TravelMate5600/5100&Aspire9400/7100
Service Guide

Service guide files and updates are available
on the AIPG/CSD web; for more information,
please refer to http://csd.acer.com.tw

Revision History

Please refer to the table below for the updates made on TravelMate5600/5100 & Aspire9400/7100 service guide.

Date	Chapter	Updates

Disclaimer

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Conventions

The following conventions are used in this manual:

Screen messages	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any 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.

Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "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.

2. 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 ACER-AUTHORIZED SERVICE PROVIDERS, your Acer 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.

System Specifications

Features

Performance

Aspire 9400 / TravelMate 5600 Series

Intel® Centrino® mobile technology, featuring:

❑ Intel® Pentium® M processor 740/750/760/770/780 (2 MB L2 cache, 1.73/1.86/2/2.13/2.26 GHz, 533 MHz FSB)

❑ Intel® Pentium® M processor 735 (2 MB L2 cache, 1.70 GHz, 400 MHz FSB) or higher

❑ Intel® 915PM/915GM Express chipset

❑ Integrated Intel® PRO/Wireless 2200BG network connection (dual-mode 802.11b/g) Wi-Fi CERTIFIED™ solution, supporting Acer SignalUp™ wireless technology

Aspire 7100 / TravelMate 5100 Series

With no Centrino® mobile technology, featuring:

❑ Intel® Celeron® M processor 370/380/390 (1 MB L2 cache, 1.50/1.60/1.70 GHz, 400 MHz FSB) or higher

❑ Mobile Intel® 910GML Express chipset

❑ Integrated Acer InviLink™ 802.11b/g Wi-Fi CERTIFIED solution, supporting Acer SignalUp™ wireless technology

Core Logic

❑ North Bridge + South Bridge:

   ❑ 915GM + ICH6M

   ❑ 915PM + ICH6M

   ❑ 910GML + ICH6M

Memory

❑ DDR2 400/533 SDRAM

❑ Two soDIMM slots, 128MB to 1GB per slot

❑ Maxium memory up to 2GB with two 1GB SODIMMs

❑ 512KB system/video BIOS in flash ROM; shadow RAM supported

❑ Dual Channel support

Display

❑ 17 WXGA TFT LCD, 1440 x 900 pixel resolution , supporting simultaneous multi-window viewing on dual displays via Acer Gridvista™

❑ Nvidia® GeForce™ Go 7300 graphics with 256 MB of VRAM (128 MB of dedicated GDDR2 VRAM; 128 MB of shared system memory), supporting Microsoft® DirectX® 9.0, Shader Model 3.0, OpenEXR High Dynamic Range (HDR) technology, Nvidia® TurboCache™, Nvidia® PowerMizer™ 6.0, PCI Express®, or

❑ Intel® 915GM integrated 3D graphics, featuring Intel® Graphics Media Accelerator 900, up to 128

MB of shared memory, supporting Microsoft® DirectX® 9.0 and dual independent displays

- ❏ 16.7 million colors
- ❏ MPEG-2/DVD hardware-assisted capability
- ❏ External CRT: 1600 x 1200 x 16M colors, refresh rate up to 85Hz or higher
- ❏ A minimum of 800 x 600 x 256 colors in SimulScan

VRAM

- ❏ 4 x 16M x 16 GDDR2
- ❏ 4 x 32M x 16 GDDR2

Audio

- ❏ Internal microphone
- ❏ Two speakers (high quality) 1.5W/9cc each
- ❏ HD Audio codec
- ❏ Codec specification requires:
  - ❏ HD Audio interface
  - ❏ 10 DAC (7.1ch + 2ch); 2 ADC
  - ❏ DAC SNR >= 95dB, ADC SNR >= 85dB
  - ❏ Pin 2 pin with Dolby/DTS logo codec
  - ❏ S/PDIF Out support
  - ❏ All DACs support 44.1K/48K/96K/192K sample rate
  - ❏ All ADCs support 44.1K/48K/96K sample rate
  - ❏ At least 2 GPIOs for customized appllications

Storage subsystem

- ❏ HDD:
  - ❏ 9.5mm height, 2.5" HDD
  - ❏ Easily removable no more than two screws
  - ❏ 40/60/80/100GB
  - ❏ PCI Bus Master Enhanced IDE
  - ❏ Support Ultra DMA100, S.M.A.R.T
  - ❏ 40/60/80/100 GB or above
  - ❏ Dual support both PATA and SATA interface
  - ❏ DASP support in TravelMate models
- ❏ Optical drive options:
  - ❏ DVD-Super Multi double-layer
  - ❏ DVD-Dual double-layer
  - ❏ DVD/CD-RW combo drive

Communication

- ❏ Modem: 56Kbps ITU V.92 with PTT approval; Wake-up-Ring support
- ❏ LAN: Fast Ethernet; Wake-on-LAN support
- ❏ WPAN: Bluetooth® 2.0 + EDR (Enhanced Data Rate)
- ❏ WLAN: Intel® PRO/Wireless 2200BG network connection (dual-mode 802.11b/g Wi-Fi

CERTIFIED^{TM} solution, supporting Acer Acer SignalUp^{TM} wireless technology (for Aspire 9400 TravelMate 5600 series)

❑ WLAN: Integrated Acer InviLink^{TM} 802.11b/g Wi-Fi CERTIFIED solution, supporting Acer SignalUp^{TM} wireless technology (for Aspire 7100 / TravelMate 5100 series)

I/O Ports

❑ One VGA port, 15 pins

❑ One microphone-in (pink jack)

❑ One line-in (blue jack)

❑ One headphone out / line-out / speaker out jack/ SPDIF (black jack)

❑ Five external USB 2.0 connectors.

❑ One DC-in jack (1.7mm) at left-hand side

❑ One Type II PCMCIA CardBus slot

❑ One RJ-11 jack for modem

❑ One RJ-45 jack for LAN

Power Supply

❑ 8-cell of 18650 Li-Ion battery pack 4800mAh Li-Ion

❑ 6-cell of 18650 Li-Ion battery pack 4000mAh Li-Ion option battery

❑ 65W 19V 3-pin AC adaptor

Environment

❑ Temperature

❑ Operating: 5 ^{o}C to 35 ^{o}C

❑ Non-operating: -20 ^{o}C to 65 ^{o}C

❑ Humidity (non-condensing)

❑ Operating: 20% to 80%

❑ Non-operating: 20% to 80%

Dimensions and weight

❑ 400 (W) x 295 (D) x 31.4/39.9 (H) mm (15.75 x 11.61 x 1.24/1.57 inches)

❑ 3.79 kg (8.36 lbs.)

Block Diagram
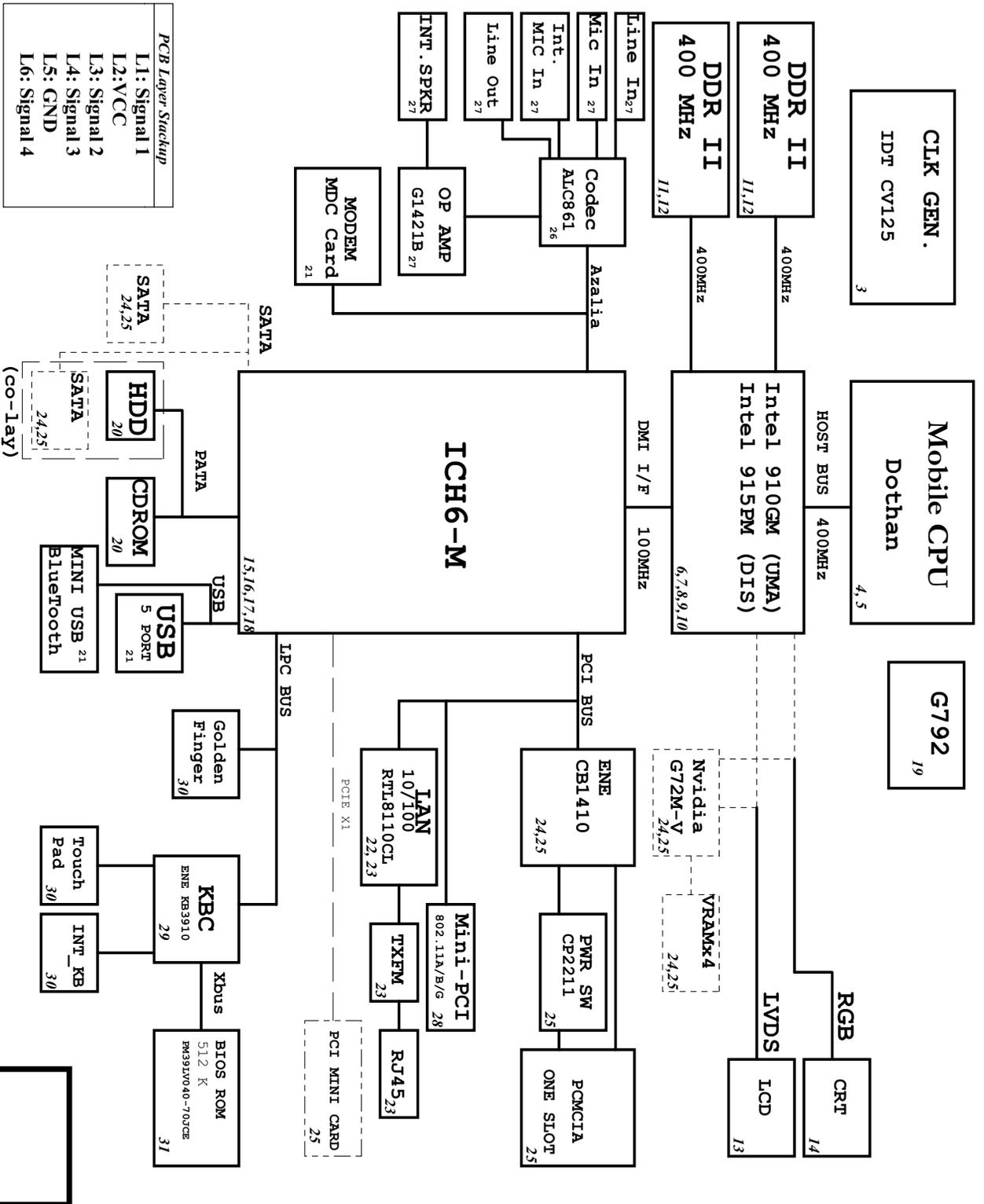
Outlook View

Front Open View

Aspire 9400/7100
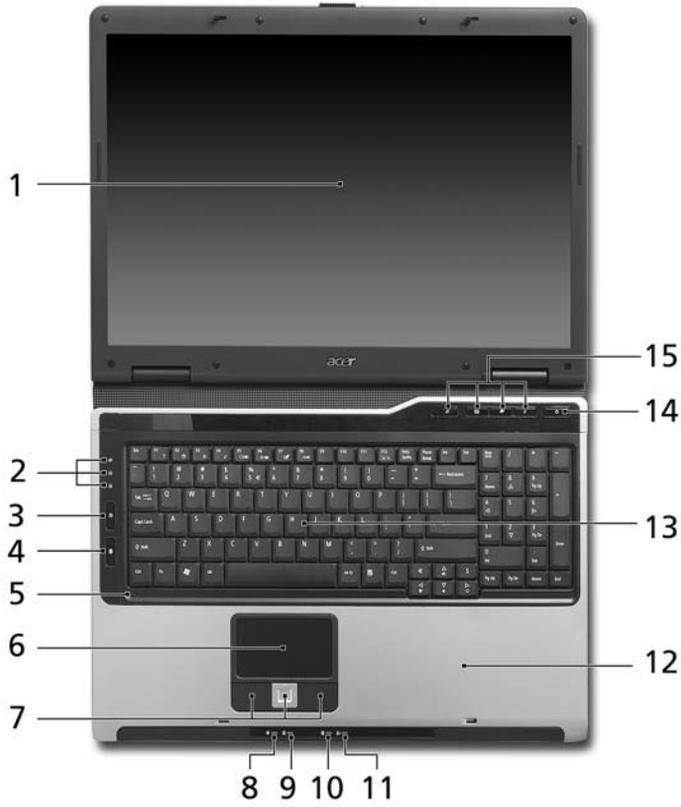
#	Icon	Item	Description
1	N/A	Display screen	Also called Liquid-Crystal Display (LCD), displays computer output.
2	N/A	Status indicators	Light-Emitting Diodes (LEDs) that light up to show the status of the computer's functions and components.
3		Wireless communication button	Press to enable/disable Wireless function. Lights to indicate the status of wireless LAN communications.
4		Bluetooth communication button	Press to enable/disable Bluetooth function. Lights to indicate the status of Bluetooth communications.
5	N/A	Microphone	Internal microphone for sound recording.
6	N/A	Touchpad	Touch-sensitive pointing device which functions like a computer mouse.
7	N/A	Click buttons (left, center and right)	The left and right buttons function like the left and right mouse buttons; the center button servesw as a four-way scroll butotn.
8		Power indicator	Indicates the computer's power status.
9		Battery indicator	Indicates the computer's battery status.

10		Bluetooth communication indicator	Indicates the status of Bluetooth communication.
11		Wireless communication indicator	Indicates the status of wireless LAN communication.
12	N/A	Palmrest	Comfortable support area for your hands when you use the computer.
13	N/A	Keyboard	For entering data into your computer.
14	N/A	Power button	Turns the computer on and off.
15	N/A	Easy-launch buttons	Buttons for launching frequently used programs.

Closed Front View

Aspire 9400/7100

TravelMate 5600/5100

#	Icon	Item	Description
1	N/A	Speakers	Left and right speakers deliver stereo audio output.
2		Line-in jack	Accepts audio line-in devices (e.g., audio CD player, stereo walkman).
3		Microphone-in jack	Accepts input from external microphones.
4		Headphones/speaker/ line-out jack with S/PDIF support	Indicates the computer's power status.
5	N/A	Latch	Locks and releases the lid.

Left View
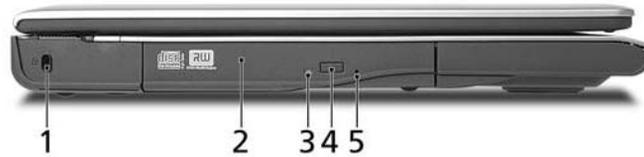
#	Icon	Item	Description
1	🔒	Kensington lock slot	Connects to a Kensington-compatible computer security lock.
2	N/A	Optical drive	Internal optical drive; accepts CDs or DVDs (slot-load or tray-load depending on model).
3	N/A	Optical disk access indicator	Lights up when the optical drive is active (location depends on model).
4	N/A	Optical drive eject button	Ejects the optical disk from the drive (location depends on model).
5	N/A	Emergency eject hole	Ejects the optical drive tray when the computer is turned off (location depends on model).

Right View
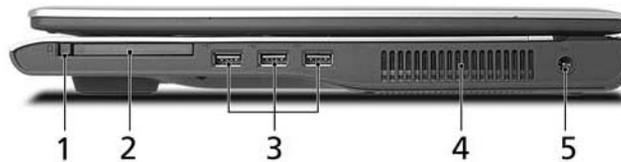
#	Icon	Item	Description
1	N/A	PC Card slot eject button	Ejects the PC Card from the slot.
2		PC Card slot	Accepts one Type II PC Card.
3		Three USB 2.0 ports	Connect to Universal Serial Bus (USB) 2.0 devices (e.g., USB mouse, USB camera).
4	N/A	Ventilation slots	Enable the computer to stay cool, even after prolonged use.
5		DC-in jack	Connects to an AC adaptor.

Rear View

#	Icon	Item	Description
1	⚬←↹	Two USB 2.0 ports	Connect to Universal Serial Bus (USB) 2.0 devices (e.g., USB mouse, USB camera).
2	▢	External display (VGA) port	Connects to a display device (e.g., external monitor, LCD projector).
3	⬜	Modem (RJ-11) port	Connects to a phone line.
4	品	Ethernet (RJ-45) port	Connects to an Ethernet 10/100-based network.
5	N/A	Battery	Powers the computer.

Bottom View
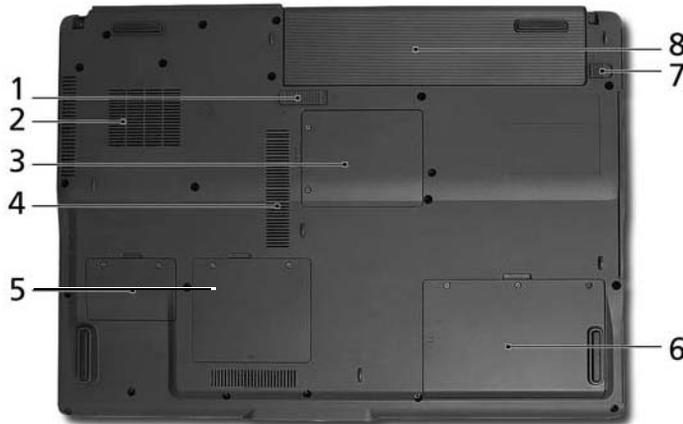
#	Item	Description
1	Battery release latch	Releases the battery for removal.
2	Cooling fan	Helps keep the computer cool. **NOTE:** Do not cover or obstruct the opening of the fan.
3	Mini PCI card bay	Houses the computer's Mini PCI card.
4	Ventilation slots	Enable the computer to stay cool, even after prolonged use.
5	Memory compartment	Houses the computer's main memory.
6	Hard disk bay	Houses the computer's hard disk (secured with screws).
7	Battery lock	Locks the battery in position.
8	Battery bay	Houses the computer's battery pack.

Indicators

Your computer has seven easy-to-read status indicators, including four on the front panel.

The front panel indicators are visible when the computer cover is closed up..

Icon	Item	Description
◈	HDD	Indicates when the hard disk drive is active.
🅰	Caps Lock activity	Lights up when Caps Lock is activated.
🔒	Num Lock activity	Lights up when Num Lock is activated.
☀	Power	Indicates the status of computer's power status.
🔋	Battery	Indicates the computer's battery status.
✱	Bluetooth	Indicates the status of Bluetooth communication.
◯	Wireless LAN	Indicates the status of wireless LAN communication.

Easy-Launch Buttons

Located above the keyboard are four buttons. They are mail, Web browser, Empowering Key and one user-programmable button.

Item	Default Application
e	Acer Empowering Technology (User-programmable)
Mail	Email application (User-programmable)
Web Browser	Internet browser (User -programmable)
P	User programmable

Touchpad

The build-in touchpad is a pointing device that senses movement on its surface.

This means the cursor responds as you move your finger across the surface of the touchpad.

The touchpad is located in the middle of the palm rest area, providing maximum comfort and efficiency.

Touchpad Basics
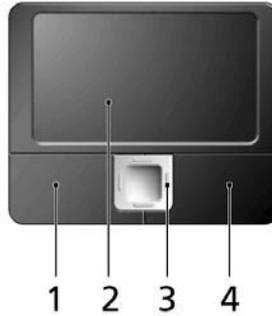
❏   Move your finger across the touchpad**(2)** to move the cursor.

❏   Press the left **(1)** and right **(4)** buttons located beneath the touchpad to perform selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touchpad is the same as clicking the left button

❏   Use the 4-way scroll **(3)** button to scroll up or down and move left or right a page. This button mimics your cursor pressing on the right scroll bar of windows applications.

Function	Left Button(1)	Righ Button(4)	Main touchpad(2)	Center button(3)
Execute	Quickly click twice		Tap twice (at the same speed as double-clicking the mouse button)	
Select	Click once		Tap once	
Drag	Click and hold. Then slide your finger across the touchpad to drag the cursor over the selection.		Tap twice quickly; rest your finger on the touchpad on the second tap and drag the cursor.	
Access context menu		Click once		
Scroll				CLick and hold to move up/down/left/right

NOTE: When using the touchpad, keep it-and your fingers-dry and clean. The touchpad is sensitive to finger movement; hence, the lighter the touch, the better the response. Tapping harder will not increase the touchpad's responsiveness.

Using the Keyboard

The full-sized keyboard includes an embedded numeric keypad, separate cursor keys, two Windows keys and twelve function keys.

Lock keys and Embedded Numeric Keypad

The keyboard has four lock keys which you can toggle on and off.
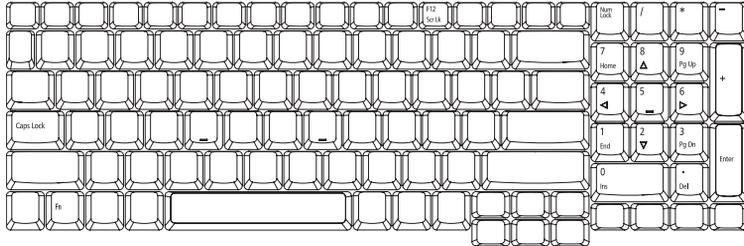
The computer features three lock keys, each with its own status indicator light.

Lock Key	Description
Caps Lock	When Caps Lock is on, all alphabetic characters are typed in uppercase. Toggle on and off by pressing the Caps Lock key on the left side of the keyboard.
Num lock <Fn+F11>	When Num Lock is on, the embedded keyboard is in numeric mode. The keys function as a calculator(complete with the arithmetic operators+,-,*, and /). Use this mode when you need to do a lot of numeric data entry. When Num Lock is off, the keys assume cursor and other shortcut functions.
Scroll lock <Fn+F12>	When Scroll Lock is on, the screen moves one line up or down when you press the up or down arrow keys respectively. Scroll Lock does not work with some applications.

The embedded numeric keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps. To simplify the keyboard legend, cursor-control key symbols are not printed on the keys.

Desired access	Num Lock on	Num Lock off
Numer keys on embedded keypad	Type numbers in a normal manner	
Cursor-control keys on embedded keypad	Hold <Shift> while using cursor-control keys.	Hold <Fn> while using cursor-control keys.
Main keyboard keys	Hold <Fn> while typing letters on embedded keypad.	Type the letters in a normal manner.

Windows Keys

The keyboard has two keys that perform Windows-specific functoins.

Windows logo key	Pressed alone, this key has the same effect as clicking on the Windows Start button; it launches the Start menu. It can also be used with other keys to provide a variety of functions:
	+ Tab (Activates the next Taskbar button)
	+ E (Opens the My Computer window)
	+ F1 (opens Help and Support)
	+F (opens the Find: All Files dialog box)
	+ M (minimizes all windows)
	<Shift> + + M (undoes the minimize all windows action)
	+ R (opens the Run dialog box)
Application key	This key has the same effect as clicking the right mouse button; it opens the application's context menu.

Hotkeys

The computer employs hotkeys or key combinations to access most of the computer's controls like screen brightness, volume output and the BIOS utility. To activate hotkeys, press and hold the <Fn> key before pressing the other key in the hotkey combination.
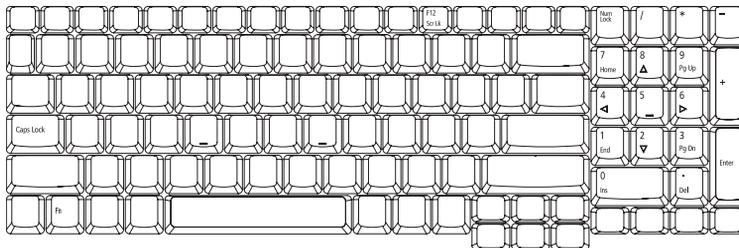
Hot Key	Icon	Item	Description
Fn+F1	?	Hot key help	This key will cause a help message to appear on the display device that describes the definition and functionality of the unit hot keys.
Fn+F2		Acer eSettings	Launches the Acer eSetting in Acer Empowering Technology. See "Acer Empowering Technology"
Fn+F3		Acer ePower Management	Launches the Acer ePower Management in Acer Empowering Technology. See "Acer Empowering Technology"
Fn+F4	Zᶻ	Sleep	Puts the computer in Sleep mode
Fn+F5	☐�❘◼	Display toggle	Switches display output between the display screen, external monitor(if connected)and both .
Fn+F6	✳·◼	Screen blank	Turns the display screen backlight off to save power. Press any key to return
Fn+F7		Touchpad toggle	Turns the internal touchpad on and off
Fn+F8	◁/◀»)	Speaker toggle	Turns the speakers on and off
Fn+w	◀»)	Volume up	Increases the sound volume
Fn+y	◀)	Volume down	Decreases the sound volume
Fn+x	☀	Brightness up	Increases the screen brightness
Fn+z	☀	Brightness down	Decrease the screen brightness

Special Keys

You can locate the Euro symbol and the US dollar sign at the upper-center of your keyboard.
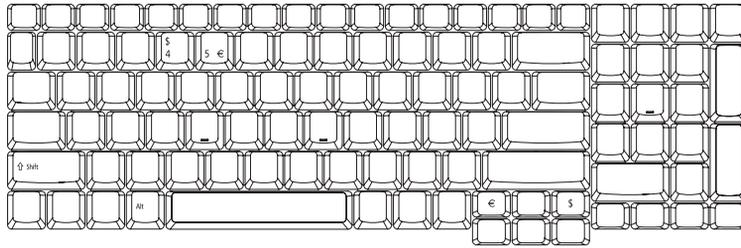
The Euro Symbol

1. Open a text editor or word processor.

2. Either press < € > at the bottom-right of the keyboard, or hold **<Alt Gr>** and then press the **<5>** key at the upper-center of the keyboard.

NOTE: Some fonts and software do not support the Euro symbol. Please refer to www.microsoft.com/ typography/faq/faq12.htm for more information.

The US Dollar Sign

1. Open a text editor or word processor.

2. Either press < $ > at the bottom-right of the keyboard, or hold **<Shift>** and then press the **<4>** key at the upper-center of the keyboard.

NOTE: This function varies according to the language settings.

Using the System Utilities

Acer GridVista(dual-display compatible)

To enable the dual monitor feature of your notebook, first ensure that the second monitor is connected, then, select **Start**, **Control Panel**, **Display** and click on **Settings**. Select the secondary monitor (2) icon in the display box and then click the check box Extend my Windows desktop onto this monitor. Finally, click **Apply** to confirm the new settings and click **OK** to complete the process.

Acer GridVista is a handy utility that offers four pre-defined display settings so you can view multiple windows on the same screen. To access this function, please go to **Start, All Programs** and click on **Acer GridVista**. You may choose any one of the four display settings indicated below:

Double (vertical), Triple (primary at left), Triple (primary at right), or Quad Acer Gridvista is dual-display compatible, allowing two displays to be partitioned independently.

Set up Procedure

1. Run Acer GridVista and select your preferred screen configuration for each display from the taskbar.

2. Drag and drop each window into the appropriate grid.

3. Enjoy the convenience of a well-organized desktop.
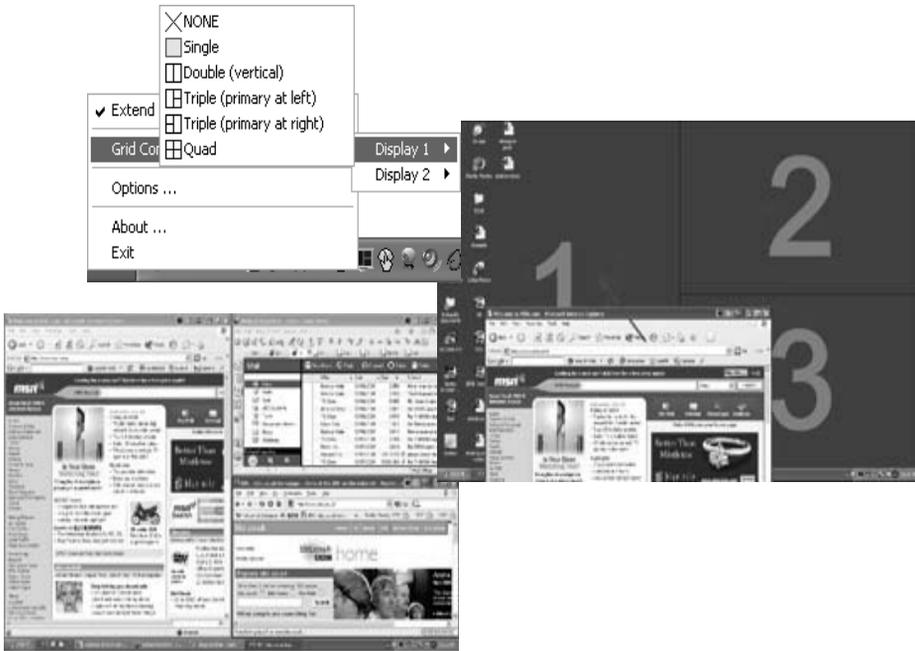
NOTE: The system utilities work under Microsoft Windows XP only.

Launch Manager
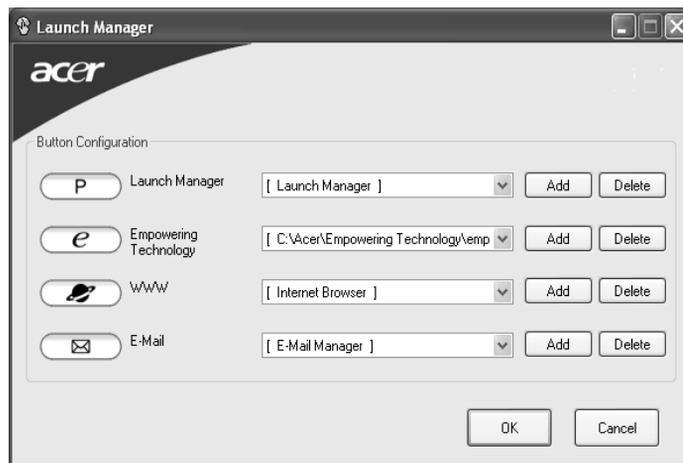
Launch Manager allows you to set the four easy-launch buttons located above the keyboard. You can access the Launch Manager by clicking on **Start, All Programs**, and then **Launch Manager** to start the application.

Norton AntiVirus

Norton AntiVirus is an anti-virus software that finds and repairs infected files, and protects against viruses to keep your computer data safe and secure.

How do I check for viruses?

A Full System Scan scans all files on your computer. To perform a system scan:

1. Start Norton AntiVirus.

Double click on the **Norton AntiVirus** icon on the desktop or click on the **Start** menu in the Windows taskbar, highlight **Programs**, and select **Norton AntiVirus**.

2. In the Norton AntiVirus main window, click **Scan for Viruses**.
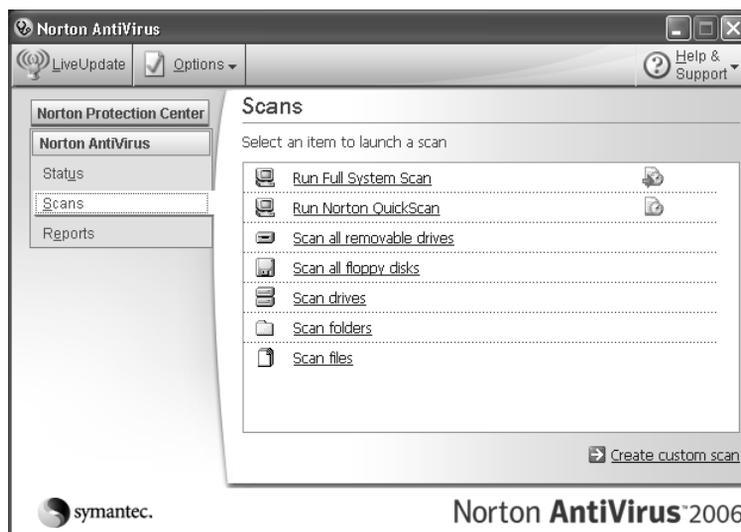
3. In the **Scan** for **Viruses** panel, click **Scan My Computer**.
4. Under **Actions**, click **Scan**.
5. When the scan is complete, a scan summary appears. Click **Finished**.

You can schedule customized virus scans that run unattended on specific dates and times or at periodic intervals. If you are using the computer when the scheduled scan begins, it runs in the background so that you do not have to stop working.

For more information refer to the Norton Antivirus Help menu.

Acer Empowering Technology

Acer's innovative Empowering Technology makes it easy for you to access frequently used functions and manage your new Acer notebook. It features the following handy utilities:

❑ **Acer eDataSecurity Management** protects data with passwords and advanced encryption algorithms.
❑ **Acer eLock Management** limits access to external storage media.
❑ **Acer ePerformance Management** improves system performance by optimizing disk space, memory and registry settings.
❑ **Acer eRecovery Management** backs up/recovers data flexibly, reliably and completely.
❑ **Acer eSettings Management** accesses system information and adjusts settings easily.
❑ **Acer eNet Management** hooks up to location-based networks intelligently (for selected models).
❑ **Acer ePower Management** extends battery power via versatile usage profiles.
❑ **Acer ePresentation Management** connects to a projector and adjusts display settings conveniently.

For more information, press the < e > key to launch the Empowering Technology menu, then click on the appropriate utility and select the Help function.

Acer eDataSecurity Management

Acer eDataSecurity Management is handy file encryption utility that protexts your files from being accessed by unauthorized persons. It is conveniently integrated with Windows explorer as a shell extension for quick and easy data encryption/decryption and also supports on-the-fly file encryption for MSN Messager and Microsoft Outlook.

There are two passwords that can be used to encrypt/decrypt a file; the supervisor passowrd and the file-specific password. The supervisor passwork is a "master" password that cna decrypt any file on your system; the file-specific password will be used to encrypt files by default, or you cna choose to enter your own file-specific password when encrypting a file.

NOTE: The password used encrypt a file is the unique key that the system needs to decrypt it. If you lose the password, the supervisor password is the only other key capable of decrypting the file. If you lose both passwords, there will be no way to decrypt your encryped file! **Be sure to safeguard all related passwords!**
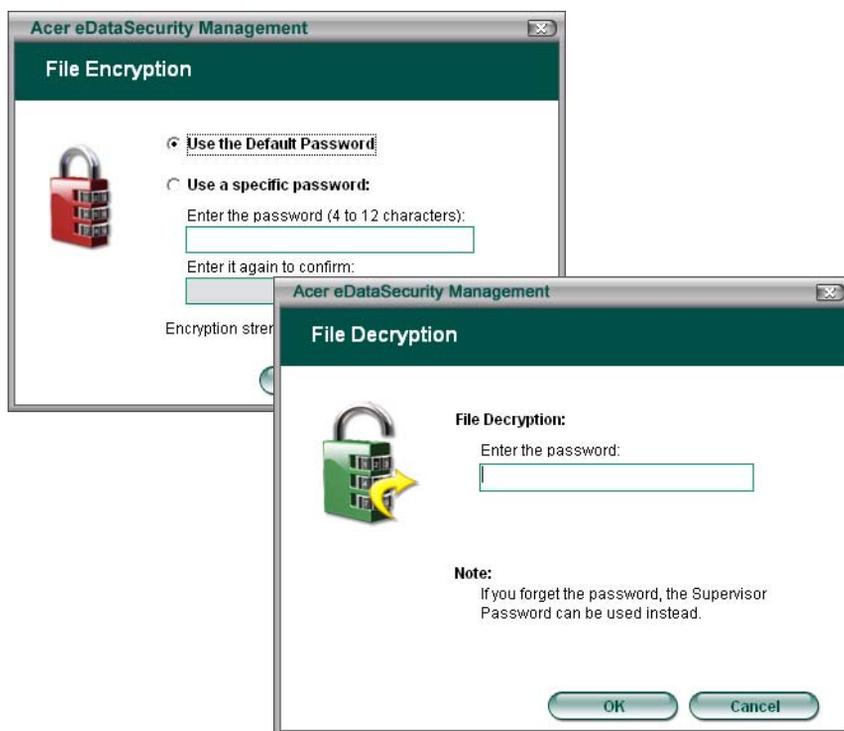
Acer eLock Management

Acer eLock Management is a security utility that allows you to lock up your removable data, optical and floppy drives to ensure that data can't be stolen while your notebook is unattended.

❑ Removable data devices - includes USB disk drives, USB pen drives, USB flash drives, USB MP3 drives, USB memory card readers, IEEE 1394 disk drives and any other removable disk drives that can be mounted as a file system when plugged into the system.
❑ Optical drive deivces - includes any kind of CD-ROM or DVD-ROM drives.
❑ Floppy disk drives - 3.5-inch disks only.

To activate Acer eLock Management, a password must be set first. Once set, you may apply lock to any of the three kinds of devices. Lock(s) will immediately be set without any reboot necessary, and will remain locked after rebooting, until unlocked.

If you do not set a password, Acer eLock Management will reset back to the initial status with all locks removed.

NOTE: If you lose your password, there is no method to reset it except by reformatting your notebook or taking your notebook to anAcer Customer Serivce Center. Be sure to remember or write down your password.
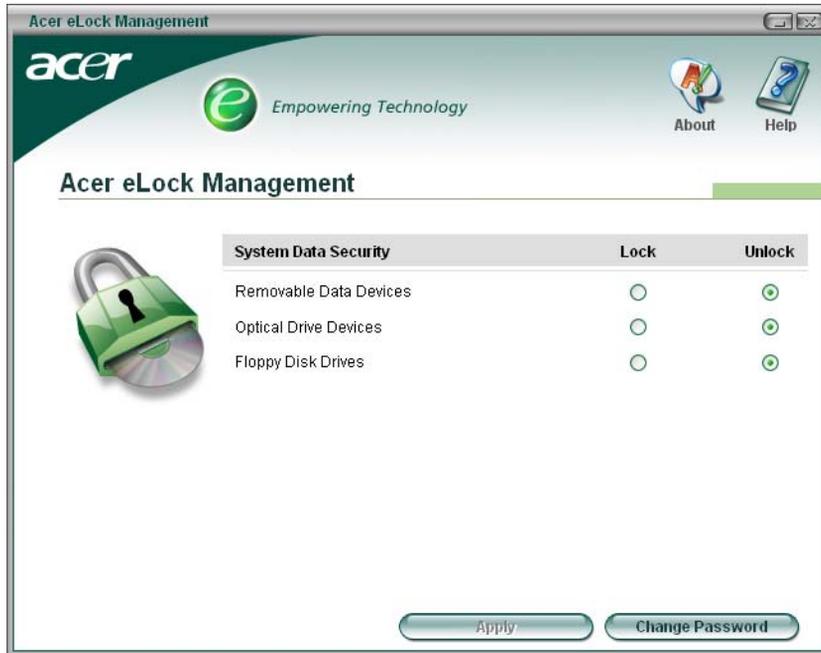
Acer ePerformance Management

Acer ePerformance Management is a system optimization tool that boosts the performance of your Acer notebook. It provides you with the following options to enhance overall system performance:

❑ Memory optimization - releases unused memory and check usage.
❑ Disk optimization - removes unneeded items and files.
❑ Speed optimization - improves the usability and performance of your Windows XP system.
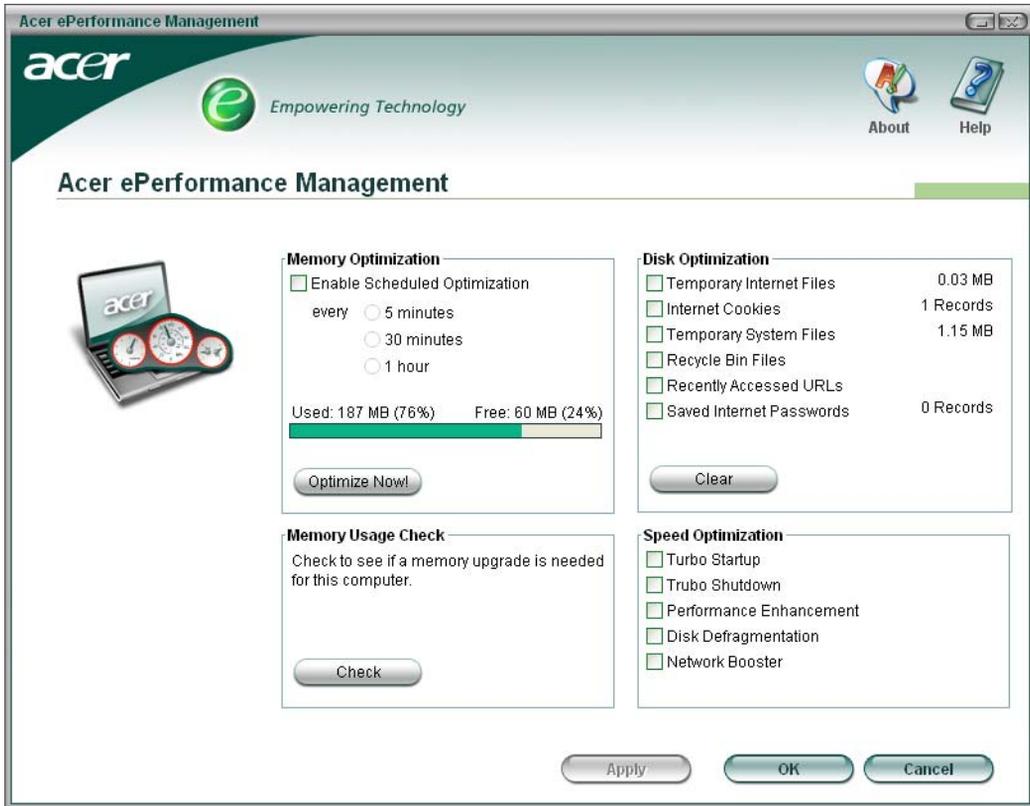
Acer eRecovery Management

Acer eRecovery Management is a powerful utility that does away with the need for recovery disks provided by the manufacturer. The Acer eRecovery Management utility occupies space in a hidden partition on your system's HDD. User-created backups are stored on D:\ drive. Acer eRecovery Management provides you with:

❑ Password protection.
❑ Recovery of applications and drivers.
❑ Image/data backup:

    ❑ Back up to HDD (set recovery point).

    ❑ Back up to CD/DVD.

❑ Image/data recovery tools:

    ❑ Recover from a hidden partition (factory defaults).

    ❑ Recover from the HDD (most recent user-defined recovery point).

    ❑ Recover from CD/DVD.

NOTE: If your computer did not come with a Recovery CD or System CD, please use Acer eRecovery Management's "System backup to optical disk" feature to burn a backup image to CD or DVD. To ensure the best results when recovering your system using a CD or Acer eRecovery Management, detach all peripherals (except the external Acer ODD, if your computer has one), including your Acer ezDock.

Acer eSettings Management

Acer eSettings Management allows you to inspect hardware specifications and to monitor the system health status. Furthermore, Acer eSettings Management enables you to optimize your Windows operating system, so your computer runs faster, smoother and better.

Acer eSettings Management also:

❑ Provides a simple graphical user interface for navigating through the program effortlessly.
❑ Displays general system status and advanced monitoring for power users.
❑ Logs when a hardware component has been removed or replaced.
❑ Permits you to migrate personal settings.
❑ Keeps a history log of all alerts that were previously issued.

Acer eNet Management

Acer eNet Management helps you to quickly and easily connect to both wired and wireless networks in a variety of locations. To access this utility, either click on the "Acer eNet Management" icon on your notebook, or start the program from the Start menu. You also have the option to set Acer eNet Management to start automatically when you boot up your PC.

Acer eNet Management automatically detects the best settings for a new location, while offering you the freedom to manually adjust the settings to match your needs, simply by right-clicking on the icon in the taskbar.

Acer eNet Management can save network settings for a location to a profile, and automatically apply the appropriate profile when you move from one location to another. Settings stored include network connection

settings(IP and DNS settings, wireless AP details, etc.), as well as default printer settings. Security and safety concerns mean that Acer eNet Management does not store username and password information.
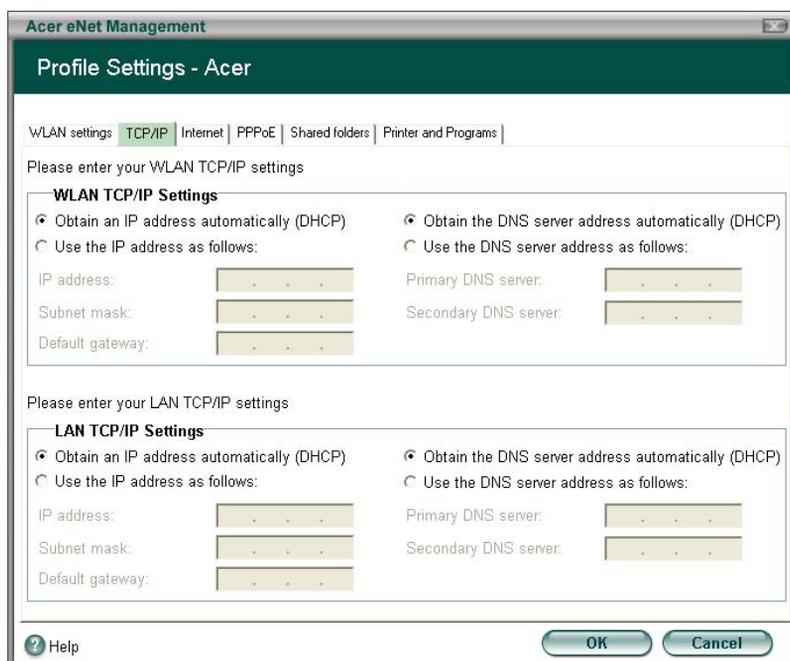
Acer ePower Management

Acer ePower Management features a straightforward user interface. To launch it, select Acer ePower Management from the Empowering Technology interface, or double-click the Acer ePower Management icon in the task tray.

Acer Mode

The default setting is "Maximum Performance." You can adjust CPU speed, LCD brightness and other settings, or click on buttons to turn the following functions on/off: Wireless LAN, Bluetooth, CardBus, Memory Card, Audio, and Wired LAN.

DC Mode

To suit your usage, there are four pre-defined profiles - Entertainment, Presentation, Word Processing, and Maximum Battery. Or, you can define up to three of your own profiles.

Create new power scheme

1. Assign a name for the new scheme.

2. Choose existing scheme to use as a template.

3. Select whether used for mains (AC) or batery mode.

4. Choose which power options best fit your needs, then click OK.

5. The new profile will appear on the main screen.

Battery status

For real-time battery life estimates based on current usage, referto the panel on the lower left-hand side of the window.
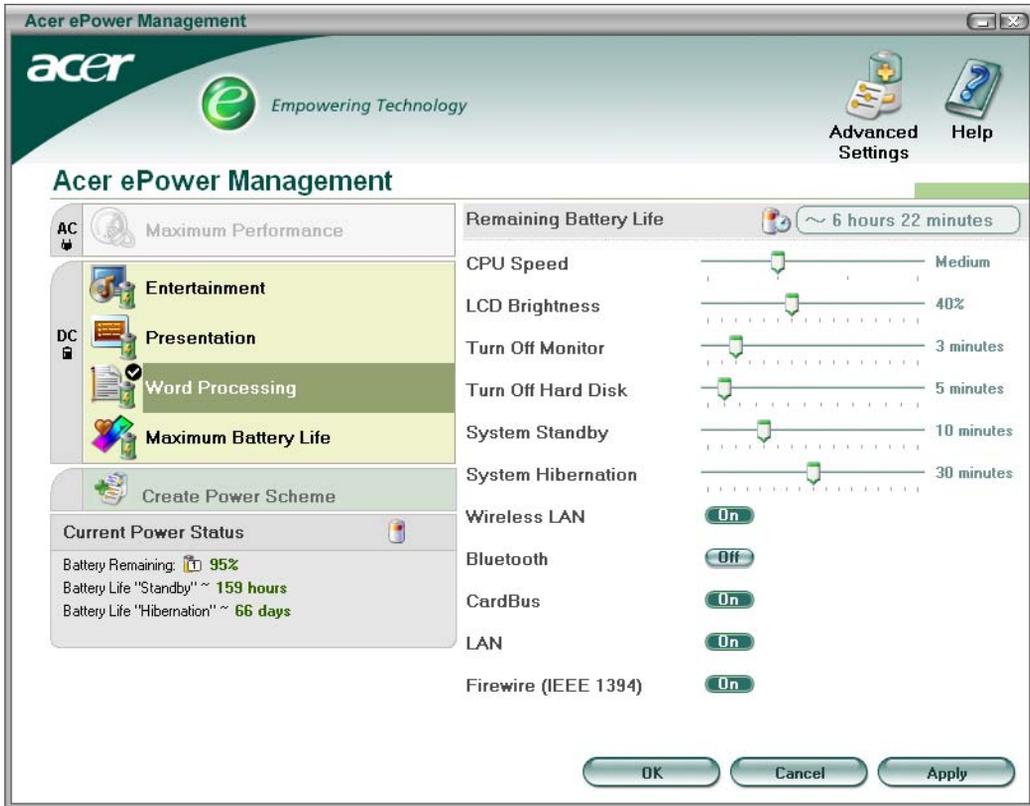
You can also click "Advanced Settings" to:

❑ Set alarms.
❑ Re-load factory defaults.
❑ Select what actions will be taken when the cover is closed, and set passwords for accessing the system after Hibernation or Standby.
❑ View information about Acer ePower Management.
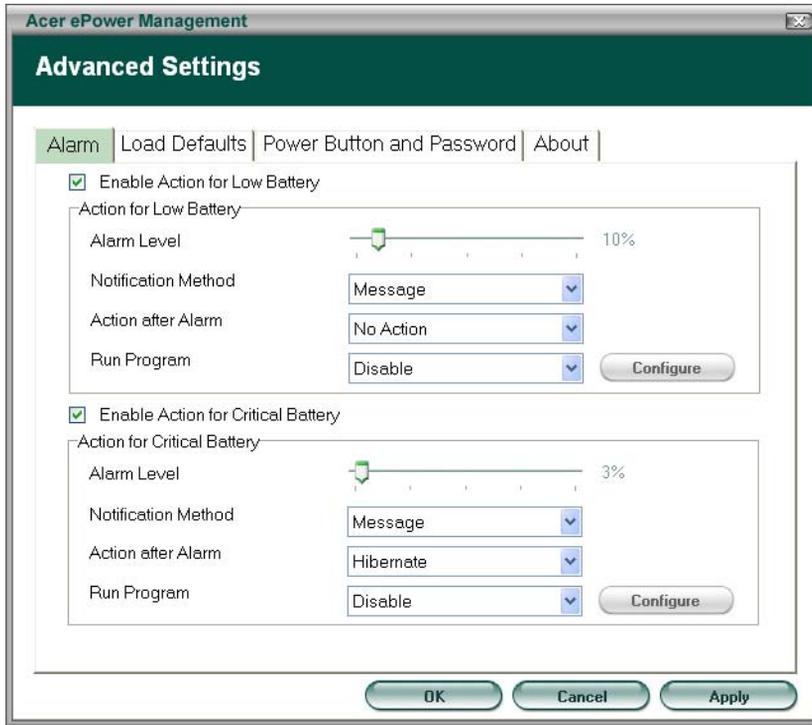
Acer ePresentation Management

Acer ePresentation Management lets you select from two of the most common projector resolutions: XGA and SVGA.
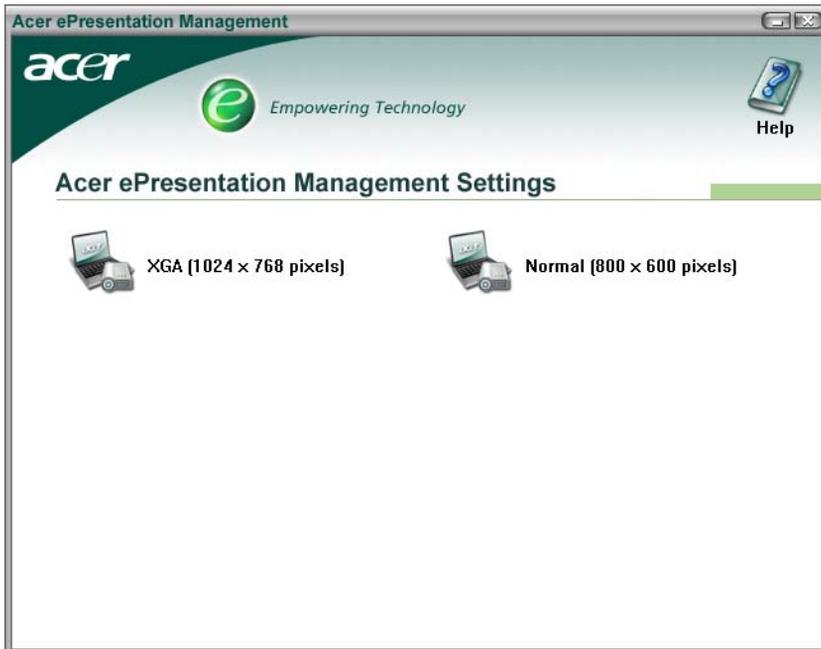
Hardware Specifications and Configurations

Processor

Item	Specification
CPU type	Intel® Pentium® M processor 740/750/760/770/780, Intel® Celeron® M processor 370/380/390
CPU package	Micro-FCPGA
CPU core voltage	Depend on DVI
CPU I/O voltage	1.2875V

System Board Major Chips

Item	Controller
System core logic	Intel® 915GM/915PM/910GML + ICH6M
Super I/O controller	ICH6M LPC interface
Audio controller	Azalia Audio Controller ALC861
Video controller	UMA for 915GM and 910 GML Nvidia G72MV
Hard disk drive controller	ICH6M
Keyboard controller	ENE KB3910
DVI controller	CH7307
PCMCIA controller	ENE CB 1410
DDR-soDIMM controller	915GM/915PM

BIOS

Item	Specification
BIOS vendor	Phoenix
BIOS Version	Phoenix First BIOS
BIOS ROM type	1MB CMOS Boot Block Flash Memory
BIOS ROM size	1MB
BIOS package	40 pin TSOP
BIOS password control	Set by setup manual

System Memory

Item	Specification
Memory controller	915GM/915PM/910GML
Memory size	256MB/512MB/1G
DIMM socket number	2
Supports memory size per slot	1024 MB
Supports maximum memory size	2GB (with dual soDIMM modules)
Supports DIMM type	DDRII SDRAM Standard
Supports DIMM Speed	533 MHz
Supports DIMM voltage	1.8V
Memory module combinations	You can install memory modules in any combinations as long as they match the above specifications.

.

LAN Interface

Item	Specification
Supports LAN protocol	10/100Mbps PCI LAN
LAN chip	Realtek 8100CL
LAN connector type	RJ45
Feature	Support WOL from S5, support jumbo frame, file deployment

.

Wireless LAN

Item	Specification
Card Type	Mini-PCI
Mode	802.11 a/b/g(Intel 2915ABG) 802.11 b/g (Intel 2200BG)
Antenna	Built in 2 antenna(Has to be placed on the top of LCD on the sides of LCD latch, the wire of antenna can't be placed under the panel) Must use WNC PIFA type
Support	Wi-Fi, WPA2, WMM, CCX V3/V4

Modem Interface

Item	Specification
Data modem data baud rate (bps)	56K ITU
Supports modem protocol	V.90/V.92, WWDAA Apply CISPR22 Wake-on-Ring ready
Modem connector type	RJ11

VGA

Notice	UMA	Discrete
Chipset for suitable VGA type	915GM/910GML	Nvidia G72MV
Video RAM	up to 128MB	up to 256MB

USB Port

Item	Specification
USB compliancy level	2.0
OHCI	USB 2.0
Number of USB port	5
Location	Rear Side *2 Right Side *3

Audio Port

Item	Specification
Audio Controller	Azalia Audio Controller (Realtek ALC883)
Audio onboard or optional	Built-in
Mono or Stereo	Stereo
Resolution	SNR>85, High-performance DACs with 95dB SNR, ADCs 85 dB SNR
Compatibility	Microsoft PC99/2100, AC97 2.3 & WHQL/WLP2.0
Mixed sound source	CD
Sampling rate	All DACs support 44.1K/48K/96K/192K sample rate All ADCs support 44.1K/48K/96K sample rate
Internal microphone	one internal microphone(2 digital picrophone array)
Internal speaker / Quantity	Yes / 2(at least 1.5W/30cc for each)
Support	VoIP/Universal jack

PCMCIA Port

Item	Specification
PCMCIA controller	ENE CB1410
Supports card type	Type II
Number of slots	One
Access location	Right Side
Supports 32 bit CardBus	Yes

Keyboard

Item	Specification
Keyboard controller	ENE KB3910
Keyboard vendor & model name	New Acer Ergo keyboard
Total number of keypads	❑ 105/106 keys standard keyboard
Touchpad with 4-way integrated scroll button	Yes

Keyboard

Item	Specification
Feature	❑ Support Windows keys and application keys
	❑ Standard pitch, 2.5 mm travel length
	❑ Hotkey controls
	❑ embedded numberic keypad
	❑ Multi-Langue support
	❑ Spill-proof
Four easy-launch buttons	❑ Internet browser
	❑ email with LED
	❑ Acer Empowering
	❑ one user-programmable button

Battery

Item	Specification
Vendor & model name	Panasonic/Sanyo/Sony
Battery Type	Li-ion
Number of battery cell	6-cell 2000mAh 8-cell 2400mAh
Package configuration	
Pin 1 Pin 2	BATT+: Battery+, Battery Positive Terminal
Pin 3	ID : Identify Pin (Note 1)
Pin 4	B/I : Battery-In Pin
Pin 5	TS : Connect to Thermister
Pin 6	SMD : SMBus data interface I/O pin
Pin 7	SMC : SMBus clock interface I/O pin
Pin 8 Pin 9	GND : Battery Negative Terminal

17.1" LCD Panel

Item	Specification			
Vendor & model name	AUO B170PW03 V3 AUO B170PW03 V4	QDI QD17TL02-06	SAMSUNG LTN170WX-L05-1 LTN170WX-L05-H	LG LP171WP4-TL02
Screen Diagonal (mm)	17.1" WXGA	17.1" WXGA	17.1" WXGA	17.1" WXGA
Active Area (mm)	367.20(W)x229.50(H)	367.20(W)x229.50(H)	367.20(W)x229.50(H)	367.20(W)x232.90(H)
Display resolution (pixels)	1440x3(RGB)x900	1440x3(RGB)x900	1440x3(RGB)x900	1440x3(RGB)x900
Pixel Pitch(mm)	0.255(per one triad)x0.255	0.255(per one triad)x0.255	0.255(per one triad)x0.255	0.255(per one triad)x0.255
Pixel Arrangement	RGB vertical stripe	RGB vertical stripe	RGB vertical stripe	RGB vertical stripe
Display Mode	Normally white	Normally white	Normally white	Normally white

17.1" LCD Panel

Item	Specification			
Surface Treatment	non-glare type(V3) glare type(V4)	Hard coating(3H) glare type	non-glare type(1) glare type(H)	glare type
Typical White Luminance (cd/m^2) also called Brightness	200(Typical)	200(Center Typical)	200(Typical)	200(Typical)
Contrast Ratio	300 :1(Typical)	300:1(Min)	350(Typical)	350(Min)
Response Time (Optical Rise Time+Fall Time)msec	16(Typical)	25(Typical)	25(Typical) 35(Max)	25(Typical)
Normal Input Voltage of Power Supply	+3.3V(Typical)	+3.3V(Typical)	+3.3V(Typical)	+3.3V(Typical)
Power Consumption (watt)	8(Max)	4.7(Typical)	4.320(typ)	4.78(Typ)
Weight	700g(Max)	750g	750(Typical)	670(Typical)
Physical Size(mm)	382.2(W)x244.5(H)x 6.6(D) (Max)	382.7(H)x245.1(V)x 7.0(T)Max	382.7(H)x245(V)x7 .0(T)Max	382.2(W)x244.5(H)x6.5(D) (Max)
Electrical Interface	2 channel LVDS	2 channel LVDS	3.3V LVDS	2 channel LVDS
Support Color	Native 262K colours	Native 262K colours	Native 262K colours	Native 262K colours
Viewing Angle (typ.) Horizontal: Right/Left Vertial: Upper/Lower	45/45 20/35	45/45 15/35	65/65 45/55	45/45 15/35
Temperature Range($^\circ$C) Operating Storage (shipping)	0 to +50 -20 to +60	0 to +50 -25 to +60	0 to +50 -20 to +60	0 to +50 -20 to +60

AC Adapter

Item	Specification
Vendor & model name	LITEON-65W, PA-1650-02 WR YELLOW 1.7X5.5X11 LF
Input Requirements	
Maximum input current (A, @100Vac, full load)	1.6A @100Vac input and maximum load
Nominal(Rated) frequency (Hz)	50 or 60 and single phase
Frequency variation range (Hz)	47 - 63
Nominal voltages (Vrms)	100-127(low range) 200-240(high range)
Efficiency	High efficiency 83% minimum, full load, warm-up condition.
Output Ratings (CV mode)	
Rated output voltage	Offers rated output voltage 19.0V
Voltage Range	18.05V to 19.95V
Noise + Ripple	380mV
Rated Power	65Watts continuously at all specified conditions
Output current	0 A (min.) to 4.74A (max.)
Dynamic Output Characteristics	

Item	Specification
Start-up time	Shall less than 5 sec
Hold up time	at least 5ms (@115 Vac input, full load)
Over Voltage Protection (OVP)	29V
Over Current Protection(OCP)	Output current limit is 5A(Max mode)
Short circuit protection	Output can be shorted without damage, and auto recovery
Electrostatic discharge (ESD)	15kV (at air discharge) 8kV (at contact discharge)
Dielectric Withstand Voltage	
Primary to secondary	2150VDC for 1 sec
Leakage current	less than 100uA
Regulatory Requirements	1. CISPR 22 Class B 2. VCCI Class II

Hard Disk Drive Interface

Item		Specification	
Vendor & Model Name	Segate SATAST98823AS/ HGST SATA 1.5G NCQ MORAGA+HTS541080G9SA 00	Segate SATA ST9100824AS LF/HGST NCQMORAGA+HTS541010 G9AT00	Segate SATA ST9120821AS LF/ Toshiba SATAI1.5G W/ NCQ MK1234GSX
Capacity (MB)	80000	100000	120000
Bytes per sector	1024/512	512	512
Data heads	3/4	4	4
Drive Format			
Disks	2	2	2
Spindle speed (RPM)	5400 RPM	5400 RPM	5400 RPM
Performance Specifications			
Buffer size	8192KB	8192KB	8192KB
Interface	Serial ATA	Serial ATA	Serial ATA
Max. media transfer rate (disk-buffer, Mbytes/s)	57.6/61.6	57.6/61.6	57.6
Data transfer rate (host~buffer, Mbytes/s)	150 MB/Sec. SATA 1.0	150 MB/Sec.	150 MB/Sec.
DC Power Requirements			
Voltage tolerance	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%

Item	Specification		
Vendor & Model Name	Segate ST960812A	Segate ST980829A	Segate ST9100825A
Capacity (MB)	60000	80000	100000
Bytes per sector	512	512	512
Data heads	2	3	4
Drive Format			
Disks	1	2	2
Spindle speed (RPM)	4200 RPM	4200 RPM	4200 RPM
Performance Specifications			
Buffer size	8184KB	8184KB	8184KB
Interface	Parallel ATA	Parallel ATA	Parallel ATA
Max. media transfer rate (disk-buffer, Mbytes/s)	56.25	56.25	56.25
Data transfer rate (host~buffer, Mbytes/s)	100 MB/Sec.(Ultra DMA Mode 5)	100 MB/Sec.(Ultra DMA Mode 5)	100 MB/Sec.(Ultra DMA Mode 5)
DC Power Requirements			
Voltage tolerance	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%

8X DVD Dual Interface

Item	Specification
Vendor & model name	PHILIPS SDVD8441
Performance Specification	
Transfer rate (KB/sec)	Sustained: DVD:10.9Mbytes/sec(Typ) CD: 3650Kbytes/sec(Typ)
Access Time(Typical)	DVD: Random Access: 130 ms DVD:Full Stroke: 240ms CD:Random Access:130ms CD:Full Stroke:240ms
Buffer Memory	2MB
Interface	ATA/ATAPI-5

8X DVD Dual Interface

Item	Specification
Applicable disc format	DVD(read): DVD-ROM 5,9,10,18, DVD-VIDEO, DVD-AUDIO, DVD-R, DVD-R 3.95G, DVD-R MULTI BORDER, DVD-RW, DVD+R, DVD+R DL, DVD+R MULTI-SESSION, DVD+RW CD(read):CD-DA, CD-ROM Mode-1, CD-ROM/XA Mode-2 Form-1 Form-2, CD-I, CD-I Bridge, Video-CD(MPEG-1), Karaoke CD, Photo-CD, Enhanced CD, CD Plus, CD Extra, i-trax CD, CD-Text, CD-R, and CD-RW DVD(write): DVD Data&Video CD(write): CD-DA, CD-ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2 Form-2, CD-i, Video-CD, CD-Text
Loading mechanism	Load: Manual load
Power Consumption	Max. 1500 mA
Input Voltage	5 V +/- 5 % (Operating)

24X Combo Drive Interface

Item	Specification	
Vendor & model name	PHILIPS SCB5265	LITEON SSC-2485K
Performance Specification		
Transfer rate (KB/sec)	Sustained: DVD:Max 10.56Mbytes/sec CD: 3600Kbytes/sec	Sustained: DVD:Min 10.15Mbytes/sec CD: 3500 Kbytes/sec
Access Time(Typical)	DVD: Random Access: 125 ms DVD:Full Stroke: 165ms CD:Random Access:105ms CD:Full Stroke:160ms	DVD: Random Access: 100 ms DVD:Full Stroke: 190ms CD:Random Access:95ms CD:Full Stroke:180ms
Buffer Memory	2MB	2MB
Interface	Compliant to ATA/ATAPI-5	ATA/ATAPI-6, MMC-3 and SFF8090 Ver5, Revision 1.2.
Applicable disc format	DVD(read):DVD 5, 9, 10, 18, DVD-ROM, DVD-Video, DVD-R 3.95G, DVD-R 4.7G, DVD-RW, DVD+R, DVD+RW, Multi-Border DVD-R/DVD-RW, Multi-Session DVD+R, DVD+RW, DVD-RAM CD(write): CD-DA, CD ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2 Form-2, CD-I , Video-CD(MPEG-1), CD-Text CD(write): CD-DA, CD-ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2, CD-i, Video-CD, CD-Text	CD: CD-DA, CD-ROM Mode-1, CD-ROM XA Mode-2 Form-1 and Form-2, CD-I Ready, Viceo-CD(MPEG-1), Karaoke-CD, PhotoCD(MultiSession), Enhance CD, CD extra, I-Trax CD and UDF

24X Combo Drive Interface

Item	Specification	
Loading mechanism	Load: Manual load	Manual load/DC brushless motor system
Power Requirement	Max. 1300mA	Max. 1200mA
Input Voltage	5 V +/- 5 % (Operating)	5 V +/- 5 % (Operating)

8X Super Multi Interface

Item	Specification	
Vendor & model name	Liteon SSM 8515S	Panasonic UJ-845
Performance Specification		
Transfer rate (KB/sec)	Sustained: DVD:Min 10.00Mbytes/sec CD: 3500Kbytes/sec	Sustained: DVD:Min 10.5Mbytes/sec CD: 3600 Kbytes/sec
Access Time(Typical)	DVD: Random Access: 130 ms DVD:Full Stroke: 250ms CD:Random Access:110ms CD:Full Stroke:220ms	DVD: Random Access: 180 ms DVD:Full Stroke: 360ms CD:Random Access:150ms CD:Full Stroke:270ms
Buffer Memory	2MB	2MB
Interface	Compliant to ATA/ATAPI-6, MMC-4 and SFF8090 Ver5	ATA/ATAPI-6, MMC-3 and SFF8090 Ver5, Revision 1.2.
Applicable disc format	CD-DA, CD ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2 Form-2, CD-I , Video-CD(MPEG-1), CD-Text, PhotoCD, Enhance CD, CD extra, I-Trax CD and UDF DVD-ROM, DVD-Video, DVD-Audio, DVD-R single/multi border, DVD+R single/multi session, DVD-RW, DVD+RW, DVD-RAM	CD-DA, CD ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2 Form-2, CD-I , Video-CD(MPEG-1), CD-Text, PhotoCD, Enhance CD, CD extra, I-Trax CD and UDF DVD-ROM, DVD-Video, DVD-Audio, DVD-R single/multi border, DVD+R single/multi session, DVD-RW, DVD+RW, DVD-RAM
Loading mechanism	Load: Manual load/DC brushless motor system	Manual load
Power Requirement	Max. 1500mA	Max. 2100mA
Input Voltage	5 V +/- 5 % (Operating)	5 V +/- 5 % (Operating)

Power Management

ACPI Mode	Power Management
Mech. Off (G3)	All devices in the system are turned off completely.
Soft Off (G2/S5)	OS initiated shutdown. All devices in the system are turned off completely.
Working (G0/S0)	Individual devices such as the CPU and hard disk may be power managed in this state.

Power Management

ACPI Mode	Power Management
Sleeping State (S3)	CPU Power Down VGA Power Down PCMCIA Suspend Audio Power Down Hard Disk Power Down Super I/O Power Down
Sleeping State (S4)	Also called Hibernate state. System saves all system states and data onto the disk prior to power off the whole system.

Dimensions and Weight

Item	Details	
Model	Aspire 1690	Aspire 3510
Deminsions	400mm(W) x 295mm(D) x 31.4~39.9mm(H)	
Weight	3.79Kg	

Environmental Requirements

Item	Specification
Temperature	
Operating	+5 ~ +35°C
Non-operating	-20 ~ +65°C (storage package)
Humidity	
Operating	20% ~ 80% without condensation
Altitude	Operating sea level 0 to 10,000ft
	Storage sea level 0 to 40,000ft

System Utilities

BIOS Setup Utility

The BIOS Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/Output System).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 4 Troubleshooting when problem arises.

To activate the BIOS Utility, press **m** during POST (when "Press <F2> to enter Setup" message is prompted on the bottom of screen).

The setup screen displays BIOS as follows:Navigating the BIOS Utility

Function	Item
Information	Display the system informations
Main	Allows the user to specify standard IBM PC AT system parameters
Advanced	Provides advanced settings of the system
Security	Provides security settings of the system
Boot	Allows the user to specify the boot options
Exit	Allows the user to save CMOS setting and exit Setup

During setup,all Fn function keys and power saving functions are disabled.

There are five menu options: Main, Advanced, Security, Boot and Exit.

Follow these instructions:

❑ To choose a menu, use the cursor left/right keys (zx).

❑ To choose a parameter, use the cursor up/down keys (wy).

❑ To change the value of a parameter, press p or q.

❑ Press ^ while you are in any of the menu options to go to the Exit menu.

❑ In any menu, you can load default settings by pressing t. You can also press u to save any changes made and exit the BIOS Setup Utility.

NOTE: You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen. Help for parameters are found in the Item Specific Help part of the screen. Read this carefully when making changes to parameter values.

Information

PhoenixBIOS Setup Utility				
Info.	**Main**	**Security**	**Boot**	**Exit**

CPU Type: Intel(R) Celeron(R) M processor   1.70GHz
CPU Speed   1700 MHz

IDE1 Model Name: HTS421260H9AT00-(PM)
IDE1 Serial Number: HKA210AJGKRMSB
System BIOS Version: v0.09
VGA BIOS Version: 1227

KBC Version: 07.06
Serial Number: 814G501003G6010006FKS00
Asset Tag Number: None
Product Name: TravelMate 5100
Manufacturer Name: Acer
UUID: 102ae5e0-839a-11da-9193-f492294eedab

F1 Help	↑↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	←→ Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit

Parameter	Description
CPU Type	This item will show the CPU information of the system.
CPU Speed	This item will show the CPU clock speed.
IDE1 Model Name	This item will show the Model name of HDD installed on Primary IDE master. The hard disk model name is automatically detected by the system. If there is no hard disk present or unknown type, "None" should be shown on this field
IDE1 Serial Number	This item will show the Serial number of HDD installed on Primary IDE master. If no Hard disk or other devices are installed on Primary IDE master, then it will display a blank line
System BIOS Version	This field reports the BIOS version of system
VGA BIOS Version	This field reports the VGA version of the system
KBC Version	This field reports the keyboard controller version of the system
Serial Number	This item will show the Serial number of system.
Asset Tag Number	This item will show the Asset Tag number of the system.
Product Name	This field will show product name.
Manufacturer Name	This field will show manufacturer name.
UUID	This will be visible only when there is an internal LAN device present.

Main

This menu provides you the information of the system.

```
                      PhoenixBIOS Setup Utility

     Info.      Main        Security       Boot       Exit


                                                    Item Specific Help

    System Time:          [11:59:38]
    System Date:          [01/16/2006]              <Tab>, <Shift-Tab>, or
                                                    <Enter> selects field.
    System Memory:        640 KB
    Extended Memory:      254 KB
    Video Memory:         128 MB


    Quiet Boot:           [Enabled]
    Power on Display:     [Auto ]
    Network boot:         [Enabled]
    F12 Boot Menu:        [Disabled]
    D2D Recovery:         [Enabled]




    F1   Help       ↑↓  Select Item    F5/F6  Change Values     F9   Setup Defaults
    Esc  Exit       ←→  Select Menu    Enter  Select  ▶ Sub-Menu  F10  Save and Exit
```

Parameter	Description
System Time / System Date	The hours are displayed with 24 hours format. The values set in these two fields take effect immediately.
System Memory	This field reports the memory size of system base memory. The size is fixed to 640KB.
Extended Memory	This field reports the memory size of the extended memory in the system. Extended Memory size = Total memory size - 1 MB
Video Memory	VGA Memory size = 128MB
Quiet Boot	Customer Logo display will be shown during POST when it is selected.
Power on display	**Auto**: During power on process, the system will detect if any display device is connected on external video port. If any external display device is connected, the power on display will be in CRT (or projector) only mode. Otherwise it will be in LCD only mode. **Both**: Simultaneously enable both the integrated LCD screen and the system's external video port (for an external CRT or projector).
Network boot	When this is selected, Boot from LAN feature is enabled. When this is not selected, Boot from LAN feature is then disabled.

Parameter	Description
F12 Boot Menu	When this is selected, users can modify device boot priority by pressing F12 key during POST. When this is not selected, device boot priority will not be adjustable during POST.
D2D Recovery	Allow user to enable/disable the Disk-to-Disk recovery

Security

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

PhoenixBIOS Setup Utility				
Info.	Main	Security	Boot	Exit

		Item Specific Help
Supervisor Password Is:	Clear	
User Password Is:	Clear	
		Supervisor Password controls accesses of the setup utility.
Set Supervisor Password	[Enter]	
Set User Passord	[Enter]	
Primary HardDisk Security	[Disabled]	
Password on Boot:	[Disabled]	

F1 Help	↑↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	←→ Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
Supervisor Password Is	N/A	N/A
User Password Is	N/A	N/A
HDD Password Is	N/A	N/A
Set Supervisor Password Set User Password	Press Enter to set the administrator password. When set, this password protects the BIOS Setup Utility from unauthorized access. [Set]: System password is set [Clear]: System password is not set	Length -- No more than 8 characters Characters -- 0-9, A-Z (not case sensitive)

Parameter	Description	Option
Set HDD Password	When shown as [Locked], the hard drive password currently can not be changed or disabled. To change or disable it, turn off the system and enter Setup immediately after turning it back on. Press [Enter] to input change, or disable hard drive password.	**Enter**
Password on boot	Defines whether a password is required or not while the events defined in this group happened. The following sub-options are all requires the Supervisor password for changes and should be grayed out if the user password was used to enter setup. Allows the user to specify whether or not a password is required to boot.	**Disabled** Enabled

Set Supervisor/User Password

If password on boot is required, the password must be set otherwise it cannot be enabled.

The formats of the password are as follows:

Length   No more than 8 characters

Characters   0-9,A-Z (not case sensitive)

While these fields are highlighted and press "Enter", a window similar to the following is shown:

```
          Set SupervisorPassword

     Enter New Password        [            ]

     Confirm New Password    [            ]
```

If there is an old password then setup will prompt with the following window instead and a current password will be required to be entered at first:

```
          Set Supervisor Password

     Enter current password    [            ]

     Enter New Password        [            ]

     Confirm New Password    [            ]
```


User can now type password in field "Enter New Password", and re-enter password in field "Confirm New Password" for verification.

If the verification is OK:

The password setting is complete after user presses enter.

```
Setup Notice

Changes have been saved.

[ continue]
```

If the current password entered does not match the actual current password:

```
Setup Warning

Invalid password

Re-enter Password

[ continue]
```

If the new password and confirm new password strings do not match:

```
Setup Warning

Password do not match

Re-enter Password
```

Boot

This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices includes the distette drive in module bay, the onboard hard disk drive and the CD-ROM in module bay and onboard LAN device.

PhoenixBIOS Setup Utility				
Info.	Main	Security	Boot	Exit

```
                                                        Item Specific Help

  +Hard Drive
  Floppy Drive                                 Use <↑> or <↓> to select
  CD-ROM/DVD Drive                             a device, then press
  Network Boot                                 <F6> to move it up the
                                               list, or <F5> to move
                                               it down the list.

                                               Press <Esc> to escape
                                               the menu.
```

F1 Help	↑↓ Select Item	F5/F6 Change Values	F9 Setup Defaults
Esc Exit	←→ Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit

Parameter	Description
Boot priority order	Keys used to view or configure devices: Up and Down arrows select a device. <+> and <-> movew the device up or down. <f> and <r> specifies the device fixed or removable. > <x> exclude or include the device to boot. <Shift +1> enables or disables a device. <1-4> Loads default boot sequence.

.

Exit

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

PhoenixBIOS Setup Utility					
Info.	Main	Security	Boot	Exit	

Exit Saving Changes

Exit Dicarding Changes

Load Setup Defaults

Discard Changes

Save Changes

Item Specific Help

Exit System Setup and save your changes to CMOS.

F1	Help	↑↓	Select Item	F5/F6	Change Values	F9	Setup Defaults
Esc	Exit	←→	Select Menu	Enter	Select ▶ Sub-Menu	F10	Save and Exit

The table below describes the parameters in this screen.

Parameter	Description
Exit Saving Changes	Exit System Setup and save your changes to CMOS
Exit Discarding Changes	Exit utility without saving Setup data to CMOS
Load Setup Default	Load default values for all SETUP items
Discard Changes	Load previous values from CMOS for all SETUP items
Save Changes	Save Setup Data to CMOS

Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

To disassemble the computer, you need the following tools:

❏ Wrist grounding strap and conductive mat for preventing electrostatic discharge

❏ Small Philips screw driver

❏ Philips screwdriver

❏ Plastic flat head screw driver

❏ Tweezers

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components. When you remove the stripe cover, please be careful not to scrape the cover.

Disassembly Procedure Flowchart

The flowchart on the succeeding page gives you a graphic representation on the entire disassembly sequence and instructs you on the components that need to be removed during servicing. For example, if you want to remove the main board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.
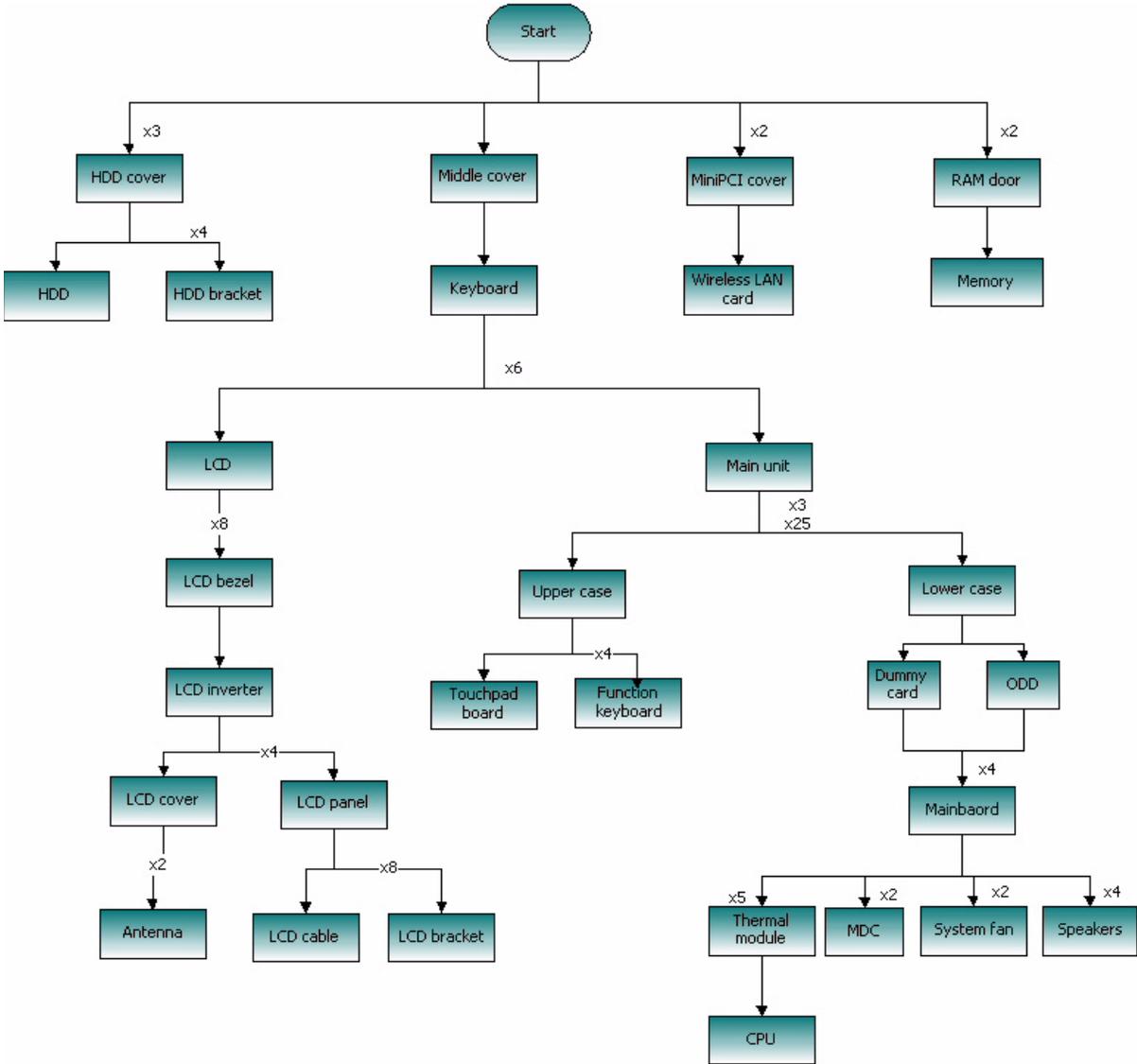
General Information

Before You Begin

Before proceeding with the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.

2. Unplug the AC adapter and all power and signal cables from the system.

3. Remove the battery pack.

NOTE: This product uses mylar or tape to fasten the FFC/FPC/connectors/cable, you may need to tear the tape or mylar before you disconnect different FFC/FPC/connectors.

NOTE: There are several types of screws used to secure bottom case and upper case assembly. The screws vary in length. Please refer the picture below, group the same type of screws together during service disassembling. Please also remember the screw location for each screw type. If you fasten the screw to the wrong location, the screw may be too long to damage the main board.

Removing the Battery Pack

1. Release the battery lock.
2. Slide the battery latch.
3. Remove the battery pack.

Removing the miniPCI/Memory/HDD Module/Keyboard

Removing the miniPCI and Memory

1. Remove the two screws securing the miniPCI cover.
2. Remove the miniPCI cover.
3. Disconnect the wireless antenna.

4. Remove the wireless LAN card.
5. Remove the two screws securing the RAM door and remove the RAM door.
6. Press the left and right latches to pop up the memory.
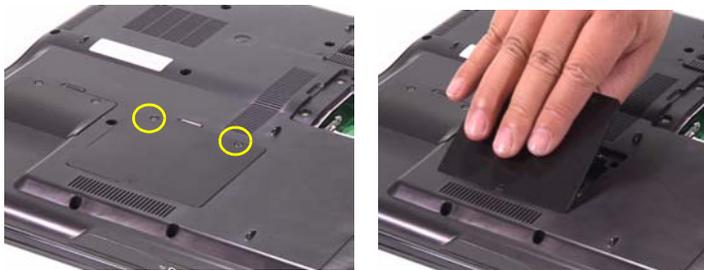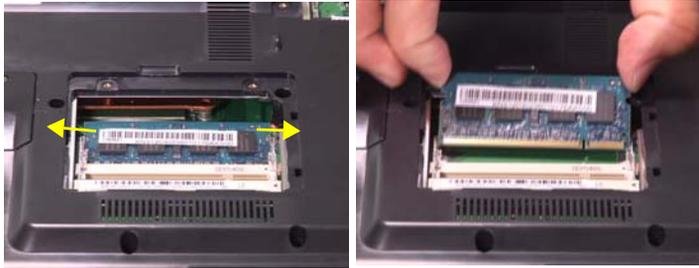
Removing the HDD

1. Remove the three screws that secure the HDD cover.
2. Remove the HDD cover.

3. Pull the HDD outward a little bit and remove the HDD.
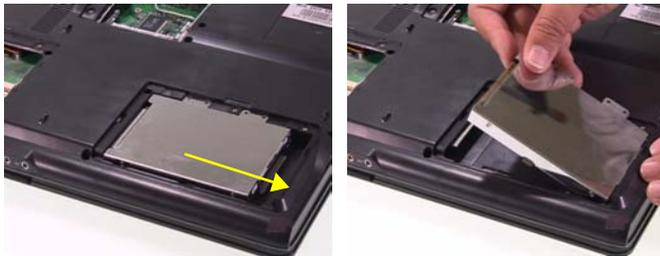
Removing the keyboard

1. Open the notebook.
2. Remove the middle cover.

3. Release the four keyboard latches.
4. Pull the keyboard and trun it over.
5. Disconnect the keyboard FFC from the mainboard.

6. Remove the keyboard from the main unit.
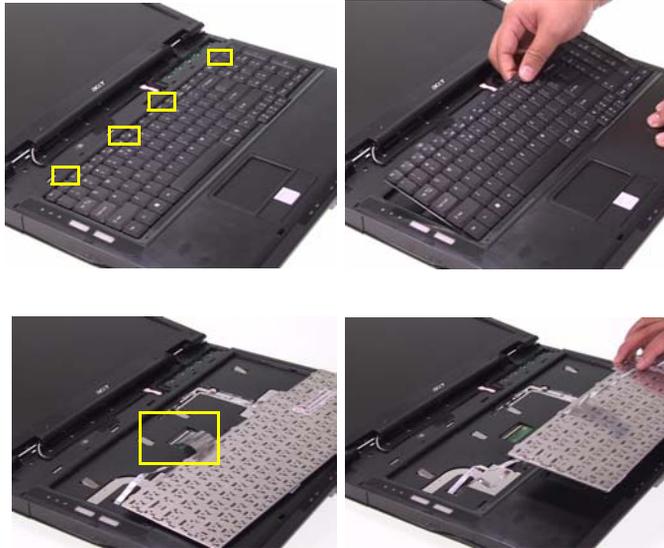
Seperate the LCD module and main unit

1. Disconnect the LCD cable from the mainboard.
2. Tear off the tape on the wireless antenna.
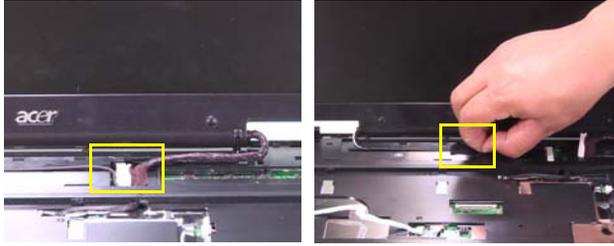
3. Pull out the wireless antenna.
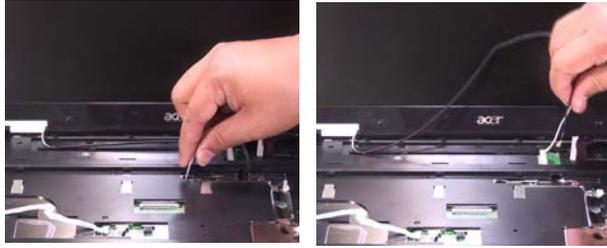
4. Remove the two screws securing the LCD hinge on the bottom.
5. Remove the two screws securing the LCD hinge on the rear panel.
6. Remove the two screws securing the LCD hinge as shown.
7. Remove the LCD module from the main unit.

Disassemble the main unit

Separate upper and lower case

1. Disconnect the touchpad board FFC from the mainboard
2. Disconnect the function keyboard FFC from the mainboard.

3. Remove the three screws on the upper case.
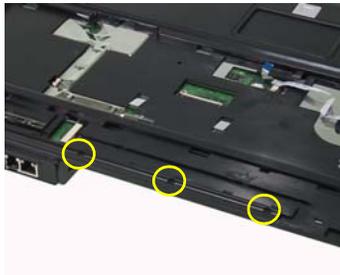
4. Remove the 25 screws on the lower case.

5. Lift up the upper case and disconnect the lid switch cable.

6. Separate the upper and lower case.

Removing the Function Keyboard

1. Disconnect the function keyboard FFC from the function keyboard.

2. Remove the four screws securing the function keyboard bracket.
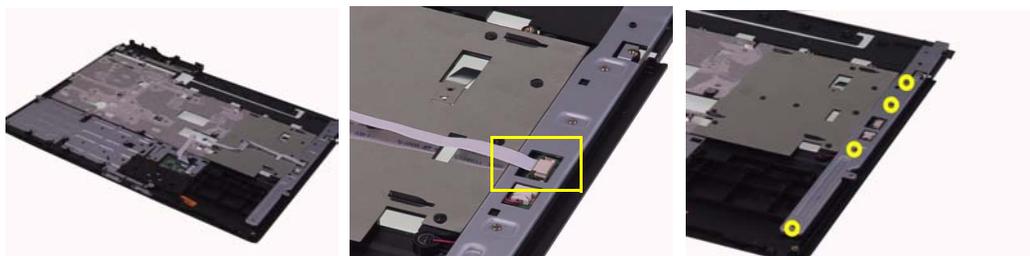
3. Remove the function keyboard bracket.

4. Pull the function keyboard up, disconnecting the microphone cable and remove the function keyboard.
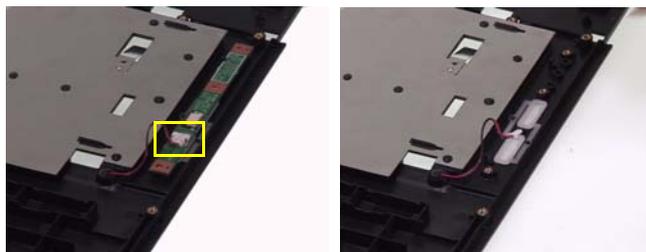
Removing the Touchpad Board

1. Disconnect the touchpad board FFC from the touchpad board.

2. Remove the touchpad bracket from the upper case.

3. Remove the touchpad board.

Removing the ODD

1. Remove the ODD from the main unit.
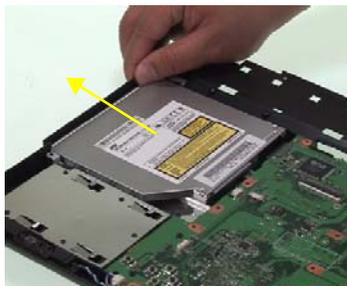
Removing the Dummy Card

1. Remove the dummy card from the main unit.

Removing the Mainboard

1. Disconnect the fan cable from the mainboard.
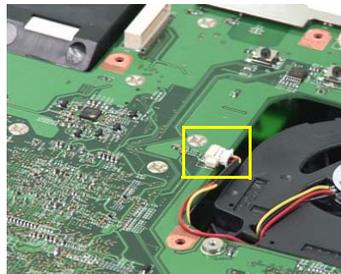
2. Disconnect the speaker cable from the mainboard.

3. Remove the four screws securing the mainboard.

4. Remove the mainboard.

Removing the System Fan

1. Remove the two screws securing the heatsink.

2. Remove the heatsink.
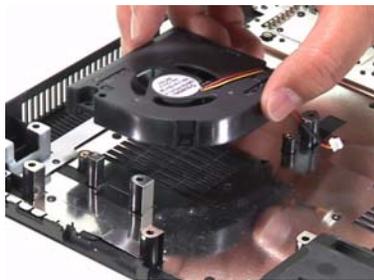
Removing the Speakers

1. Remove the four screws securing the left and right speakers.

2. Tear off the tape on the speaker cable.

3. Remove the speakers from the lower case.

Removing the MDC Module

1. Disconnect the MDC cable from the mainboard.
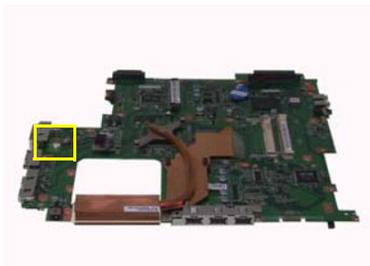
2. Remove the two screws securing the MDC board.

3. Remove the MDC module from the mainboard.
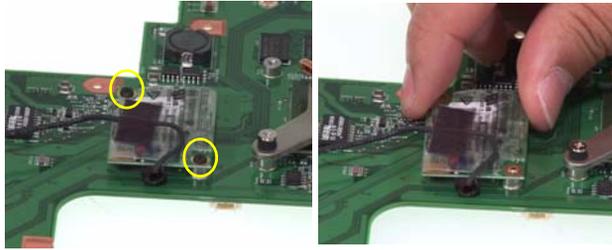
4. Disconnect the MDC cable from the MDC board and tear off the tape on MDC board.
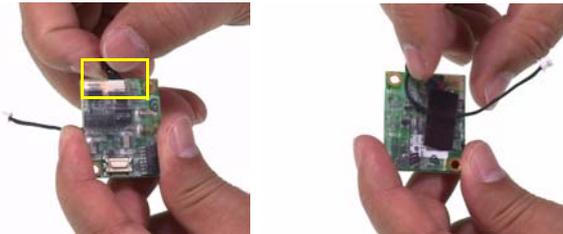
Removing the Heatsink Module

1. Remove the five screws securing the heatsink.

2. Remove the heatsink module from the mainboard.
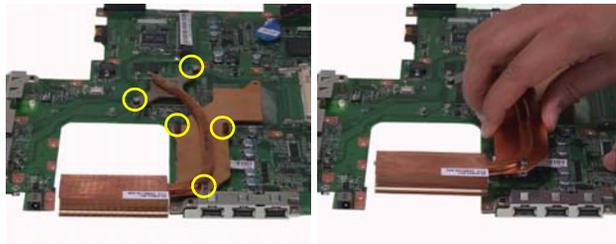
Removing the CPU

1. Turn the screw counterclockwise with a flat screw driver to release the CPU.

2. Remove the CPU from the CPU socket.

LCD Disassembly

1. Remove the eight caps on the LCD bezel.
2. Remove the eight screws securing the LCD bezel.

3. Remove the LCD bezel from the LCD module. Please release all latches as shown. Press the latch a little bit to remove the LCD bezel.

4. Remove the screw securing the inverter board.
5. Pull the inverter board and turn it over, disconnect the cables from the inverter board as shown, and remove the inverter board.

6. Remove the four screws securing the LCD panel.
7. Remove the LCD panel from the LCD cover.
8. Remove the left and right LCD hinge from the LCD cover.

9. Remove the two screws securing the antenna.

10. Remove the antennas from the LCD cover.

11. Remove the four screws securing the left LCD bracket.

12. Remove the left LCD bracket from the LCD panel.
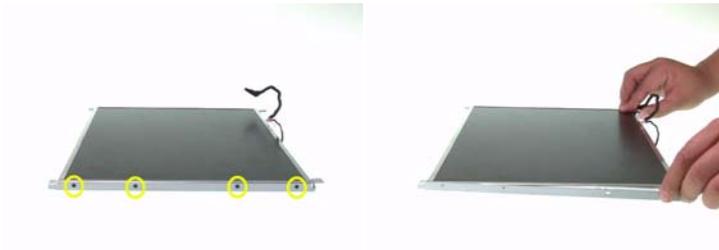
13. Remove the four screws securing the right LCD bracket.

14. Remove the right LCD bracket from the LCD panel.
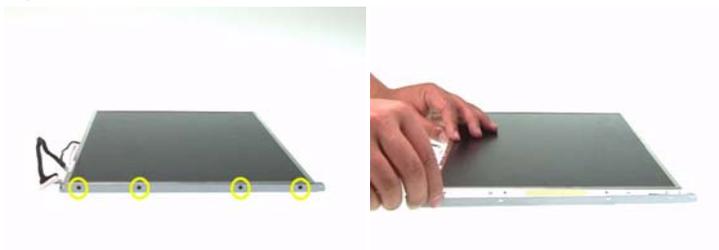
15. Tear off the tape on the LCD cable.

16. Disconnect the LCD cable then remove it.
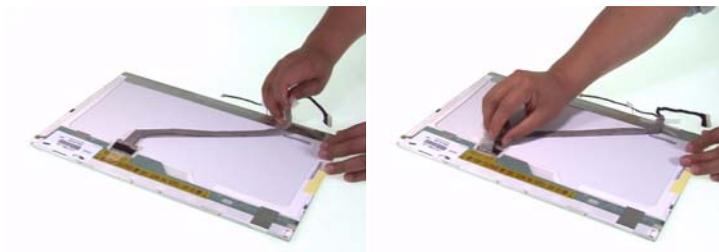
HDD Disassembly

1. Remove the four screws securing the HDD bracket.
2. Remove the HDD from the HDD bracket.

ODD Disassembly

1. Remove the two screws securing the ODD bracket.
2. Remove the ODD bracket from the ODD.

Troubleshooting

Use the following procedure as a guide for computer problems.

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

1. Duplicate symptom and obtain the failing symptoms in as much detail as possible.

2. Distinguish symptom. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.

3. Disassemble and assemble the unit without any power sources.

4. If any problem occurs, you can perform visual inspection before you fellow this chapter's instructions. You can check the following:

   power cords are properly connected and secured;

   there are no obvious shorts or opens;

   there are no obviously burned or heated components;

   all components appear normal.

5. Use the following table with the verified symptom to determine which page to go to.

Symptoms (Verified)	Go To
Power failure. (The power indicator does not go on or stay on.)	"Power System Check" on page 69.
POST does not complete. No beep or error codes are indicated.	"Power-On Self-Test (POST) Error Message" on page 71 "Undetermined Problems" on page 83
POST detects an error and displayed messages on screen.	"Error Message List" on page 72
Other symptoms (i.e. LCD display problems or others).	"Power-On Self-Test (POST) Error Message" on page 71
Symptoms cannot be re-created (intermittent problems).	Use the customer-reported symptoms and go to "Power-On Self-Test (POST) Error Message" on page 71 "Intermittent Problems" on page 82 "Undetermined Problems" on page 83

System Check Procedures

External Diskette Drive Check

If an error occurs with the internal diskette drive, reconnect the diskette connector on the system board.

If the error still remains:

1. Reconnect the external diskette drive/DVD-ROM module.
2. Replace the external diskette drive/CD-ROM module.
3. Replace the main board.

External CD-ROM Drive Check

Do the following to isolate the problem to a controller, drive, or CD-ROM. Make sure that the CD-ROM does not have any label attached to it. The label can cause damage to the drive or can cause the drive to fail.

Do the following to select the test device:

1. Boot from the diagnostics diskette and start the diagnostics program.
2. See if CD-ROM Test is passed when the program runs to CD-ROM Test.
3. Follow the instructions in the message window.

If an error occurs, reconnect the connector on the System board. If the error still remains:

1. Reconnect the external diskette drive/CD-ROM module.
2. Replace the external diskette drive/CD-ROM module.
3. Replace the main board.

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 character appears, make sure that the flexible cable extending from the keyboard is correctly seated in the connector on the system board.

If the keyboard cable connection is correct, run the Keyboard Test.

If the tests detect a keyboard problem, do the following one at a time to correct the problem. Do not replace a non-defective FRU:

1. Reconnect the keyboard cables.
2. Replace the keyboard.
3. Replace the main board.

The following auxiliary input devices are supported by this computer:

- ❏ Numeric keypad
- ❏ External keyboard

If any of these devices do not work, reconnect the cable connector and repeat the failing operation.

Memory check

Memory errors might stop system operations, show error messages on the screen, or hang the system.

1. Boot from the diagnostics diskette and start the doagmpstotics program (please refer to main board.
2. Go to the diagnostic memory in the test items.
3. Press F2 in the test items.
4. Follow the instructions in the message window.
NOTE: Make sure that the DIMM is fully installed into the connector. A loose connection can cause an error.

Power System Check

To verify the symptom of the problem, power on the computer using each of the following power sources:

1. Remove the battery pack.

2. Connect the power adapter and check that power is supplied.

3. Disconnect the power adapter and install the charged battery pack; then check that power is supplied by the battery pack.

If you suspect a power problem, see the appropriate power supply check in the following list:

❑ "Check the Battery Pack" on page 70

Check the Battery Pack

To check the battery pack, do the following:

From Software:

1. Check out the Power Management in control Panel

2. In Power Meter, confirm that if the parameters shown in the screen for Current Power Source and Total Battery Power Remaining are correct.

3. Repeat the steps 1 and 2, for both battery and adapter.

4. This helps you identify first the problem is on recharging or discharging.

From Hardware:

1. Power off the computer.

2. Remove the battery pack and measure the voltage between battery terminals 1(+) and 6(ground). See the following figure

3. If the voltage is still less than 7.5 Vdc after recharging, replace the battery.

To check the battery charge operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

If the battery status indicator does not light up, remove the battery pack and let it return to room temperature. Re-install the battery pack.

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

Touchpad check

If the touchpad doesn't work, do the following actions one at a time to correct the problem. Do not replace a non-defective FRU:

1. After rebooting, run Tracking Pad PS2 Mode Driver. For example, run Syn touch driver.

2. Run utility with the PS/2 mouse function and check if the mouse is working.

3. If the PS/2 mouse does not work, then check if the main board to switch board FPC is connected O.K.

4. If the main board to switch board FPC is connected well, then check if the FCC on touch pad PCB connects properly.

5. If the FFC on touch pad PCB connects properly, then check if LS851 JP1 Pin6=5V are pulese. If yes, then replace switch board. If no, then go to next step.

6. Replace touch pad PCB.

7. If the touch pad still does not work, then replace FPC on Track Pad PCB.

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

Power-On Self-Test (POST) Error Message

The POST error message index lists the error message and their possible causes. The most likely cause is listed first.

NOTE: Perform the FRU replacement or actions in the sequence shown in FRU/Action column, if the FRU replacement does not solve the problem, put the original part back in the computer. Do not replace a non-defective FRU.

This index can also help you determine the next possible FRU to be replaced when servicing a computer.

If the symptom is not listed, see "Undetermined Problems" on page 83.

The following lists the error messages that the BIOS displays on the screen and the error symptoms classified by function.

NOTE: Most of the error messages occur during POST. Some of them display information about a hardware device, e.g., the amount of memory installed. Others may indicate a problem with a device, such as the way it has been configured.

NOTE: If the system fails after you make changes in the BIOS Setup Utility menus, reset the computer, enter Setup and install Setup defaults or correct the error.

Index of Error Messages

Error Message List

Error Messages	FRU/Action in Sequence
Struck Key	See "Keyboard or Auxiliary Input Device Check" on page 68
System CMOS checksum bad - Default configuration used	RTC battery Run BIOS Setup Utility to reconfigure system, then reboot system.
Real time clock error	RTC battery Run BIOS Setup Utility to reconfigure system time, then reboot system. Main board
Previous boot incomplete - Default configuration used	"Load Default Settings" in BIOS Setup Utility. RTC battery Main baord
Invalid System Configuration Data	"Load Default Settings" in BIOS Setup Utility. Main board
Operating system not found	Enter Setup and see if fixed disk and drive A are properly identified. Dikette drive Hard disk drive Main board

Error Message List

No beep Error Messages	FRU/Action in Sequence
Power-on indicator turns off and LCD is blank.	Power source (battery pack and power adapter.) See "Power System Check" on page 69 Ensure every connector is connected tightly and correctly. Reconnect the DIMM. Main board.
Power-on indicator turns on and LCD is blank.	Power source (battery pack and power adapter.) See "Power System Check" on page 69 Reconnect the LCD connector Hard disk drive LCD cable LCD inverter LCD Main board
Power-on indicator turns on and LCD is blank. But you can see POST on an external CRT.	Reconnect the LCD connectors. LCD cable LCD inverter LCD Main board
Power-on indicator turns on and a blinking cursor shown on LCD during POST.	Ensure every connector is connected tightly and correctly. Main board

Phoenix BIOS 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
07h		Disable shadow and execute code from the ROM.
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
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
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
41h		Initialize extended memory for RomPilot.
42h		Initialize interrupt vectors
45h		POST device initialization
46h	2-1-2-3	Check ROM copyright notice

Code	Beeps	POST Routine Description
47h		Initialize I20 support
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
55h		Enable USB devices
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)
8Ah		Initialize Extended BIOS Data Area

Code	Beeps	POST Routine Description
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 Multi Processor 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
B1h		Inform RomPilot about the end of POST.
B2h		POST done- prepare to boot operating system
B4h	1	One short beep before boot
B5h		Terminate QuietBoot (optional)
B6h		Check password (optional)
B7h		Initialize ACPI BIOS
B9h		Prepare Boot
BAh		Initialize SMBIOS
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
C5h		PnPnd dual CMOS (optional)
C6h		Initialize notebook docking (optional)

Code	Beeps	POST Routine Description
C7h		Initialize notebook docking late
C8h		Force check (optional)
C9h		Extended checksum (optional)
CAh		Redirect Int 15h to enable remote keyboard
CBh		Redirect Int 13h to Memory Technologies Devices such as ROM, RAM, PCMCIA, and serial disk.
CCh		Redirect Int 10h to enable remote serial video
CDh		Re-map I/O and memory for PCMCIA
CEh		Initialize digitizer and display message.
D2h		Unknown interrupt
The following are 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 Multi Processor
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
F5h		Clear Huge Segment
F6h		Boot to Mini DOS
F7h		Boot to Full DOS

Index of Symptom-to-FRU Error Message

LCD-Related Symptoms

Symptom / Error	Action in Sequence
LCD backlight doesn't work	First, plug a monitor to CRT port. Next, enter BIOS utility to running "Load Default Settings" then reboot the system. Reconnect the LCD connectors. Keyboard (if the brightness function key doesn't work). LCD cable LCD inverter LCD Main board
LCD is too dark LCD brightness cannot be adjusted	Enter BIOS Utility to execute "Load Setup Default Settings", then reboot system. Reconnect the LCD connectors. Keyboard (if the brightness function key doesn't work). LCD cable LCD inverter LCD Main board
Unreadable LCD screen Missing pels in characters Abnormal screen Wrong color displayed LCD has extra horizontal or vertical lines displayed.	Reconnect the LCD cable LCD cable LCD Main board

Indicator-Related Symptoms

Symptom / Error	Action in Sequence
Indicator incorrectly remains off or on, but system runs correctly	Main board
HDD/CD-ROM active indicators cannot work	HDD/CD-ROM drive Device driver Main board

Power-Related Symptoms

Symptom / Error	Action in Sequence
Power shuts down during operation	Power source (battery pack and power adapter). See "Power System Check" on page 69. Battery pack AC adapter See if the thermal module is overheat (Heat sink or fan). Main board
The system cannot power-on.	Power source (battery pack and power adapter). See "Power System Check" on page 69. Battery pack Power adapter CPU Main board
The system cannot power-off.	In Windows XP operating system, hold and press the power switch for more than 4 seconds. If the system can power off, then the main board is OK. Verify OS in the HDD. Main board

Power-Related Symptoms

Symptom / Error	Action in Sequence
Battery can't be charged or discharged	See "Check the Battery Pack" on page 70. Battery pack Main board
System hang during POST	ODD/HDD/FDD/RAM module Main board

PCMCIA-Related Symptoms

Symptom / Error	Action in Sequence
System cannot detect the PC Card (PCMCIA)	PCMCIA slot assembly Main board
PCMCIA slot pin is damaged.	PCMCIA slot assembly
PC Card cannot be inserted or ejected	Check if the PCMCIA slot is blocked Main board

Memory-Related Symptoms

Symptom / Error	Action in Sequence
Memory count (size) appears different from actual size.	Enter BIOS Setup Utility to execute "Load Default Settings" then reboot system. RAM module Main board Check BIOS revision
System can power on, but you hear two long beeps: "B--, B--" and the LCD is blank.	Reinsert DIMM DIMM Main board

Speaker-Related Symptoms

Symptom / Error	Action in Sequence
In Windows, multimedia programs, no sound comes from the computer.	OS volume control Audio driver Speaker Main board
Internal speakers make noise or emit no sound.	Speaker Main board
Microphone cannot work	Audio driver Volume control in Windows XP Main board

Power Management-Related Symptoms

Symptom / Error	Action in Sequence
The system will not enter hibernation mode	Power option in Windows XP Hard disk drive Main board
The system doesn't enter standby mode after closing the lid of the portable computer.	Driver of Power Option Properties Lid close switch in upper case Main board

Power Management-Related Symptoms

Symptom / Error	Action in Sequence
The system doesn't resume from hibernation/standby mode.	Connect AC adapter then check if the system resumes from Standby/Hibernation mode. Check if the battery is low. Hard disk drive Main board
The system doesn't resume from standby mode after opening the lid of the portable computer.	LCD cover switch Main board
Battery fuel gauge in Windows doesn't go higher than 90%.	Refresh battery (continue use battery until power off, then charge battery). Battery pack Main board
System hangs intermittently.	Reconnect hard disk/CD-ROM drives. Main board

Peripheral-Related Symptoms

Symptom / Error	Action in Sequence
System configuration does not match the installed devices.	Enter BIOS Setup Utility to execute "Load Setup defaults", then reboot system. Reconnect hard disk/CD-ROM drives/FDD or other peripherals. Main board
External display does not work correctly.	Press Fn+F5, LCD/CRT/Both display switching Keyboard Main board
USB does not work correctly	Main board
Print problems.	Enter BIOS Setup Utility to execute "Load Default Settings" then reboot the system. Run printer self-test. Printer driver Printer cable Printer Main board
Parallel port device problems	Enter BIOS Setup Utility to execute "Load Default Settings" then reboot the system. Device driver Device cable Device Main board

Keyboard/Touchpad-Related Symptoms

Symptom / Error	Action in Sequence
Keyboard (one or more keys) does not work.	Reconnect the keyboard cable. Keyboard Main board
Touchpad does not work.	Reconnect touchpad cable. Touchpad board Main board

Modem/LAN-Related Symptoms

Symptom / Error	Action in Sequence
Internal modem does not work correctly.	Phone cable Driver Reconnect the Internal modem cable to the main board tightly. Main board
Internal LAN does not work correctly	Lan cable Driver Main board

NOTE: If you cannot find a symptom or an error in this list and the problem remains, see "Undetermined Problems" on page 83.

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 diagnostic test for the system board in loop mode at least 10 times.

2. If no error is detected, do not replace any FRU.

3. If any error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

Undetermined Problems

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

Follow these procedures to isolate the failing FRU (do not isolate non-defective FRU).

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

NOTE: Verify that the power supply being used at the time of the failure is operating correctly. (See "Power System Check" on page 69):

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

    ❏   PC Cards

4. Power-on the computer.

5. Determine if the problem has changed.

6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.

7. If the problem remains, replace the following FRU one at a time. Do not replace a non-defective FRU:

    ❏   System board

    ❏   LCD assembly

Jumper and Connector Locations

Top View
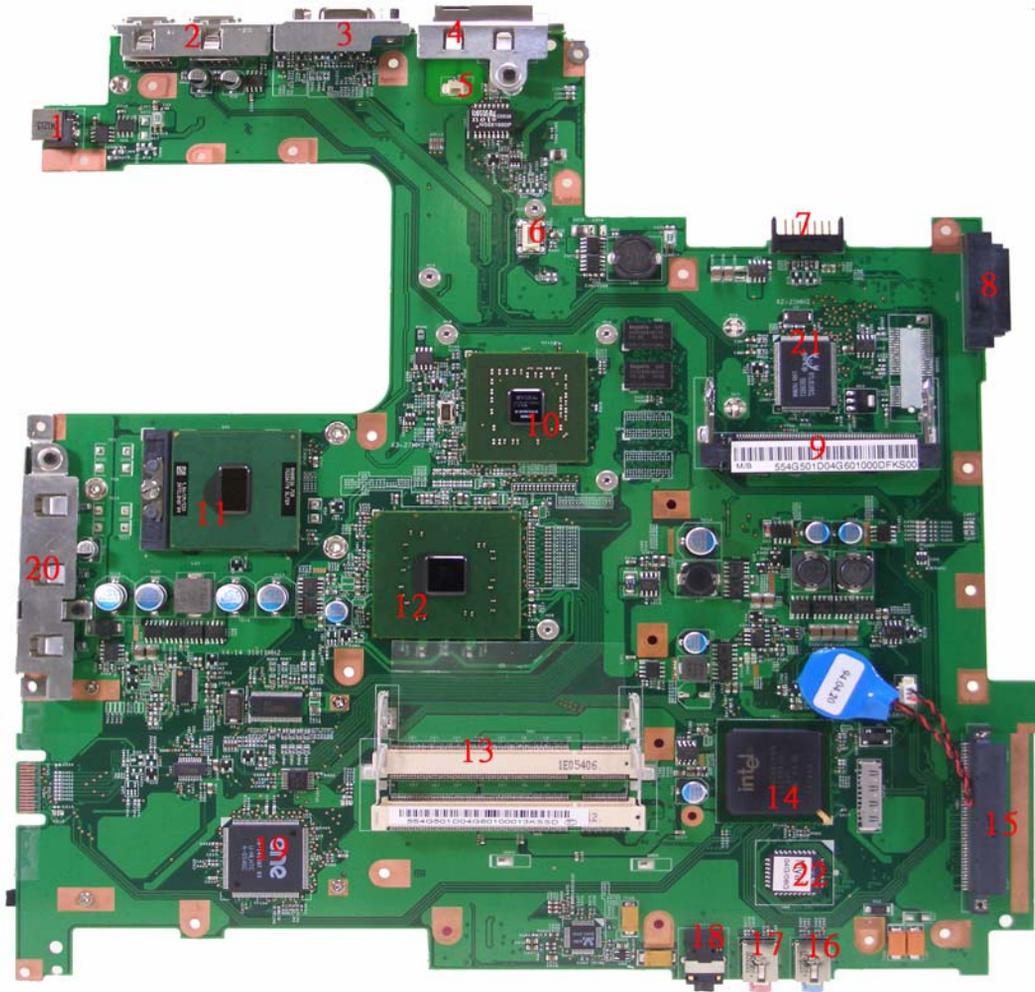
Item	Description	Item	Description
1	DC-in Jack	2	USB connector
3	CRT connector	4	RJ11&RJ45 connector

Item	Description	Item	Description
5	MDC connector	6	MDC board connector
7	Main battery connector	8	ODD connector
9	Mini PCI connector	10	VGA
11	CPU	12	North bridge
13	DIMM slot	14	South bridge
15	HDD connector	16	Line-in jack
17	Microphone-in jack	18	Line-out jack
19	Cardbus controller	20	USB connector
21	LAN controller	22	BIOS ROM

Bottom View
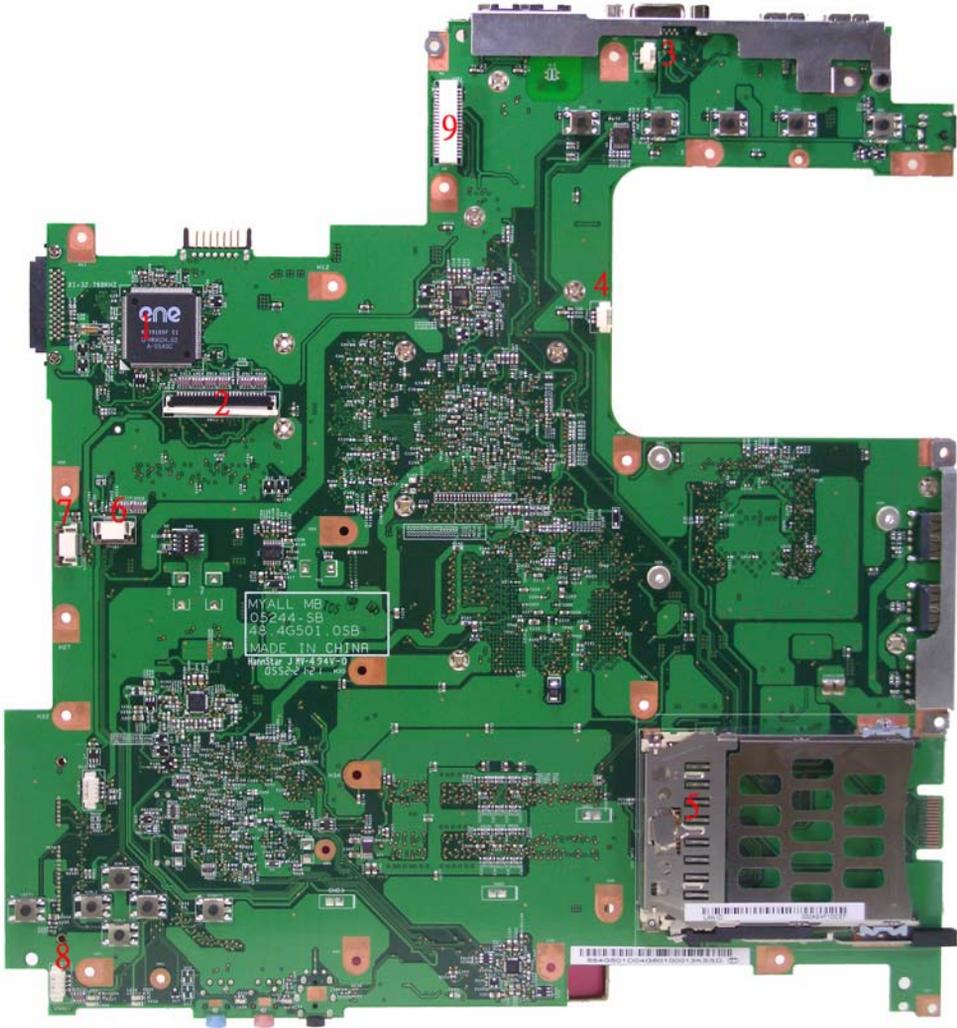
Item	Description	Item	Description
1	Keyboard controller	2	Keyboard connector
3	Lid switch connector	4	System fan connector
5	PCMCIA connector	6	Function keyboard connector
7	Touchpad board connector	8	Speaker connector
9	LCD cable connector		

FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of Aspire 9400/7100 and TravelMate5600/5100. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

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

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

NOTE: Please visit website http://aicsl.acer.com.tw/spl/ for the up to date SPL.

Exploded Diagram
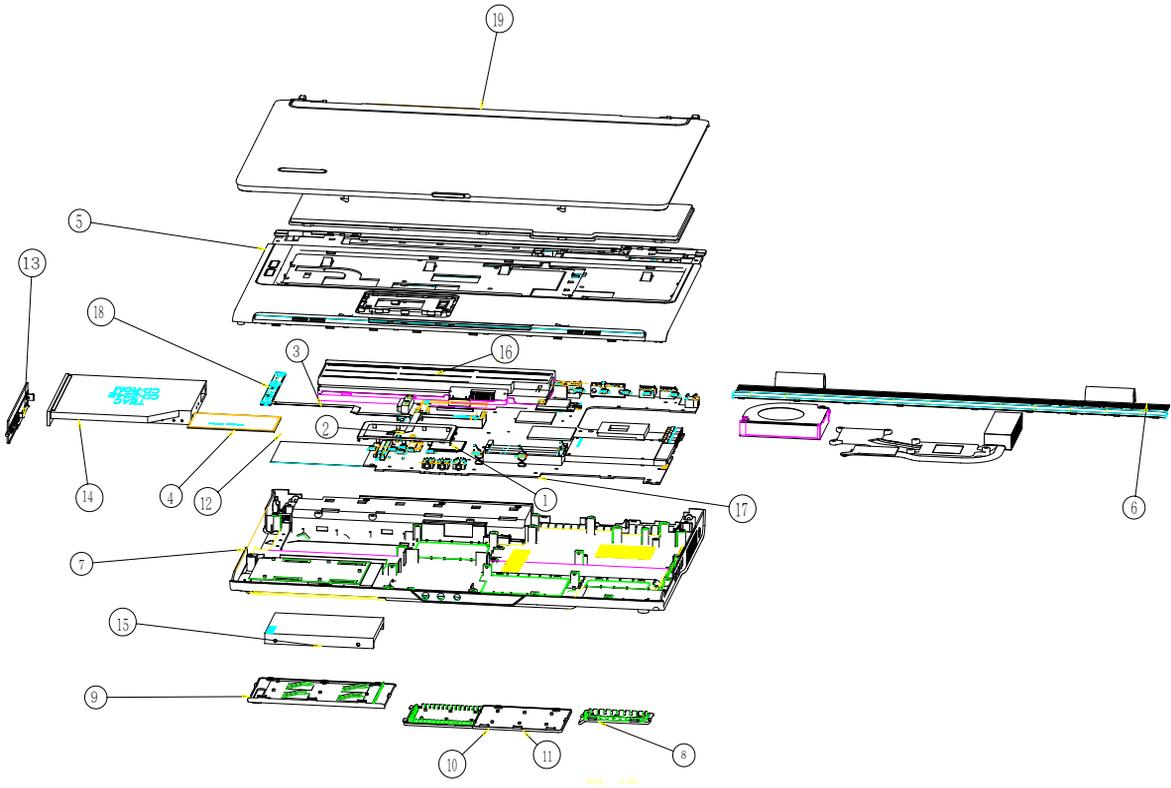
Item	Description	Item	Description
1	T/P bracket	2	T/P FFC
3	Function keyboard FFC	4	T/P board
5	Upper case	6	Middle cover
7	Lower case	8	Optional cover
9	HDD cover	10	Mini PCI cover
11	DIMM cover	12	HDD cover
13	ODD bezel	14	ODD
15	HDD	16	Battery
17	Mainboard	18	Function keyboard
19	LCD module	20	

Spare Part List

Category	Part Name	Description	Acer Part No.
ADAPTER			
N/A	ADAPTER 65W DELTA SADP-65KB DBE	ADT 65W DELTA SADP-65KB DBE	AP.06501.007
	ADAPTER 65W LITEON PA-1650-02WR	ADT 65W LITEON PA-1650-02WR	AP.06503.011
BATTERY			
	BATTERY PACK LI-MN 6CELL 2.0MAH SANYO	BTY PACK LI-MN 6C 2.0AH SANYO	BT.00603.021
	BATTERY PACK LI+ 6CELL 2.0MAH SONY	BTY PACK LI+ 6C 2.0AH SONY	BT.00604.010
	BATTERY PACK LI+ 8CELL 2.4MAH SANYO	BTY PACK LI+ 8C 2.4AH SANYO	BT.00803.018
N/A	RTC BATTERY	BTY RTC MITSUBISHI ROHS	23.TCBV1.003
BOARD			
N/A	BLUETOOTH BOARD FOXCONN BCM2045	BT MODULE FOXCONN BCM2045 V00	54.A74V1.003
	TOUCHPAD BOARD SYNPATICT M61PUF1G372	TOUCHPAD SYNPATICTM61PUF1G372	56.A46V1.001
	LED BOARD	MYALL LED BOARD 05569-1	55.TCBV1.001
	WIRELESS LAN BOARD 802.11BG INTEL INTEL867074 LF	WLAN 802.11BG INTEL867074 LF	KI.CAX01.013
	INVERTER BOARD DARFON VK.21189.402	INVERTER 17" VK.21189.402	19.TCBV1.001
N/A	INVERTER BOARD FOXCONN T62I240.00 ROHS	"INVERTER 17"" T62I240.00 ROHS "	19.ACKV1.001
	MODEM BOARD FOXCONN T60M893.03	MODEM MDC1.5 FOXCONNT60M893.03	54.TCBV1.001

Category	Part Name	Description	Acer Part No.
	Aspire 9400 128M MAINBOARD MYALL W/ MODEM & MODEM CABLE & RTC BATTERY W/O CPU & MEMORY	MYALL MB 05244-SB W/O CPU 128M	MB.TC901.002
	Aspire 9400 64M MAINBOARD MYALL W/ MODEM & MODEM CABLE & RTC BATTERY W/O CPU & MEMORY	MYALL MB 05244-SB W/O CPU 64M	MB.TBH01.002
	Aspire 7100/5100 MAINBOARD MYALL W/ MODEM & MODEM CABLE & RTC BATTERY W/O CPU & MEMORY	MYALL MB 05244-1 W/O CPU 910	MB.TCB01.001
	Aspire 5600 64M MAINBOARD MYALL W/ MODEM & MODEM CABLE & RTC BATTERY W/O CPU & MEMORY	MYALL MB 05244-SB W/O CPU 915	MB.TBH01.002
	Aspire 5600 UMA MAINBOARD MYALL W/ MODEM & MODEM CABLE & RTC BATTERY W/O CPU & MEMORY	MYALL MB 05244-1 W/O CPU 915(D	MB.TBG01.002
CABLE			
N/A	COVER SWITCH CABLE	COVER SWITCH HT MYALL	50.TCBV1.004
N/A	BLUETOOTH CABLE	B/T CABLE HT MYALL	50.TCBV1.001
	TOUCHPAD CABLE	T/P FFC CABLE MYALL	50.TCBV1.002
	LAUNCH BOARD CABLE	LAUNCH BOARD FFC CABLE MYALL	50.TCBV1.003
N/A	"LCD CABLE 17.1"" WXGA"	"LCD CABLE 17.1"" WXGA HT MYALL "	50.TCBV1.005
N/A	MODEM CABLE	MDC CABLE HT MYALL	50.TCBV1.006

Category	Part Name	Description	Acer Part No.
N/A	POWER CORD 10A 250V 3PIN ITALY	CORD 10A 250V 3P ITALY BK	27.01518.711?
	POWER CORD 10A 250V 3PIN ITALY	CORD ITALY 10A 250V 3P BK	27.01518.611
	POWER CORD 10A 250V SWISS	CODE 10A 250V 3P SWISS BK	27.01518.691?
	POWER CORD 10A 250V SWISS	CODE SWISS POWER 10A 250V BK	27.01518.581
	POWER CORD 10A 250V 3PIN BK SOUTH AFRICA	CODE 16A 250V SOUTH AFRICA BK	27.01518.681?
	POWER CORD 10A 250V 3PIN BK SOUTH AFRICA	CODE SOUTH AFRICA 10A 250V BK	27.01518.571
	POWER CORD 7A 250V 2PIN KOREAN	CODE 7A250V 2P 1830 KOREAN	27.01518.531
	POWER CORD 7A 125V 2PIN JAPEN	CODE JAPAN 7A 125V 2P BK	27.01518.551
	POWER CORD 10A 3PIN BK	CODE DENMARK 10A 3P BK	27.01518.561
	POWER CORD 2.5A 250V AUSTRALIA	CODE 2.5A 250V AUSTRALIA BK	27.01518.621
	POWER CORD 10A 125V 3PIN US BK	CODE 10A 125V 3P US BK	27.01518.641
	POWER CORD 10A 125V US	CODE US 10A 125V BK	27.T30V1.001
	POWER CORD 10A 250V 3PIN CHINA	CORD CHINA 10A 250V 3P	27.01518.591
	POWER CORD 10A 250V 3PIN CHINA BK	CORD 10A 250V 3P CHINA BK	27.01518.701
	POWER CORD 10A 250V SOUTH AFRICA BK	CORD 10A 250V SOUTH AFRICA BK	27.01518.721
	POWER CORD 2.5A 250V SOUTH AFRICA BK	CORD 2.5A 250V SOUTH AFRICA BK	27.01518.631
	POWER CABLE 16A 250V 3PIN EUR BK	CORD 16A 250V 3P EUR BK	27.01518.731
	POWER CORD 220V 3PIN EUR	CORD EUR 220V 3P BK	27.T30V1.004
	POWER CORD 2.5A 125V USA	CORD USA/W CNS 2.5A 125V 8121-	27.01518.781
	POWER CORD 5A 250V 3PIN UK BK	CODE 5A 250V 3P UK BK	27.03118.001
	POWER CORD 3A 250V 3PIN UK	CODE UK 3A 250V 3P BK	27.01518.541
	POWER CORD ACA / ACNZ	POWER CODE ACA / ACNZ ANNIE	27.03218.021
	POWER CODE 7A 125V 2PIN JAPAN	CODE 7A 125V JAPAN 2PIN BK	27.03518.161
CASE / COVER / BRACKET ASSEMBLY			
	MIDDLE COVER	ASSY MIDDLE COVER--AS MYALL	60.ACKV1.003

Category	Part Name	Description	Acer Part No.
	MINI PCI COVER	ASSY MINIPCI COVER MYALL	42.TCBV1.003
N/A	MINI CARD COVER	ASSY MINICARD COVER MYALL	42.TCBV1.004
	HDD COVER	ASSY HDD COVER MYALL	42.ACKV1.001
	DIMM COVER	ASSY DIMM COVER MYALL	42.TCBV1.002
	LED BOARD SUPPORT BRACKET	U-CASE SUP. BKT L MYALL	33.TCBV1.001
	UPPER CASE W/COVER SWITCH CABLE	ASSY U_CASE--AS MYALL	60.ACKV1.002
	LOWER CASE W/ SPEAKER	ASSY L-CASE MYALL	60.TCBV1.001
	OPTICAL BRACKET	ODD BRKT MYALL	33.TCBV1.002
	COMBO BEZEL	ASSY COMBO ODD BEZEL GBASE	42.TCBV1.011
	LCD BRACKET RIGHT	"BRKT LCD 17.1"" R MYALL"	33.TCBV1.004
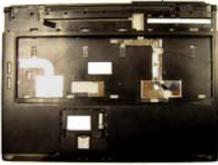
Category	Part Name	Description	Acer Part No.
LCD BRACKET LEFT	"BRKT LCD 17.1"" L MYALL"	33.TCBV1.005
HINGE PACK LEFT/RIGHT	HINGE PACK LEFT/RIGHT	6K.TCBV1.001
HDD CHASSIS	ASSY HDD CHASSIS MYALL	33.TCBV1.003
N/A	"LCD PANEL 17.1"" W/ LOGO"	"ASSY LCD 17.1"" PANEL-TM MYALL "	TBD
N/A	"LCD BEZEL 17.1"" W/ LOGO"	"ASSY LCD BEZEL 17.1"" MYALL "	60.TCBV1.004
N/A	"LCD PANEL 17.1"" W/ LOGO"	"ASSY LCD 17.1"" PANEL-AS MYALL "	60.ACKV1.005
DVD DUAL BEZEL	ASSY DVD_DUAL ODD BEZEL GBASE	42.TCBV1.012
N/A	DVD SUPER MULIA BEZEL	ASSY S_MULTI ODD BEZEL GBASE	42.TCBV1.013
SPEAKER			
N/A	SPEAKER LEFT/RIGHT	SPEAKER MYALL	23.TCBV1.001
COMBO MODULE			
N/A	COMBO MODULE 24X GBASE W/BEZEL	ASSY COMBO LITEON SOSC-2485K	6M.TCBV1.001
	CDRW/DVD COMBO DRIVE 24X LITEON SOSC-2485K W/O BEZEL	COMBO LIT/SSC-2485K NO BZL	KO.02409.015
	CDRW/DVD COMBO DRIVE 24X PHILIPS SCB5265 W/O BEZEL	COMBO PHI/SCB5265 MYALL NOBZL	KO.02408.010
CPU / PROCESSOR			
	CPU DOTHAN735A 1.7GMHZ INTEL	IC CPU DOTHAN735A 1.7G TJ85 C0	KC.NA001.735
	CPU DOTHAN740 1.73GMHZINTEL	IC CPU DOTHAN740 1.73G PGA C0	KC.N0001.740
	CPU DOTHAN750 1.87GMHZ INTEL	IC CPU DOTHAN750 1.87G PGA C0	KC.N0001.750
	CPU DOTHAN760 2GMHZ INTEL	IC CPU DOTHAN760 2G PGA C0	KC.N0001.760
	CPU DOTHAN770 2.13GMHZ INTEL	IC CPU DOTHAN770 2.13G PGA C0	KC.N0001.770
	CPU PEN-M 780 2.26GMHZ 2M 533 INTEL	IC CPU PEN-M 780 2.26G 2M 533	KC.N0001.780
DVD-RW DRIVE			

Category	Part Name	Description	Acer Part No.
	DVD-RW MODULE 24X DUAL GBASE W/BEZEL	ASSY DVD DUAL TOSHIBA TS-L532U	6M.TCBV1.002
	DVD-RW DRIVE 8X DUAL TS-L532U W/O BEZEL	DUAL TOS/TS-L532U W/ BOLSENA BZ	KU.00801.005
	DVD-RW DRIVE 8X DUAL PHILIPS SDVD8441 W/O BEZEL	DUAL PHI/SDVD8441 NO BZL MORAR	KU.00809.002
	DVD-RW MODULE 24X SUPER MULTI GBASE W/ BEZEL	ASSY SUPER MULTI TSST TS-L632D	6M.TCBV1.003
	DVD-RW DRIVE 8X SUPER MULTI SLOT IN TOSHIBA TS-L632D W/O BEZEL	S-MULT 8X TST/TS-L632D W/O BZL	KU.00801.014
	DVD-RW DRIVE 8X SUPER MULTI SLOT IN LITEON SSM-8515S W/O BEZEL	S-MULTI LTN/SSM-8515S BOLSEN-E	KU.00804.022
	DVD-RW DRIVE 8X SUPER MULTI SLOT IN PIONEER DVR-K06RS W/O BEZEL	SUP-MULT PIO/DVR-K06RS SLOT LF	KU.00805.027
	DVD-RW DRIVE 8X SUPER MULTI SLOT IN PANASONIC UJ-855 W/O BEZEL	SUP-MULT PAN/UJ-845 SLOT LF AG	KU.00807.029
HDD / HARD DISK DRIVE			

Category	Part Name	Description	Acer Part No.
	HDD MODULE 60G 4200RPM PATA	HDD MODULE 60G 4200RPM PATA	TBD
	HDD 60G 4200RPM SEAGATE ST960812A	HDD 60GB SEAGATE ST960812A	KH.06001.006
	HDD 60G HITACHI HTS421260H9AT00	HDD 60GB HGST HTS421260H9AT00	KH.06007.009
	HDD 60G 4200RPM TOSHIBA MK6025GAS	HDD 60GB TOSHIBA MK6025GAS	KH.06004.004
	HDD MODULE 60G 5400RPM PATA	HDD MODULE 60G 5400RPM PATA	TBD
	HDD 60G 5400RPM SEAGATE ST96812A	HDD 60GB SEAGATE ST96812A	KH.06001.007
	HDD 60G 5400RPM TOSHIBA	HDD 60GB TOSHIBA 5400RPM	KH.06004.007
	HDD 60G 5400RPM HITACHI HTS541260H9AT00	HDD 60GB HGST HTS541260H9AT00	KH.06007.011
	HDD MODULE 80G 4200RPM PATA	ASSY HDD 80G SEAGATE MYALL	TBD
	HDD 80G 4200RPM SEAGATE ST980829A	HDD 80GB SEAGATE ST980829A	KH.08001.021
	HDD 80G 4200RPM HITACHI HTS421280H9AT00	HDD 80GB HGST HTS421280H9AT00	KH.08007.011
	HDD 80G 4200RPM TOSHIBA MK8025GAS	HDD 80GB TOSHIBA MK8025GAS	KH.08004.003
	HDD MODULE 80G 5400RPM PATA	ASSY HDD 80G SEAGATE 5400 RPM	TBD
	HDD 80G 5400RPM SEAGATE ST98823A	HDD 80GB SEAGATE ST98823A	KH.08001.022
	HDD 80G 5400RPM TOSHIBA	HDD 80GB TOSHIBA 5400RPM	KH.08004.006
	HDD 80G 5400RPM HITACHI	"HDD 80G 2.5"" 5400RPM HGST"	KH.08007.013

Category	Part Name	Description	Acer Part No.
	HDD 80G 5400RPM WD WD800UE-22HCT0	HDD 80GB WD WD800UE-22HCT0	KH.08008.027
	HDD MODULE 100G 4200RPM PATA	ASSY HDD 100G SEAGATE 4200 RPM	TBD
	HDD 100G 4200RPM SEAGATE ST9100825A	HDD 100GB SEAGATE ST9100825A	KH.10001.006
	HDD 100G HITACHI HTS421210H9AT00	HDD 100GB HGST HTS421210H9AT00	KH.10007.002
	HDD 100G TOSHIBA MK1031GAS	HDD 100GB TOSHIBA MK1031GAS	KH.10004.001
	HDD MODULE 100G 5400RPM PATA	HDD MODULE 100G 5400RPM PATA	TBD
	HDD 100G 5400RPM SEAGATE ST9100824A	HDD 100GB SEAGATE ST9100824A	KH.10001.007
	HDD 100G 5400RPM TOSHIBA MK1032GAX	HDD 100GB TOSHIBA MK1032GAX	KH.10004.002
	HDD 100G 5400RPM HITACHI 13G1591 ROHS	HDD 100GB HGST 13G1591 ROHS	KH.10007.004
	HDD 100G 5400RPM SAMSUNG HM100JC	HDD 100GB SAMSUNG HM100JC	KH.1000B.002
	HDD MODULE 120G 4200RPM PATA	HDD MODULE 120G 4200RPM PATA	TBD
	HDD 120G 4300RPM SEAGATE ST9120824A	HDD 120GB SEAGATE ST9120824A	KH.12001.023
	HDD 120G 4200RPM SEAGATE MK1233GAS	HDD 120G MK1233GAS 4200RPM ROH	KH.12004.001
	HDD 120G 4200RPM HITACHI 0A26308	HDD 120GB HGST 0A26308 ROHS	KH.12007.006
	HDD MODULE 120G 5400RPM PATA	ASSY HDD 120G SEAGATE MYALL	TBD
	HDD 120G 5400RPM SEAGATE ST9120821A	HDD 120GB SEAGATE ST9120821A	KH.12001.024
	HDD 120G 5400RPM TOSHIBA	HDD 120GB TOSHIBA 5400RPM	KH.12004.002
HEATSINK			
	CPU HEATSINK W/O FAN	ASSY CPU HSINK CCI UMA MYALL	34.TCBV1.001
FAN			
	FAN	FAN SUNON MYALL	23.TCBV1.004
KEYBOARD			

Category	Part Name	Description	Acer Part No.
	AS9400/7100 KEYBOARD DARFON US INTERNATIONAL	AS9400/7100 KEYBOARD DARFON US INTERNATIONAL	KB.ACF07.001
	AS9400/7100 KEYBOARD DARFON CHINESE	AS9400/7100 KEYBOARD DARFON CHINESE	KB.ACF07.002
	AS9400/7100 KEYBOARD DARFON SPANISH	AS9400/7100 KEYBOARD DARFON SPANISH	KB.ACF07.003
	AS9400/7100 KEYBOARD DARFON THAI	AS9400/7100 KEYBOARD DARFON THAI	KB.ACF07.004
	AS9400/7100 KEYBOARD DARFON BRAZILIAN PROTUGESE	AS9400/7100 KEYBOARD DARFON BRAZILIAN PROTUGESE	KB.ACF07.005
	AS9400/7100 KEYBOARD DARFON KOREA	AS9400/7100 KEYBOARD DARFON KOREA	KB.ACF07.006
	AS9400/7100 KEYBOARD DARFON UK	AS9400/7100 KEYBOARD DARFON UK	KB.ACF07.007
	AS9400/7100 KEYBOARD DARFON GERMAN	AS9400/7100 KEYBOARD DARFON GERMAN	KB.ACF07.008
	AS9400/7100 KEYBOARD DARFON ITALIAN	AS9400/7100 KEYBOARD DARFON ITALIAN	KB.ACF07.009
	AS9400/7100 KEYBOARD DARFON FRENCH	AS9400/7100 KEYBOARD DARFON FRENCH	KB.ACF07.010
	AS9400/7100 KEYBOARD DARFON SWISS/G	AS9400/7100 KEYBOARD DARFON SWISS/G	KB.ACF07.011
	AS9400/7100 KEYBOARD DARFON PORTUGUESE	AS9400/7100 KEYBOARD DARFON PORTUGUESE	KB.ACF07.012
	AS9400/7100 KEYBOARD DARFON ARABIC	AS9400/7100 KEYBOARD DARFON ARABIC	KB.ACF07.013
	AS9400/7100 KEYBOARD DARFON BELGIUM	AS9400/7100 KEYBOARD DARFON BELGIUM	KB.ACF07.014
	AS9400/7100 KEYBOARD DARFON SWEDEN	AS9400/7100 KEYBOARD DARFON SWEDEN	KB.ACF07.015

Category	Part Name	Description	Acer Part No.
	AS9400/7100 KEYBOARD DARFON CZECH	AS9400/7100 KEYBOARD DARFON CZECH	KB.ACF07.016
	AS9400/7100 KEYBOARD DARFON HUNGAIAN	AS9400/7100 KEYBOARD DARFON HUNGAIAN	KB.ACF07.017
	AS9400/7100 KEYBOARD DARFON NORWAY	AS9400/7100 KEYBOARD DARFON NORWAY	KB.ACF07.018
	AS9400/7100 KEYBOARD DARFON DANISH	AS9400/7100 KEYBOARD DARFON DANISH	KB.ACF07.019
	AS9400/7100 KEYBOARD DARFON TURKISH	AS9400/7100 KEYBOARD DARFON TURKISH	KB.ACF07.020
	AS9400/7100 KEYBOARD DARFON TURKISH F TYPE	AS9400/7100 KEYBOARD DARFON TURKISH F TYPE	KB.ACF07.021
	AS9400/7100 KEYBOARD DARFON CANADIAN FRENCH	AS9400/7100 KEYBOARD DARFON CANADIAN FRENCH	KB.ACF07.022
	AS9400/7100 KEYBOARD DARFON JAPANESE	AS9400/7100 KEYBOARD DARFON JAPANESE	KB.ACF07.023
	AS9400/7100 KEYBOARD DARFON GREEK	AS9400/7100 KEYBOARD DARFON GREEK	KB.ACF07.024
	AS9400/7100 KEYBOARD DARFON HEBREW	AS9400/7100 KEYBOARD DARFON HEBREW	KB.ACF07.025
	AS9400/7100 KEYBOARD DARFON RUSSIAN	AS9400/7100 KEYBOARD DARFON RUSSIAN	KB.ACF07.026
	AS9400/7100 KEYBOARD DARFON SLOVENIA (SLO)	AS9400/7100 KEYBOARD DARFON SLOVENIA (SLO)	KB.ACF07.027
	AS9400/7100 KEYBOARD DARFON CROATIA (CR)	AS9400/7100 KEYBOARD DARFON CROATIA (CR)	KB.ACF07.028
COMMUNICATION MODULE			
N/A	WIRELESS ANTENNA LEFT/RIGHT	ANTENNA CABLE MYALL	25.TCBV1.001
LCD			
	"LCD 17"" WXGA+ AU B170PW03 V4 GLARE "	"LCD 17""WXGA B170PW03 V4 GLARE "	LK.17105.005
	"LCD 17"" WXGA+ LG LP171WP4-TL02 GLARE"	"LCD 17""W LP171WP4-TL02 GLARE"	LK.17008.015
	"LCD 17""WXGA+ QDI QD17TL02-06 GLARE"	"LCD 17"" QD17TL02-06 GLARE"	LK.17109.002
	"LCD 17"" WXGA+ SAMSUNG LTN170WX-L05-H GLARE"	"LCD 17""W LTN170WX-L05-H GLARE"	LK.17106.002
	"LCD 17.1"" WXGA+ SAMSUNG LTN170WX-L05 NONE GLARE "	"LCD 17""W LTN170WX-L05 "	LK.17106.001
	"LCD 17.1"" WXGA+ AU B170PW03 V3 NONE GLARE "	"LCD 17""W AU B170PW03 V3"	LK.17105.006
	"LCD 17.1"" WXGA+ QDI QD17TL02-05 NONE GLARE "	"LCD 17""W QDI QD17TL02-05"	LK.17109.001
	"LCD MODULE 17.1"" WXGA+ GLARE "	"ASSY 17.1"" AUO GLARE AS "	6M.ACKV1.021
	"LCD MODULE 17.1"" WXGA+ NONE GLARE "	"ASSY 17.1"" QDI NON-GLARE TM "	6M.ACKV1.011

Category	Part Name	Description	Acer Part No.
N/A	PCMCIA SLOT 4PIN	CONN CARDBUS 4P 59330-00L0C	22.T28V1.001
MEMORY			
	SDIMM 256M MICRON MT4HTF3264HY-53EB4	SODIMM 256M MT4HTF3264HY-53EB4	KN.25604.030
	DIMM 256M NANYA NT256T64UH4A1FN-37B	DIMM 256M NT256T64UH4A1FN-37B	KN.25603.029
	SDIMM 256M SAMSUNG 470T3354CZ3-CD5	SODIMM 256M M470T3354CZ3-CD5	KN.2560B.017
	SDIMM 256M INFINEON HYS64T32000HDL-3.7-A	SODIMM256MHYS64T32000HDL-3.7-A	KN.25602.023
	SDIMM 256M HYNIX HYMP532S64BP6-C4	SODIMM 256M HYMP532S64BP6-C4	KN.2560G.012
	SDIMM 512M NANYA NT512T64UH8A1FN-37B	SODIMM512M NT512T64UH8A1FN-37B	KN.51203.023
	SDIMM 512M SAMSUNG M470T6554CZ3-CD5	SODIMM 512M M470T6554CZ3-CD5	KN.5120B.015
	SDIMM 512M INFINEON MHYS64T64020HDL-3.7-A	SODIMM512MHYS64T64020HDL-3.7-A	KN.51202.021
	SDIMM 512M ELPIDA GU33512AGEPN612C	SODIMM 512M GU33512AGEPN612C	KN.51209.005
	SDIMM 512M HYNIX HYMP564S64BP6-C4	SODIMM 512M HYMP564S64BP6-C4	KN.5120G.013
	SDIMM 1G HYS64T128021HDL-3.7-A	SODIMM1G HYS64T128021HDL-3.7-A	KN.1GB02.023
	SDIMM 1GB 533 NANYA	SO-DIMM DDRII 533 1GB NANYA	KN.1GB03.006
MICROPHONE			
	MICROPHONE	MICROPHONE MYALL	23.TCBV1.002
MISCELLANEOUS			
N/A	LCD SCREW RUBBER	RUB LCD RUBBER CUSHION BOLSENA	47.A46V1.002
	LCD SCREW RUBBER	RUBBER SCREW MYALL	47.TCBV1.001
	LOGO PLATE FOR PANEL	PLT LOGO PANEL	31.T49V1.001
	LOGO PLATE FOR BEZEL	"PLT BEZEL PLATE ""ACER "" LOGO"	31.A46V1.001
SCREW			

Category	Part Name	Description	Acer Part No.
N/A	SCREW	SCW HEX NYL I#R-40/O#4-40 L5.5	34.00015.081
	SCREW	SCREW MACH WAFER M2*L4 NI	86.T39V1.002
	SCREW	SCRW M2.5*6 ~ L-CASE + U-CASE	86.00D28.330
	SCREW	SCRW M2*L3	86.00D29.620
	SCREW	SCRW M2.5*5 WAFER B-ZN ROHS	86.00D47.630
	SCREW	SCREW M2*L3 NYLOK CR 3+	86.00E25.723
	SCREW	SCREW M2*L3 NON-NYLOK CR3+	86.00E31.723
	SCREW	SCREW M2.5*L6 NYLOK CR3+	86.00E33.736
	SCREW	SCREW M2.5*L8 NYLOK CR3+	86.00E34.738
	SCREW	SCREW M2*L8 NI NON-NYLOK	86.00E35.228
	SCREW	SCREW M3x4(86.9A524.4R0)	86.9A524.4R0
	SCREW	SCRW M2*4 WAFER NI	86.9A552.4R0
	SCREW	SCREW NI M2*6L	86.9A552.6R0
	SCREW	SCRW M2.5*L3(NON NYLOK)	86.9A523.3R0