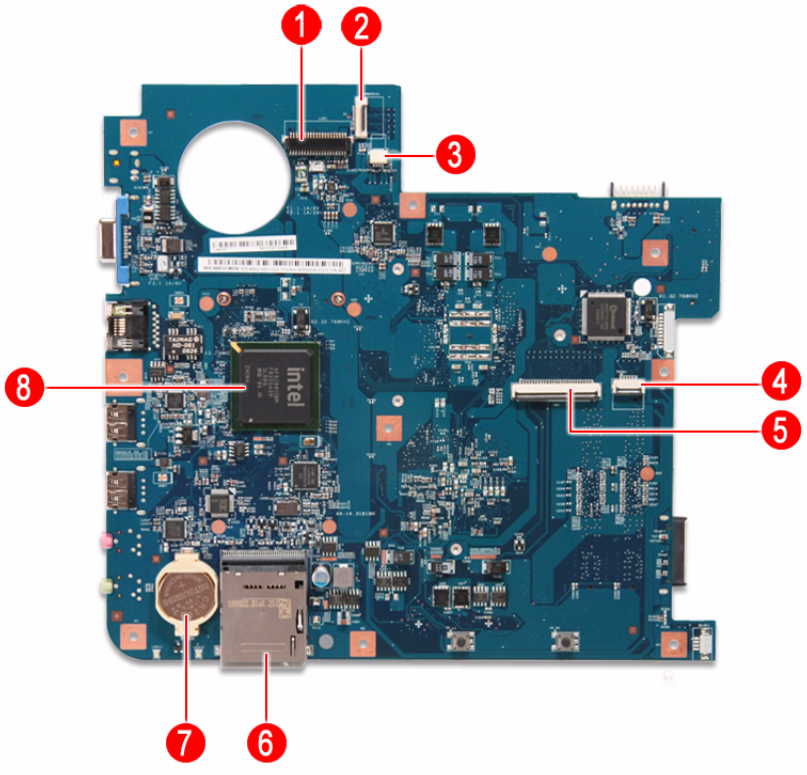
The core subsystems of the Acer Aspire 4732Z/4332 are depicted in the following block diagram.



Mainboard Layout

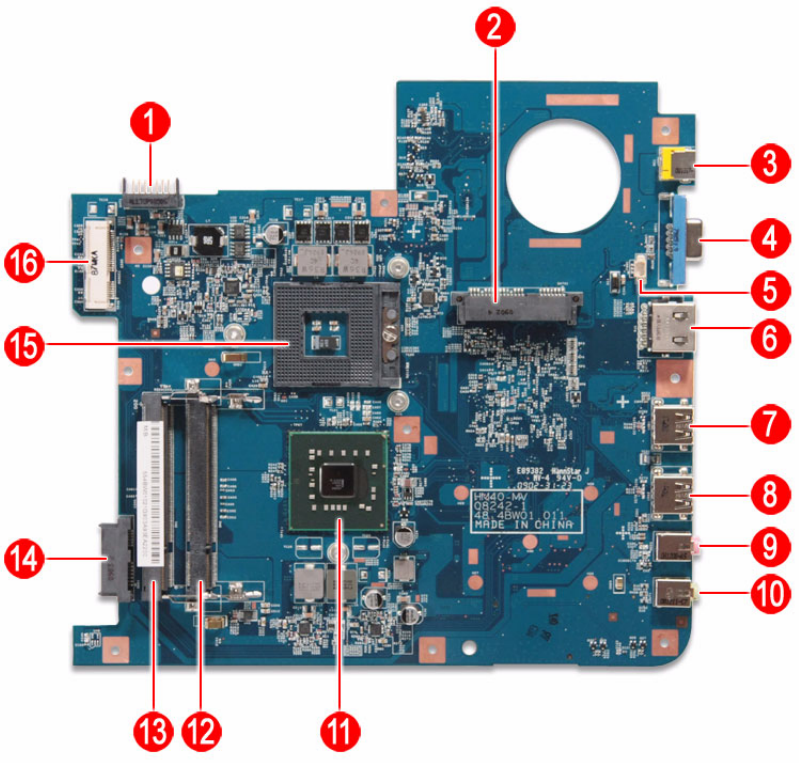
This section shows the major mainboard components

Top View



	Code	Component
1	LCD1	LCD-CCD coaxial cable connector
2	POWERCN1	Power board cable connector
3	SPK1	Speaker cable connector
4	TPAD1	Touchpad board cable connector
5	KB1	Keyboard cable connector
6	CARD1	5-in-1 card reader module
7	RTC1	RTC battery
8	U16	Intel ICH9M chipset

Bottom View



	Code	Component
1	BAT1	Battery pack connector
2	HDD1	HDD module connector
3	DC1	DC-in jack
4	CNt1	VGA port
5	FAN1	Heat sink fan cable connector
6	RJ1	Ethernet port
7	USB1	USB 2.0 ports
8	USB2	
9	MC1	Microphone-in jack
10	LOUT1	Line-out jack
11	NB1	Mobile Intel GM45 or GL40 GMCH
12	DM2	DIMM slots
13	DM1	
14	ODD1	ODD module connector
15	U33	Processor socket
16	MINIC1	WLAN module slot

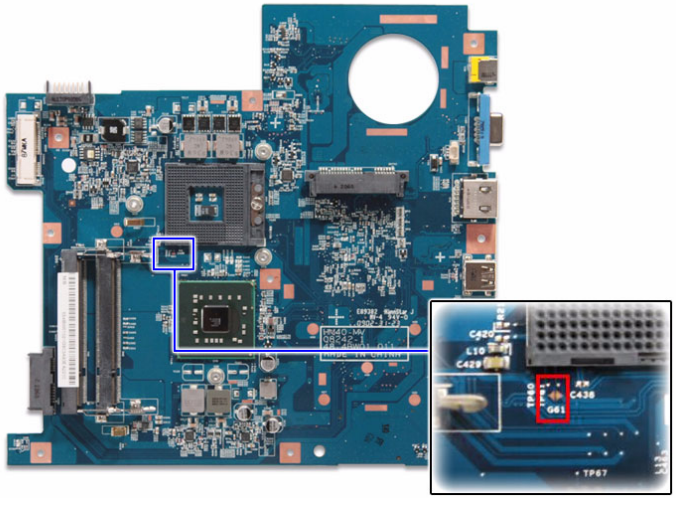
Clearing a BIOS Password

To clear a lost BIOS password (user or supervisor password) you need to short the G61hardware gap located near the HDD connector.

	Default Setting	Function
G61	Open (normal)	Short to clear the user and supervisor passwords.

To clear a BIOS password:

1. Turn off the computer and unplug all the peripherals connected to it.
2. Unplug the power cord from the computer.
3. Remove the battery pack according to the instructions described on page 28.
4. Remove the lower case cover according to the instructions described on page 29.
5. Remove the HDD module according to the instructions described on page 31.
6. Locate the G61 gap. It is near the processor socket.



7. Use an electrical conductivity tool to short the two contacts on the hardware gap together.
8. While resting the tool on the two contacts, plug one end of the AC adapter into the DC-in jack and plug one end to an electrical outlet.
9. Press the ⏻ button to turn on the system.
10. After the BIOS POST, remove the tool from the hardware gap.
11. Reinstall the HDD module, battery pack, and the lower case cover.
12. Turn on the computer and press **F2** during bootup to access the Setup Utility.
13. Press **F9** to load the system defaults.
14. Press **F10** to save the changes you made and close the Setup Utility.

Unlocking the HDD

To regain access to your computer if you lose the HDD password, you need to generate a master password and unlock your hard drive.

To unlock the hard drive:

1. Open the computer in a DOS environment.
2. Type the following command:

```
A\> unlock6 XXXXX  00
```

3. Press **Enter** to display the command options.
4. Select option **2** (upper case ASCII code), then press **Enter**.
5. Write down the generated master password.
6. Reboot the computer.
7. In the HDD password prompt, type the master password generated in step 4, then press **Enter**.

BIOS Recovery

An interruption during a BIOS flash procedure (e.g. a power outage) can corrupt the BIOS code, which will cause the system to go into an unbootable state. You need to access and execute the boot block program to reboot the computer and recover the regular BIOS code.

Note the following when restoring the BIOS settings:

- Make sure the battery pack is installed to the system and that the computer is connected to a UPS unit during the BIOS recovery process.
- The BIOS crisis recovery disk should be prepared in a computer running the Windows XP or Windows Vista OS.

Creating the BIOS Crisis Recovery Disk

1. Prepare a removable USB storage device with a capacity size greater than 10MB.

   Note that all data on the USB storage device will be cleared during the creation of the crisis disk.
2. Set up a computer running the Windows XP or Windows Vista operating system and plug in the USB storage device into an available USB port.
3. Decompress the Crisis Package Source.
4. Select **WINCRIS.EXE** and then select **Run as administrator**.
5. Keep the default settings and then click on the **Start** button.
6. When the pop-up warning dialog box appears, click **OK** to create the crisis disk.
7. Click **No** if you do not want to create another crisis disk.
8. Eject and reconnect the USB removable storage device from the computer, and make sure it contains the following three files:
   - BIOS.wph
   - MINIDOS.sys
   - PHLASH16.exe

Performing a BIOS Recovery

1. Shut down the BIOS failed-computer.
2. Connect the USB storage device containing the BIOS recovery crisis disk files to the failed computer.
3. Press and hold **<Fn>** + **<Esc>** keys (this is the BIOS recovery hotkey), then press the power button.

   The system will now execute the BIOS recovery process. When the process is complete the computer will automatically reboot.
4. Disconnect the USB storage device from the computer.
5. Perform a BIOS flash procedure to update the BIOS firmware.

Chapter 6

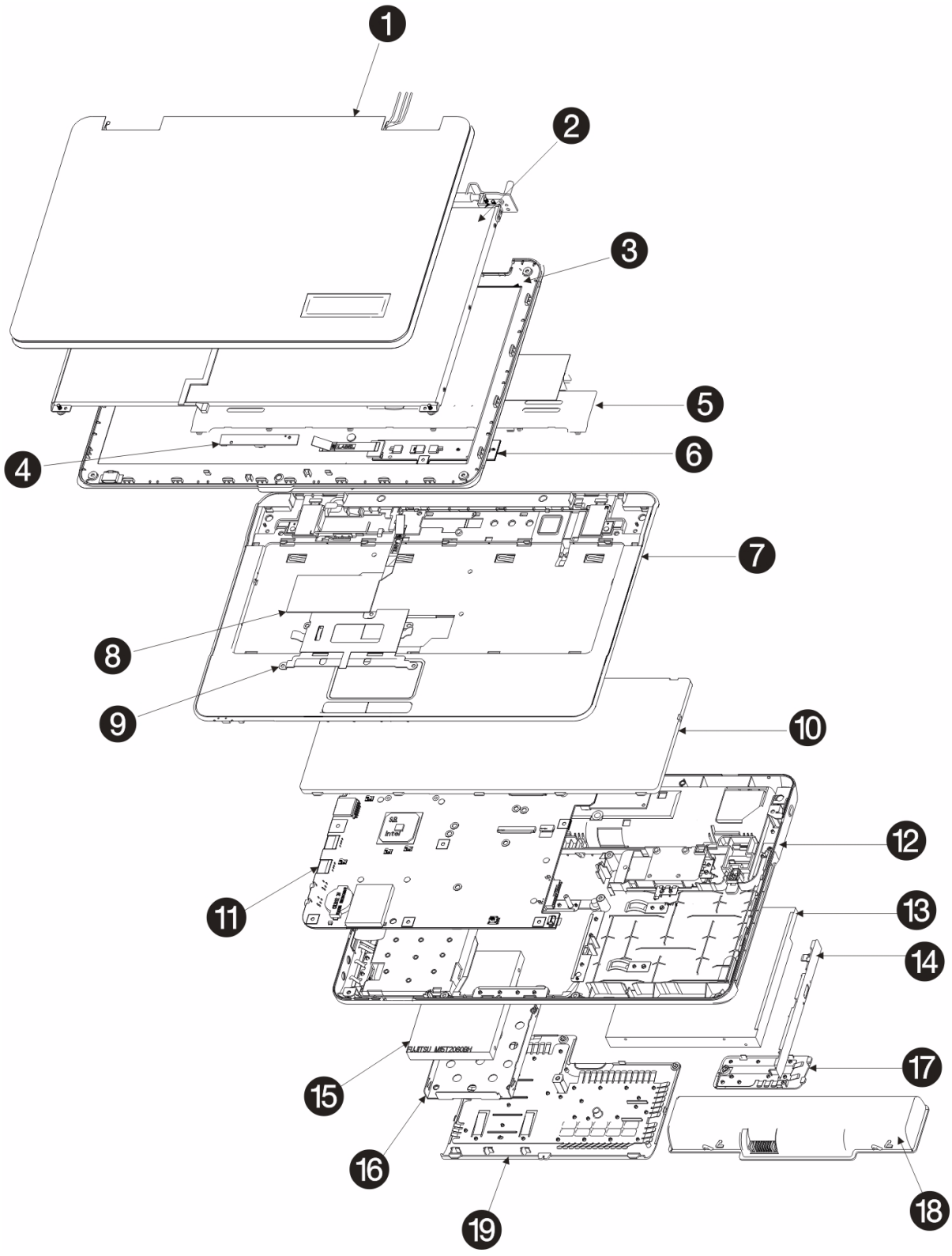
Field Replaceable Unit (FRU) List

This chapter gives you the FRU (Field Replaceable Unit) listing of the Aspire 4732Z/4332 computer global configurations. Refer to this list when ordering for repair parts or for RMA (Return Merchandise Authorization).

IMPORTANT: Part number changes will not be noted in this printed Service Guide. The part numbers listed in this Service Guide may differ from those given to regional AUTHORIZED SERVICE PROVIDERS. You MUST use the local FRU list provided by your regional office to order FRU parts for repair and service of customer machines. Make sure that you are using the most up-to-date information available on your regional web site or channel when ordering FRU parts.

NOTE: Follow the local government regulations, or the rules set by your regional office on how to return or dispose of defective parts.

Acer Aspire 4732Z/4332 Exploded Diagram



No.	Component	Part Name	Part Number
1	LCD case	LED LCD COVER 14" IMR BLUE W/ANTENNA*2 & LOGO PLATE	60.PGL01.003
2	LCD panel	LED LCD MODULE 14" WXGA GLARE BLUE W/CAMERA 0.3M & ANTENNA*2 FOR NORMAL	6M.PGL01.002
		LED LCD 14" WXGA LG LP140WH1-TLA1 GLARE LF 220NIT 8MS 500:1	LK.1400D.004
		LED LCD 14" WXGA AU B140XW01 V0 GLARE LF 220NIT 8MS 500:1	LK.14008.001
		LED LCD 14" WXGA SAMSUNG LTN140AT01-G01 GLARE LF 220NIT 8MS 500:1	LK.14005.006
		LED LCD 14" WXGA CMO N140B6-L02 GLARE LF 220NIT 8MS 400:1	LK.14006.009
3	LCD bezel	LED LCD BEZEL 14" W/CAMERA HOLE FOR NORMAL	60.PGL01.002
4	Webcam	CAMERA 0.3M CHICONY CNF701721004973L	56.18012.094
		CAMERA 0.3M SUYIN CN0314-SN30-OV03-5 CAMELLIA_2G	56.18007.094
5	Middle cover	MIDDLE COVER	42.PGL01.001
6	Power board	POWER BUTTON BOARD	55.N4401.001
7	Upper case	UPPER CASE SILVER W/SPEAKER	60.PGL01.001
8	Touchpad board	TOUCHPAD SYNAPTICS TM-01242-001	56.17010.161
		TOUCHPAD ALPS KGDFF0030A	56.17004.191
9	Touchpad board bracket	TOUCHPAD BRACKET	33.N4401.001
10	Keyboard	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK US INTERNATIONAL	KB.I140A.196
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK GREEK	KB.I140A.181
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK CHINESE	KB.I140A.176
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK THAILAND	KB.I140A.193
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK HEBREW	KB.I140A.197
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK ARABIC	KB.I140A.172
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK RUSSIAN	KB.I140A.188
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK UK	KB.I140A.195
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWEDEN	KB.I140A.191
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH	KB.I140A.179
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK PORTUGUESE	KB.I140A.187
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SLOVENIA	KB.I140A.189
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BRAZILIAN PORTUGUESE	KB.I140A.174

No.	Component	Part Name	Part Number
10	Keyboard *(continuation)*	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWISS	KB.I140A.192
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK DANISH	KB.I140A.177
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK ITALIAN	KB.I140A.183
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BELGIUM	KB.I140A.173
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK GERMAN	KB.I140A.180
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORWEGIAN	KB.I140A.186
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK HUNGARIAN	KB.I140A.182
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SPANISH	KB.I140A.190
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK TURKISH	KB.I140A.194
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORDIC	KB.I140A.185
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH ARABIC	KB.I140A.178
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK US W/ CANADIAN FRENCH	KB.I140A.198
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK CZECH SLOVAK	KB.I140A.175
		KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 91KEYS BLACK JAPANESE	KB.I140A.184
11	Mainboard	MAINBOARD HM41_MV UMA GL40NB A1 ICH9M LF W/RTC BATTERY W/O MODEM BOARD & MODEM CABLE	MB.PGL01.001
12	Lower case	LOWER CASE	60.N4401.001
13	Optical disc drive	DVD-RW SUPER-MULTI MODULE 8X SATA	6M.N4401.001
		ODD SONY SUPER-MULTI DRIVE 12.7MM TRAY DL 8X AD-7580S LF W/O BEZEL SATA	KU.0080F.004
		ODD PLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA DS-8A3S LF W/O BEZEL	KU.0080D.040
		ODD PANASONIC SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA UJ880A LF W/O BEZEL	KU.0080E.017
		ODD HLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X GT20N LF W/O BEZEL	KU.00807.064
14	ODD bezel	DVD-RW SUPER-MULTI BEZEL	42.N4401.004

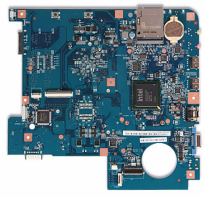
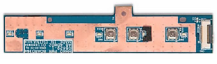
No.	Component	Part Name	Part Number
15	Hard disk drive	HDD 160GB 5400RPM SATA HGST HTS543216L9A300 F/W:C30C	KH.16008.022
		HDD 160GB 5400RPM SATA SEAGATE ST9160310AS F/W:2010	KH.16007.019
		HDD 160GB 5400RPM SATA TOSHIBA LIBRA-BS MK1655GSX F/W:FG0101J 5.4	KH.16001.034
		HDD 160GB 5400RPM SATA WD WD1600BEVT-22ZCT0 FW:11.01A11	KH.16004.006
		HDD 250GB 5400RPM SATA SEAGATE ST9250320AS CROCKETT LF F/W:0303	KH.25001.016
		HDD 250GB 5400RPM SATA TOSHIBA LIBRA-BS MK2555GSX F/W:FG000J 5.4K	KH.25001.012
		HDD 250GB 5400RPM SATA HGST HTS545025B9A300 PANTHER-B LF	KH.25004.003
	Hard disk drive *(continuation)*	HDD 250GB 5400RPM SATA WD WD2500BEVT-22ZCT0 F/W:11.01A11	KH.25007.015
		HDD 250GB 5400RPM SATA SEAGATE ST9250315AS LF F/W:0001SDM1	KH.25008.021
		HDD 320GB 5400RPM SATA TOSHIBA MK3255GSX LIBRA LF F/W:FG010J	KH.32008.013
		HDD 320GB 5400RPM SATA SEAGATE ST9320320AS F/W:2010	KH.32004.002
		HDD 320GB 5400RPM SATA HGST HTS545032B9A300 PANTHER B LF	KH.32001.008
		HDD 320GB 5400RPM SATA WD WD3200BEVT-22ZCT0 ML125 F/W:01.01A01	KH.32007.007
		HDD 500GB 5400RPM SEAGATE ST9500325AS SATA LF F/W:0001SDM1	KH.50008.013
16	HDD bracket	HDD BRACKET	33.N4401.003
17	WLAN module compartment cover	WIRELESS LAN COVER	42.N4401.003
18	Battery pack	BATTERY SIMPLO AS-2009A LI-ION 3S2P LGC 6 CELL 4400MAH MAIN COMMON LGC 2.2AH (S3)	BT.00607.066
		BATTERY SANYO AS-2009A LI-ION 3S2P SANYO 6 CELL 4400MAH MAIN COMMON 2.2AH (A)	BT.00607.067
		BATTERY SAMSUNG AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON 2.2AH (F)	BT.00603.076
		BATTERY SIMPLO AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON SDI 2.2AH (F)	BT.00606.002
		BATTERY SONY AS-2007B LI-ION 4S2P SONY 8 CELL 4800MAH MAIN COMMON	BT.00607.068
		BATTERY PANASONIC AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON 2.2AH (CG)	BT.00604.030
		BATTERY SIMPLO AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON PANASONIC 2.2AH (CG)	BT.00605.036
19	Lower case cover	UNITLOAD COVER	42.N4401.002

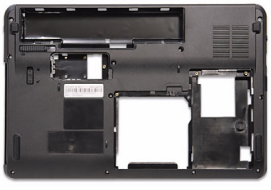
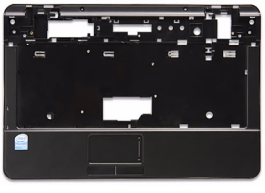
Acer Aspire 4732Z/4332 FRU List

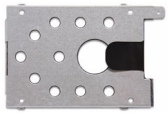
Please note that Aspire 4732Z/4332 (HM41_MV) is extended project from eMachines D725/D525 (HM40_MV). The two projects have a lot of common parts. Blue are new added items on Aspire 4732Z/4332, red means different items from eMachines D725/D525. Please still refer to service BOM on PLM system for finalized part number.

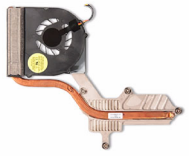
Category	Part Name	Part Number
Adapter		
	ADAPTER 65W 19V DELTA SADP-65KB DFJ YELLOW LED LF	AP.06501.022
	ADAPTER 65W 19V 3PIN DELTA ADP-65JH DB A LV5 LED LF YELLOW	AP.06501.026
	ADAPTER 65W LITEON PA-1650-02AC REV.A07 LF LEVEL-4	AP.06503.023
Power cord		
	POWER CORD 2.5A 125V USA	27.01518.A11
	POWER CORD 2.5A 125V 1.8M BLACK TAIWANESE	27.01518.781
	POWER CORD 10A 250V SWISS	27.01518.691
	POWER CORD 10A 250V 3PIN SWISS BK	27.01518.581
	POWER CORD 10A 250V ARGENTINE	27.01518.0U1
	POWER CORD 10A 125V US	27.01518.641
	POWER CORD 10A 125V 3PIN US BK	27.01518.521
	POWER CORD 7A 250V 2PIN KOREAN	27.01518.531
	POWER CORD 3A 250V 3PIN UK	27.03118.001
	POWER CORD 5A 250V 3PIN UK BK	27.01518.541
	POWER CORD 7A 125V 2PIN JAPAN	27.01518.551
	POWER CORD 10A 3PIN BK DENMARK	27.01518.671
	POWER CORD 10A 250V 3PIN DENMARK BK	27.01518.561
	POWER CORD 10A 250V 3PIN BK SOUTH AFRICA	27.01518.681
	POWER CORD 16A 250V SOUTH AFRICA BK	27.01518.571
	POWER CORD 10A 250V 3PIN CHINA	27.01518.701
	POWER CORD 10A 250V 3PIN CHINA BK	27.01518.591
	POWER CORD 250V 3PIN EUR BK	27.01518.731
	POWER CABLE 16A 250V 3PIN EUR BK	27.01518.601
	POWER CORD 10A 250V 3PIN ITALY	27.01518.711
	POWER CORD 10A 250V 3PIN ITALY BK	27.01518.611
	POWER CORD 2.5A 250V AUSTRALIA	27.01518.621
	POWER CORD 2.5A 250V SOUTH AFRICA BK (INDIA)	27.01518.721
	POWER CORD 10A 250V SOUTH AFRICA BK (INDIA)	27.01518.631
	POWER CORD 7A 125V 2PIN JAPAN BK	27.01518.661
	POWER CORD 250V 10A 3PIN ISRAEL	27.01518.761
	POWER CORD 10A 250V 1.8M BRAZIL BLK	27.01518.A41
	POWER CORD ACA / ACNZ	27.03218.051

Category		Part Name	Part Number
		POWER CORD 7.5A 250V 3P AUSTRALIA BK	27.03218.021
		POWER CORD 7A 125V 2PIN JAPAN	27.03518.161

Category	Part Name	Part Number
Battery pack		
	BATTERY SIMPLO AS-2009A LI-ION 3S2P LGC 6 CELL 4400MAH MAIN COMMON LGC 2.2AH (S3)	BT.00607.066
	BATTERY SANYO AS-2009A LI-ION 3S2P SANYO 6 CELL 4400MAH MAIN COMMON 2.2AH (A)	BT.00607.067
	BATTERY SAMSUNG AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON 2.2AH (F)	BT.00603.076
	BATTERY SIMPLO AS-2009A LI-ION 3S2P SAMSUNG 6 CELL 4400MAH MAIN COMMON SDI 2.2AH (F)	BT.00606.002
	BATTERY SONY AS-2007B LI-ION 4S2P SONY 8 CELL 4800MAH MAIN COMMON	BT.00607.068
	BATTERY PANASONIC AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON 2.2AH (CG)	BT.00604.030
	BATTERY SIMPLO AS-2009A LI-ION 3S2P PANASONIC 6 CELL 4400MAH MAIN COMMON PANASONIC 2.2AH (CG)	BT.00605.036
Boards		
Mainboard		
	MAINBOARD HM41_MV UMA GL40NB A1 ICH9M LF W/RTC BATTERY W/O MODEM BOARD & MODEM CABLE	MB.PGL01.001
Power board		
	POWER BUTTON BOARD	55.PGL01.001
Touchpad board		
	TOUCHPAD SYNAPTICS TM-01242-001	56.17010.161
	TOUCHPAD ALPS KGDFF0030A	56.17004.191
WLAN module		
	WIRELESS LAN BOARD FOXCONN ATHEROS XB63 MINICARD B/G	NI.23600.046
	WIRELESS LAN BOARD 802.11BG FOXCONN T77H121.01 ATHEROS AR9285(HB95)	NI.23600.047

	Part Name	Part Number
Cables		
Touchpad board cable		
	TOUCHPAD CABLE	50.4BW01.011
	TOUCHPAD CABLE	50.4BW01.001
Power board cable		
	POWER BUTTON BOARD CABLE	50.4BW02.011
	POWER BUTTON BOARD CABLE	50.4BW02.001
LCD-CCD coaxial cable		
	LED LCD/CAMERA CABLE	50.4BW03.011
	LED LCD/CAMERA CABLE	50.4BW03.001
Case/cover/bracket assembly		
Lower case		
	LOWER CASE	60.N4401.001
Lower case cover		
	UNITLOAD COVER	42.N4401.002
WLAN module compartment cover		
	WIRELESS LAN COVER	42.N4401.003
Upper case		
	UPPER CASE SILVER W/SPEAKER	60.PGL01.001
Middle cover		
	MIDDLE COVER	42.PGL01.001

	Part Name	Part Number
Touchpad board bracket		
	TOUCHPAD BRACKET	33.N4401.001
ODD bracket		
	OPTICAL BRACKET	33.N4401.002
ODD bezel		
	DVD-RW SUPER-MULTI BEZEL	42.N4401.004
HDD bracket		
	HDD BRACKET	33.N4401.003
xD dummy card		
	CARD READER DUMMY CARD	42.TQ901.003
LCD case		
	LED LCD COVER 14" IMR BLUE W/ANTENNA*2 & LOGO PLATE	60.PGL01.003
LCD bezel		
	LED LCD BEZEL 14" W/CAMERA HOLE FOR NORMAL	60.PGL01.002
	LED LCD BEZEL 14" W/CAMERA HOLE FOR JAPAN	60.PGL01.004
LCD panel brackets		
	LCD BRACKET LEFT W/HINGE	34.4BW02.011
	LCD BRACKET LEFT W/HINGE	34.4BW02.001
	LCD BRACKET RIGHT W/HINGE	34.4BW03.011
	LCD BRACKET RIGHT W/HINGE	34.4BW03.001

	Part Name	Part Number
Memory module		
	SODIMM 1GB DDRII667 ELPIDA EBE11UE6ACUA-6E-E	KN.1GB0G.012
	SODIMM 1GB DDRII667 NANYA NT1GT64UH8D0FN-3C LF (0.07U)	KN.1GB09.008
	SODIMM 1GB DDRII667 MICRON MT8HTF12864HDY-667G1 LF	KN.1GB03.026
	SODIMM 1GB DDRII667 SAMSUNG M470T2864EH3-CE6 LF	KN.1GB04.010
	SODIMM 1GB DDRII667 HYNIX HMP112S6EFR6C-Y5 LF	KN.1GB0B.027
	SODIMM 1GB DDRII667 HYNIX HYMP112S64CP6-Y5 LF	KN.1GB0G.022
	SODIMM 2GB DDRII667 SAMSUNG M470T5663EH3-CE6 LF	KN.2GB0G.004
	SODIMM 2GB DDRII667 NANYA NT2GT64U8HD0BN-3C LF (0.07U)	KN.2GB0B.011
	SODIMM 2GB DDRII667 MICRON MT16HTF25664HY-667G1 LF	KN.2GB03.011
	SODIMM 2GB DDRII667 ELPIDA EBE21UE8ACUA-6E-E LF	KN.2GB04.010
	SODIMM 2GB DDRII667 HYNIX HMP125S6EFR8C-Y5 LF	KN.2GB09.001
	SODIMM 2GB DDRII667 HYNIX HYMP125S64CP8-Y5 LF	KN.2GB0G.012
Processor		
	CPU INTEL PENTIUM DUAL-CORE T4200 PGA 2.0G 1M 800 35W R-0	KC.42001.DTP
	CPU INTEL MEROM PENTIUM DUAL-CORE T3400 2.16G 1M 667 MV	KC.34001.DTP
	CPU INTEL CELERONM T1600 1.66G 1M 667 DUAL CORE, MV	KC.16001.CMT
	CPU INTEL CELERONM T1700 PGA 1.83G 1M 667 DUAL CORE, MV	KC.17001.CMT
	CPU INTEL CELERON 585 PGA 2.16G 1M 667 MV	KC.N0001.585
Heat sink fan assembly		
	CPU HEATSINK W/FAN	60.4BW19.001
	CPU HEATSINK W/FAN	60.4BW18.001
	CPU HEATSINK W/FAN	60.4BW15.001
	CPU HEATSINK W/FAN	60.4BW14.001

	Part Name	Part Number
DVD-RW drive		
	DVD-RW SUPER-MULTI MODULE 8X SATA	6M.N4401.001
	ODD SONY SUPER-MULTI DRIVE 12.7MM TRAY DL 8X AD-7580S LF W/O BEZEL SATA	KU.0080F.004
	ODD PLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA DS-8A3S LF W/O BEZEL	KU.0080D.040
	ODD PANASONIC SUPER-MULTI DRIVE 12.7MM TRAY DL 8X SATA UJ880A LF W/O BEZEL	KU.0080E.017
	ODD HLDS SUPER-MULTI DRIVE 12.7MM TRAY DL 8X GT20N LF W/O BEZEL	KU.00807.064
Hard disk drive		
	HDD 160GB 5400RPM SATA HGST HTS543216L9A300 F/W:C30C	KH.16008.022
	HDD 160GB 5400RPM SATA SEAGATE ST9160310AS F/W:2010	KH.16007.019
	HDD 160GB 5400RPM SATA TOSHIBA LIBRA-BS MK1655GSX F/W:FG0101J 5.4	KH.16001.034
	HDD 160GB 5400RPM SATA WD WD1600BEVT-22ZCT0 FW:11.01A11	KH.16004.006
	HDD 250GB 5400RPM SATA SEAGATE ST9250320AS CROCKETT LF F/W:0303	KH.25001.016
	HDD 250GB 5400RPM SATA TOSHIBA LIBRA-BS MK2555GSX F/W:FG000J 5.4K	KH.25001.012
	HDD 250GB 5400RPM SATA HGST HTS545025B9A300 PANTHER-B LF	KH.25004.003
	HDD 250GB 5400RPM SATA WD WD2500BEVT-22ZCT0 F/W:11.01A11	KH.25007.015
	HDD 250GB 5400RPM SATA SEAGATE ST9250315AS LF F/W:0001SDM1	KH.25008.021
	HDD 320GB 5400RPM SATA TOSHIBA MK3255GSX LIBRA LF F/W:FG010J	KH.32008.013
	HDD 320GB 5400RPM SATA SEAGATE ST9320320AS F/W:2010	KH.32004.002
	HDD 320GB 5400RPM SATA HGST HTS545032B9A300 PANTHER B LF	KH.32001.008
	HDD 320GB 5400RPM SATA WD WD3200BEVT-22ZCT0 ML125 F/W:01.01A01	KH.32007.007
	HDD 500GB 5400RPM SEAGATE ST9500325AS SATA LF F/W:0001SDM1	KH.50008.013
	HDD 500GB 5400RP TOSHIBA MK5055GSX SATA LIBRA-BS LF F/W:FG000J	KH.50001.011
	HDD 500GB 5400RPM HGST SATA HTS545050B9A300 PANTHER B LF	KH.50004.001
	HDD 500GB 5400RPM WD SATA WD5000BEVT-22ZAT0 F/W:01.01A01	KH.50007.009

	Part Name	Part Number
Keyboard		
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK US INTERNATIONAL	KB.I140A.196
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK GREEK	KB.I140A.181
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK CHINESE	KB.I140A.176
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK THAILAND	KB.I140A.193
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK HEBREW	KB.I140A.197
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK ARABIC	KB.I140A.172
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 86KEYS BLACK RUSSIAN	KB.I140A.188
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK UK	KB.I140A.195
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWEDEN	KB.I140A.191
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH	KB.I140A.179
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK PORTUGUESE	KB.I140A.187
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SLOVENIA	KB.I140A.189
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BRAZILIAN PORTUGUESE	KB.I140A.174
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SWISS	KB.I140A.192
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK DANISH	KB.I140A.177
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK ITALIAN	KB.I140A.183
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK BELGIUM	KB.I140A.173
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK GERMAN	KB.I140A.180
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORWEGIAN	KB.I140A.186
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK HUNGARIAN	KB.I140A.182
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK SPANISH	KB.I140A.190
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK TURKISH	KB.I140A.194
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK NORDIC	KB.I140A.185
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK FRENCH ARABIC	KB.I140A.178

	Part Name	Part Number
Keyboard *(continuation)*		
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK US W/ CANADIAN FRENCH	KB.I140A.198
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 87KEYS BLACK CZECH SLOVAK	KB.I140A.175
	KEYBOARD EM-4TV2 HM41 INTERNAL 14 STANDARD 91KEYS BLACK JAPANESE	KB.I140A.184
LCD panel		
	LED LCD MODULE 14" WXGA GLARE BLUE W/ CAMERA 0.3M & ANTENNA*2 FOR NORMAL	6M.PGL01.002
	LED LCD MODULE 14" WXGA GLARE BLUE W/ CAMERA 0.3M & ANTENNA*2 FOR JAPAN	6M.PGL01.003
	LED LCD 14" WXGA LG LP140WH1-TLA1 GLARE LF 220NIT 8MS 500:1	LK.1400D.004
	LED LCD 14" WXGA AU B140XW01 V0 GLARE LF 220NIT 8MS 500:1	LK.14008.001
	LED LCD 14" WXGA SAMSUNG LTN140AT01-G01 GLARE LF 220NIT 8MS 500:1	LK.14005.006
	LED LCD 14" WXGA CMO N140B6-L02 GLARE LF 220NIT 8MS 400:1	LK.14006.009
Miscellaneous		
Speakers		
	SPEAKER	23.40531.001
	SPEAKER	23.40532.001
	SPEAKER	23.40530.001
Webcam		
	CAMERA 0.3M CHICONY CNF701721004973L	56.18012.094
	CAMERA 0.3M SUYIN CN0314-SN30-OV03-5 CAMELLIA_2G	56.18007.094
LCD bezel rubber pad		
	LCD SCREW RUBBER	47.N4401.001
Nameplate		
	NAME PLATE AS4732Z	40.PGL01.001
Screws -		
	M2.5 x L6 (black)	86.00E33.736
	M2 x L4 (black)	86.00A02.140
	M3 x L3 (silver)	86.9A554.4R0
	M2 x L4 (black)	86.9A552.4R0
	M2 x L3 (black)	86.00E25.723
	M2.5 x L8 (black)	86.00E34.738
	M2 x L4 (black)	86.00E13.524
	M2.5 x L5 (black)	86.00F87.735
	M2 x L3 (silver)	86.00C07.220

Appendix A

Model Definition and Configurations

This chapter provides features summary for each of the three Acer Aspire 4732Z/4332 computer model configurations.

Click the paper clip icon below for detailed model configurations.

Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested for both the Home Basic and Home Premium editions of Microsoft's Windows Vista operating system.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the Acer Aspire 4732Z/4332 Vista Compatibility Test Report released by the Acer Mobile System Testing Department.

Item	Compatible Device
Display Port Test	
CRT monitor	ViewSonic G220F
LCD TV	Westinghouse W37G (HDMI) Panasonic TC-37MPK (VGA/HDMI)
LCD monitor	Acer FP751 17" TFT LCD Acer AL1521 15" (DVI) Acer AL1721 17" (DVI) Acer P243W 24" (resolution:1920x1200; ports: D-Sub, DVI-D, DVIw, HDCP, and HDMI) Acer P244W 24" (resolution:1920x1200; ports: D-Sub, DVI-D, DVIw, HDCP, and HDMI) DELL SP2208WFP 22" (resolution:1680x1050; ports: DVI-D, HDCP, and HDMI) DELL UltraSharp 3008WFP 30" (resolution:2560*1600; ports: VGA, DVI-D, HDMI, S-Video, and AV) ViewSonic G90FB 19" (resolution: 2048x1536 @ 60Hz) ViewSonic VD201b 20" (DVI-I, DVI-D, D-sub)
Projector	Dell 3300MP projector
USB Port Test	
USB mouse	Belkin MiniGlow optical USB mouse Dell IR keyboard and mouse set Logitech First Wheel Mouse
USB keyboard	Dell IR keyboard and mouse set Dell KiKi L20U C-13 Darfon USB keyboard Logitech Internet Navigator Keyboard
USB speaker	Dell USB speaker Dolby headphone (5.1 channel) JS iFun USB speaker Panasonic USB Speaker (EAB-MPC57USB)
USB webcam	Canon Digital IXUS 860 IS Orange Micro USB 2.0 Web Cam
USB printer	HP 450wbt Deskjet Printer (USB/Bluetooth) HP Deskjet F4280
USB hub	IOGEAR 4-port USB hub
USB WLAN stick	Corega WLAN USB Stick-11 (CG-WLUSBST11)

Item	Compatible Device
USB modem	Huawei E220 USB Modem 3G
USB hard drive	Transcend 2.5" Portable 80 GB HDD
USB optical drive	Logitec CD-RW+ DVD-ROM combo drive Plextor DVD+R/RW
USB flash drive	A-Data 16 GBPD16 Vista Apacer 256 MB Handy Drive Apacer 2 GB Flash Drive Memory Key Apacer 8 GB AH421 IBM 128 MB USB Memory Key IBM 512 MB Memory Key SanDisk 2 GB Cruzer Micro Skin USB Flash Drive Sony 5 GB Micro Vault Pro USB Flash Drive Transcend JetFlash USB Flash Drive V85 8GB Memory Key
USB card reader	PQI 6-in-1 Flash Card Reader/Writer
Line-out Jack Test	
Earphone/headset	Hawk Stereo Headset 933
WLAN Access Point Test	
802.11a/b/g	Linksys WAP54G Wireless-G Access Point
802.11n/g/b	Buffalo AirStation Wireless-N Nfiniti WZR-G144N Buffalo AirStation Wireless-N Nfiniti WZR2-G300N SMC SMCWBR14S-N2 BARRICADE-N Draft 11n
Memory Card Test (MMC, SD, xD, MS, MS Pro)	
MultiMedia Card (MMC)	SanDisk 128 MB RS-MMC PQI 256 MB RS-MMC Mobile
Secure Digital (SD)	Apacer 128/256 MB SD card Apacer 2 GB SD card (150x Hi-Speed) Kingmax 1GB SD card (66x Hi-Speed) Ridata 4 GB SD Pro Memory Card SanDisk 256 MB SD card SanDisk 1 GB SD card Transcend 256 MB SD card Transcend 4 GB 133X SD Card Transcend 4GB SDHC Class 6 Memory Card
extreme Digital (xD)	Olympus 512 MB xD-Picture Card Olympus 1GB H Type (High Speed) xD-Picture Card
Memory Stick (MS) and MS Pro	Apacer 128 MB Memory Stick I-O DATA 64 MB Memory Stick Lexar High-speed 512 MB Memory Stick Pro Duo Lexar High-speed 1 GB Memory Stick Pro Duo SanDisk 1GB Memory Stick Pro Sony 512 MB Memory Stick Pro Sony 2 GB Memory Stick Pro Sony 2 GB High-speed Memory Stick Pro

	Compatible Software
Games	Activision - Call of Duty 4: Modern Warfare (CD-04-293) Atari - Unreal Tournament 2004 (CD-04-140) Blizzard - World of Warcraft: The Burning Crusade Eidos - Lara Croft Tomb Raider: Anniversary (CD-04-272) Electronic Arts q Crysis (CD-04-289) q Command & Conquer 3: Tiberium Wars (CD-04-268) ID Software - Quake 4 (OpenGL) Microsoft - Flight Simulator X Deluxe Edition (SP1, CD-04-266) NCsoft - Lineage II: The Chaotic Throne Splash Damage - Enemy Territory: Quake Wars (CD-04-287) THQ - Supreme Commander (CD-04-265) Ubisoft Entertainment - World in Conflict
System utilities and applications	Acer ePower Management Acer eRecovery Management Adobe Reader Adobe Flash Player EarthLink Google Desktop GoogleSetup Google Toolbar Microsoft Office Trial Microsoft Office Personal 2007 Microsoft Works 9.0 SE NetZero Norton Internet Security 2009 NTI Media Maker WildTanget WinDVD Windows Live Essentials

Appendix C

Online Support Information

This section describes online technical support services available to help you repair your Acer products.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer branch offices and regional business units can access our website. However some information sources will require a user ID and password. These can be obtained directly from Acer CSD Taiwan.

Acer's website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all Acer notebook, desktop and server models including:

- Service guides for all models
- BIOS updates
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

For these purposes, we have included a PDF file to facilitate the problem-free downloading of our technical material.

Also available on this website are:

- Detailed information on Acer's International Traveler's Warranty (ITW)
- Returned material authorization procedures
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.

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