# **System Specifications**

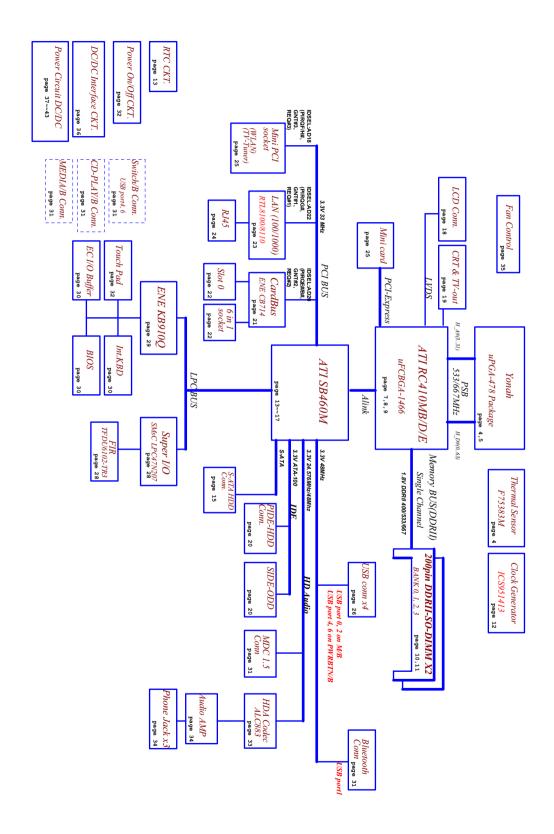
# **Features**

Below is a brief summary of the computer's many feature:

Platform	n and	memroy
		Intel® Celeron® M processor 410/420/430 (1MB L2 cache, 1.46/1.6/1.73 GHz, 533 MHz FSB)
		ATI RC410MB/D/E+ATI SB460M
		Integrated Intel <sup>®</sup> PRO/Wireless 3945ABG network connection (dual-band tri-mode 802.11a/b/g) Wi-Fi CERTIFIED <sup>TM</sup> solution, supporting Acer SignalUp <sup>TM</sup> wireless technology
		$256/512~\mathrm{MB}$ of DDR2 533 MHz memory, upgradeable to 2 GB using two so DIMM modules (dual-channel support )
Display a	and g	graphics
		15.4" WXGA high-brightness Acer CrystalBrite <sup>TM</sup> TFT LCD, 1280 x 800 pixel resolution, supporting simultaneous multi-window viewing via Acer GridVista <sup>TM</sup>
		15" XGA color TFT LCD, 1024x 768 pixel resolution
		ATI Radeon® Xpress 200M integrated 3D graphics with up to 256 MB of shared system memory, supporting Microsoft® and PCI Express®
		Dual independent display
		16.7 million colors
		MPEG-2/DVD hardware-assisted capability
		Acer CinemaVision <sup>TM</sup> video technology (Acer Arcade) ( <b>for Aspire 3650</b> )
		Acer ClearVision <sup>TM</sup> video optimization (Acer Arcade) ( <b>for Aspire 3650</b> )
Storage	subs	ystem
	Foi	r Aspire 3650:
		40/60/80/100/120 GB hard disk drive
		Optical drive options:
		➤ DVD-Super Multi double-layer
	_	DVD/CD-RW combo
		r TravelMate 2450:
	_	60/80/100/120 GB hard disk drive with Acer Disk Anti-Shock Protection (DASP)
		Optical drive options:
		➤ DVD-Super Multi double-layer  ➤ DVD/CD-RW combo
		* DVD/CD-RW COIIDO
Input de	vices	
		88/89-key keyboard
		Touchpad with 4-way scroll button
		12 function keys
		Four easy-launch buttons
		Two front-access buttons: WLAN LED-button and Bluetooth® LED-button

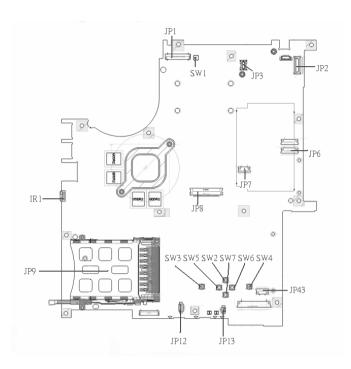
Audio		
		Audio system with two built-in speakers (1.5W)
		Intel <sup>®</sup> High-Definition audio support
		Sound Blaster Pro <sup>TM</sup> and MS Sound compatible
		Built-in microphone
Commu	nicat	ion
		Modem: 56K ITU V.92 modem with PTT approval; wake-on ring ready
		LAN: 10/100 Mbps Fast Ethernet; wake-on-LAN ready
		WLAN: Acer InviLink <sup>TM</sup> 802.11b/g Wi-Fi CERTIFIED <sup>TM</sup> , supporting Acer SignalUp <sup>TM</sup> wireless technology
		WPAN: integrated Bluetooth® 2.0+EDR (Enhanced Data Rate)
Power s	ubsy	stem
	ٔ ت	ACPI 2.0 CPU power management standard: supports Standby and Hibernation power-saving modes
		29 W 2000 mAh Li-ion battery pack (4-cell)
		2-hour rapid charge; 2.5-hour charge-in-use
		3-pin 65W AC adapter
I/O Port	s	
		PC Card slot (one Type II)
		Three USB 2.0 ports
		External display (VGA) port
		Headphones/speaker/line-out port
		Microphone in jack
		Line-in jack
		Ethernet (RJ-45) port
		Modem (RJ-11) port
		DC-in jack for AC adaptor
Environ	ment	t e e e e e e e e e e e e e e e e e e e
		Temperature:
		▶operating: 5 ° C to 35 ° C
		Non-operating: -20° C to 65° C
		Humidity (non-condensing):
		<b>♦</b> operating: 20%~80%
		Non-operating: 20%~80%

# **System Block Diagram**



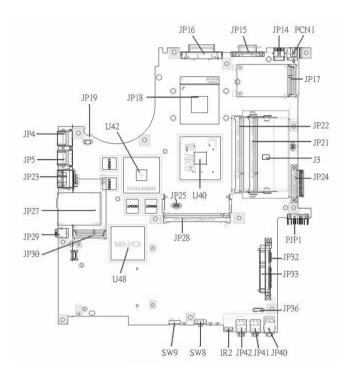
# **Board Layout**

# Top View



1	JP1	LCD Connector	10	SW7	Touchpad Down Button
2	SW1	Lid Switch	11	SW2	Touchpad Up Button
3	JP3	MDC Connector	12	SW5	Touchpad Left Button
4	JP2	Power Button Connector	13	SW3	Touchpad Left Button
5	JP6	Media Board Connector	14	JP13	Internal Microphone Connector
6	JP7	Touchpad Board Connector	15	JP12	Internal Speaker Connector
7	JP43	SIM Card Connector	16	JP9	PCMCIA Socket
8	SW4	Touchpad Right Button	17	IR1	FIR Module
9	SW6	Touchpad Left Button	18	JP8	Internal Keyboard Connector

# **Bottom View**

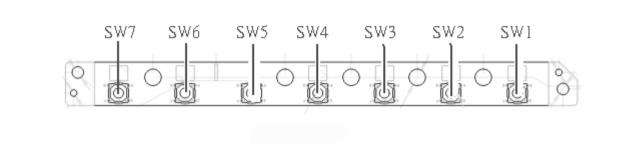


**NOTE:** This is engineering sample. The image above may not be exactly the same as the real main board you get.

1	JP19	FAN Connector	17	JP40	Headphone/SPDIF Jack
2	U42	VGA Chipset	18	JP41	Line-In Jack
3	JP18	CPU Socket	19	JP42	Microphone-in Jack
4	JP16	DVI Connector	20	IR2	CIR Module
5	JP15	CRT Connector	21	SW8	Wireless LAN Switch
6	JP14	TV-Out Connector	22	SW9	Bluetooth and 3G Switch
7	PCN1	DC-IN Jack	23	U48	South Bridge Chipset
8	JP17	Mini Card Connector	24	JP30	Mini Card Connector
9	JP22	DDRII so-DIMM Socket	25	JP29	IEEE 1394 Connector
10	JP21	DDRII so-DIMM Socket	26	JP27	5 IN1 Socket
11	J3	Clear CMOS Jumper	27	JP23	RJ45 Connector
12	JP24	ODD Connector	28	JP5	USB Connector
13	PJP1	Battery Connector	29	JP4	USB Connector
14	JP32	HDD Connector (SATA)	30	JP28	MINIPCI Connector (TV-Tuner)
15	JP33	HDD Connector (PATA)	31	JP25	FAN Connector
16	JP36	Bluetooth Connector	32	U40	North Bridge Chipset

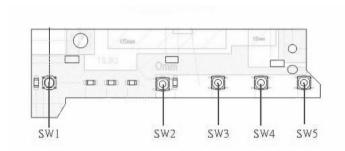
# **Jumper Board Layout**

# **Switch Board Top View**



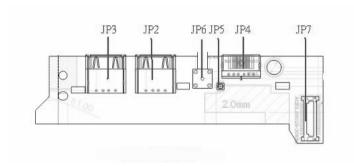
Label	Description
SW1	Arcade/TV tuner switch
SW2	Volume Up switch
SW3	Volume Down switch
SW4	Play/Pause switch
SW5	Stop switch
SW6	Forward/Next switch
SW7	Backward/Previous switch

# **Media Board Top View**



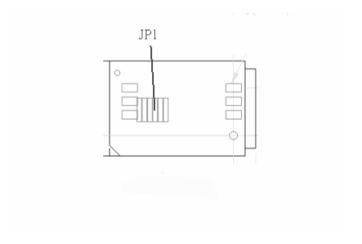
Label	Description
SW1	Power Button
SW2	E-mail Button
SW3	Internet Button
SW4	User Button
SW5	E-Power Button

# **Media Board Bottom View**



Label	Description
JP3	USB Connector
JP2	USB Connector
JP6	RF INe Connector
JP5	RF Cable Connector
JP4	AV IN Connector
JP7	Board to Main Board Connector

# **LS-2923P Power Board Top View**



Label	Description	
JP1	SIM Card Connector	

# **Jumper Setting**



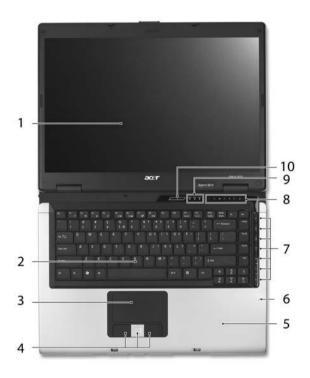
Label	Description
JOPEN1	Clear CMOS Jumper
	Note: JOPEN1 locates at the bottom side of the main board as the red circle highlighted.

# **Your Acer Notebook tour**

After knowing your computer features, let us show you around your new TravelMate computer.

# **Front view**

## **Aspire 5610:**



#	Item	Description
1	Display screen	Also called LCD (liquid-crystal display), displays computer output.
2	Keyboard	For entering data into your computer.
3	Touchpad	Touch-sensitive pointing device which functions like a computer mouse.
4	Click buttons (left, center and right)	The left and right buttons function like the left and right mouse buttons; the center button serves as a 4-way scroll button.
5	Palmrest	Comfortable support area for our hands when you use the computer.
6	Microphone	Internal microphone for sound recording.
7	TV/media/volume buttons	For use with Acer Arcade and other media playing programs.
8	Easy-launch buttons	Buttons for launching frequently used programs.
9	Status indicators	Light-Emitting Diodes (LEDs) that light up to show the status of the computer's functions and components.
10	Power button	Turns the computer on and off.

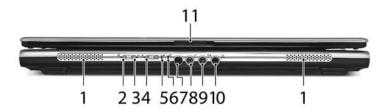
# TravelMate 4260:



#	Item	Description
1	Display screen	Also called LCD (liquid-crystal display), displays computer output.
2	Keyboard	For entering data into your computer.
3	Touchpad	Touch-sensitive pointing device which functions like a computer mouse.
4	Click buttons (left, center and right)	The left and right buttons function like the left and right mouse buttons; the center button serves as a 4-way scroll button.
5	Palmrest	Comfortable support area for our hands when you use the computer.
6	Microphone	Internal microphone for sound recording.
7	Easy-launch Buttons	Buttons for launching frequently used programs.
8	Status indicators	Light-Emitting Diodes (LEDs) that light up to show the status of the computer's functions and components.
9	Power button	Turns the computer on and off.

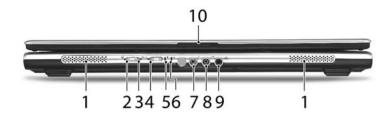
# **Closed Front View**

# Aspire 5650:



#	Icon	Item	Description
1		Speakers	Left and right speakers deliver stereo audio output.
2	*	Bluetooth <sup>®</sup> communication button/indicator	Enable/disable Bluetooth function. Indicates the status of Bluetooth- communications.
3	36	3G switch/indicator	Enables/disables the 3G function. Indicates the status of 3G communication (for selected models).
4	$\mathcal{C}$	Wireless communication button/ indicator	Enable/disable Wireless function. Indicates the status of wireless LAN communications.
5	Ġ	Power indicator	Indicates the computer's power status.
6	Ø	Battery indicator	Indicates the computer's battery status.
7	∠	CIR receiver	Receives signals from a remote control.
8	<b>18</b> 9	Microphone-in jack	Accepts input from external microphones.
9	( <del>+)</del>	Line-in jack	Accepts audio line-in devices (e.g., audio CD player, stereo walkman).
10	SPDF	Headphones/ speakers/line-out jack with S/PDIF support	Connects to audio line-out devices (e.g., speakers, headphones).
11		Latch	Locks and release the lid.

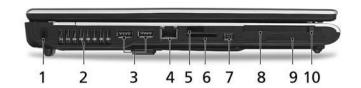
### TravelMate 4260:



#	lcon	Item	Description
1		Speaker	Left and right speakers deliver stereo audio output.
2	*	Bluetooth <sup>®</sup> communication button/indicator	Enable/disable Bluetooth function. Indicates the status of Bluetooth-communications.
3	36	3G switch/indicator	Enables/disables the 3G function. Indicates the status of 3G communication (for selected models).
4	C.	Wireless communication button/ indicator	Enable/disable Wireless function. Indicates the status of wireless LAN communications.
5	Ş	Power indicator	Indicates the computer's power status.
6	Ð	Battery indicator	Indicates the computer's battery status.
7	ren	Microphone-in jack	Accepts input from external microphones.
8	( <del>+)</del>	Line-in jack	Accepts audio line-in devices (e.g., audio CD player, stereo walkman).
9	SPOF	Headphones/ speakers/line-out jack with S/PDIF support	Connects to audio line-out devices (e.g., speakers, headphones).
10		Latch	Locks and release the lid.

# **Left View**

Aspire 5650/TravelMate 4260:



#	Icon	Item	Description
1	ĸ	Kensington lock slot	Connects to a Kensington-compatible computer security lock.
2		Ventilation slots	Enables the computer to stay cool, even after prolonged use.
3	<b>●</b> <a>***</a>	Two USB 2.0 ports	Connects to USB 2.0 devices (e.g., USB mouse, USB camera).
4		Modem (RJ-11) port	Connects to a phone line.
5		Infrared port	Interfaces with infrared devices (e.g., infrared printer and IR-aware computer).
6	PRO M SM XD	5-in-1 card reader	Accepts Memory Stick (MS), Memory Stick PRO (MS PRO), MultiMediaCard (MMC), Secure Digital (SD), xD-Picture Card (xD).
7	[1394]	4-pin IEEE 1394 port	Connects to IEEE 1394 devices.  Note: A 4-pin socket is used for laptop. The 6-pin socket is commonly found on desktop. As to 9-pin connector, it is for the faster FireWire 800.
8	Ш	PC Card slot	Accepts one Type II PC Card.
9	EXPRESS CARD	ExpressCard/34 slot	Accepts one ExpressCard/34 module.  Note: ExpressCards are third generation of PC cards, hot-swapable and smaller than previous PC Cards. Designed for both desktop and mobile use, ExpressCards use either USB 2.0 or a single lane PCI Express technology that provides 500 Mbytes/sec total throughput. Formerly code named "NEWCARD," ExpressCards are 5 mm thick like Type II PC Cards, but do not use the same 86x54 mm footprint. ExpressCards come in 75x54 mm and 75x34 mm sizes. Express Card/34 slot means this notebook accepts 75x34mm ExpressCards.

10	PC Card slot eject	Ejects the PC Card from the slot.
	button	

# **Right View**

# **Aspire 5650:**



#	Item	Description
1	•	Internal optical drive; accepts CDs or DVDs.
2	Optical disk access indicator	Lights up when the optical drive is active.
3	Slot-loaded optical drive eject button	Ejects the optical disk from the drive.

#### TravelMate 4260:



#	Item	Description
1	Optical drive	Internal optical drive; accepts CDs or DVDs.
2	Optical disk access indicator	Light up when the optical drive is active.
3	Optical drive eject button	Ejects the optical disk from the drive.
4	Emergency eject hole	Ejects the optical drive tray when the computer is turned off.

# **Rear Panel**

## **Aspire 5650:**



#	Icon	Item	Description
1	용	Ethernet (RJ-45) port	Connects to an Ethernet 10/100/1000-based network (for selected models).
2	•	Two USB 2.0 ports	Connects to USB 2.0 devices (e.g., USB mouse, USB camera).
3	RF	S-video-in (NTSC/ PAL) port	Connects to an S-video device like a DVD player or camcorder.
4	AV-IN	AV-in port	Accepts input signals from audio/visual (AV) devices.
5	==	DC-in jack	Connects to an AC adapter.
6	<u>S</u>	S-video/TV-out (NTSC/PAL) port	Connects to a television or display device with S-video input.
7		External display (VGA) port	Connects to a display device(e.g., external monitor, LCD projector).
8	DVI-D	DVI-D port	Supports digital video connections.
9		Ventilation slots	Enable the computer to stay cool, even after prolonged use.

# TravelMate 4260:



#	lcon	ltem	Description
1	윰	Ethernet (RJ-45) port	Connects to an Ethernet 10/100/1000-based network (for selected models).
2	•	Two USB 2.0 ports	Connects to USB 2.0 devices (e.g., USB mouse, USB camera).
3	==	DC-in jack	Connects to an AC adapter.
4	S <u>→</u>	S-video/TV-out (NTSC/PAL) port	Connects to a television or display device with S-video input.
5		External display (VGA) port	Connects to a display device(e.g., external monitor, LCD projector).
6	DVI-D	DVI-D port	Supports digital video connections.
7		Ventilation slots	Enable the computer to stay cool, even after prolonged use.

# **Base view**

# Aspire 5650/TravelMate 4260:



#	Item	Description
1	Battery lock	Locks the battery in position.
2	Battery bay	Helps keep the computer cool.  Note: Do not cover or obstruct the opening of the fan.
3	Hard disk bay	Houses the computer's hard disk (secured with screws)

4	`	Protects the hard disk drive from shocks and bumps. (for TravelMate 4260 only)
5	Memory compartment	Houses the computer's main memory.
6	Ventilation slots and cooling fan	Release the battery for removal.

## **Indicators**

The computer has four easy-to-read status indicators on the upper-right above the keyboard, and four on the front panel.

## **Aspire 5650:**



#### TravelMate 4260:



The power, battery and wireless communication status indicators are visible even when the LCD display is closed.

Icon	Function	Description
<b>*</b>	HDD	Indicators when the hard disk drive is active.
A	Cap lock	Lights when Cap Lock is activated
1	Num lock	Lights when Num Lock is activated.
*	Bluetooth	Indicates the status of Bluetooth communication.
36	3G	Indicates the status of 3G communication.
Ö	Wireless LAN	Indicates the status of wireless LAN communication.
Ÿ	Power	Indicates the computer's power status.
Ø	Battery	Indicates the computer's battery status.

**NOTE:** 1. **Charging:** The light shows amber when the battery is charging. 2. **Fully charged:** The light shows green when in AC mode.

# **Easy-Launch Buttons**

Located above the keyboard are four buttons. These buttons are called easy-launch buttons. They are: mail Web browser, Empowering Key " ${\cal C}$  "and one user-programmable button.

Press "C" to run the Acer Empowering Technology. The mail and Web browser buttons are pre-set to email and Internet programs, but can be reset by users. To set the Web browser, mail and programmable buttons, run the Acer Launch Manager.

#### Aspire 5650:



## TravelMate 4260:



Launch key	Default application
Р	User-programmable
Р	User-programmable
e	Acer Empowering Technology (user-programmable)
Web browser	Internet browser (user-programmable)
Mail	Email application (user-programmable)

# **Using the Keyboard**

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

# Lock Keys and embedded numeric keypad

The keyboard has three lock keys which you can toggle on and off.

#### **Aspire 5650:**



#### TravelMate 4260:



Lock Key	Description
Caps Lock	When Caps Lock is on, all alphabetic characters typed are in uppercase.
Num lock <fn>+<f11></f11></fn>	When Num Lock is on, the embedded keypad 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. A better solution would be to connect an external keypad.
Scroll lock <fn>+<f12></f12></fn>	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
Number keys on embedded keypad	Type numbers in a normal manner.	
Cursor-control keys on embedded keypad	· ·	Hold <fn> while using cursor-control keys.</fn>

Desired Access	Num Lock On	Num Lock Off
Main keyboard keys		Type the letters in a normal manner.

# **Windows Keys**

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

Key	Icon	Description
Windows 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 function:
		+ <tab> Activates next taskbar button.</tab>
		+ <e> Opens the My Computer window</e>
		+ <f1> Opens Help and Support.</f1>
		+ <f> Opens the Find: All Files dialog box.</f>
		+ <r> Opens the Run dialog box.</r>
		+ M Minimizes all windows.
		<shift>+ # + <m> Undoes the minimize all windows action.</m></shift>
Applicati on key		This key has the same effect as clicking the right mouse button; it opens the application's context menu.

# **Hot Keys**

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 hot keys, press and hold the **<Fn>** key before pressing the other key in the hotkey combination.

#### Aspire 5650:



#### TravelMate 4260:



Hot Key	Icon	Function	Description
Fn-F1		Hot key help	Displays help on hot keys.
	?		
Fn-F2		Acer eSetting	Launches the Acer eSettings in Acer eManager.
	Š		
Fn-F3	<b>♦</b>	Acer ePowerManagement	Launches the Acer ePowerManagement in Acer eManager.
Fn-F4	Z <sup>z</sup>	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- <u>↑</u>	<b>(</b> 1)	Volume up	Increases the speaker volume.
Fn-↓	<b>4</b> )	Volume down	Decreases the speaker volume.
Fn-¬¬	÷.	Brightness up	Increases the screen brightness.

Hot Key	Icon	Function	Description
Fn-€		Brightness down	Decreases the screen brightness
	<b></b>		

## **Special Key**

You can locate the Euro symbol and US dollar sign at the upper-center and/or bottom-right of your keyboard. To type:

#### **Aspire 5650:**



#### TravelMate 4260:



### The Euro symbol

- 1. Open a text editor or word processor.
- 2. Either directly press the < €> symbol at the bottom-right of the keyboard, or hold <Alt Gr> and then press the<5> symbol at the upper-center of the keyboard.

#### The US dollar sign

- 1. Open a text editor or word processor.
- 2. Either directly press the < \$> key 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 by the operating system version.

**NOTE:** Some fonts and software do not support the Euro symbol. Please refer to <a href="https://www.microsoft.com/typography/fag/fag12.htm">www.microsoft.com/typography/fag/fag12.htm</a> for more information.

# **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.
- 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 < < < < key to launch the Empowering Technology menu, then click on the appropriate utility and select the Help function.

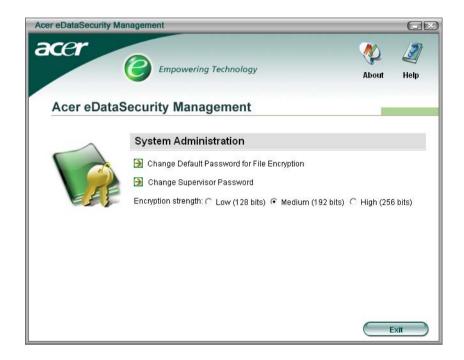
### **Acer eDataSecurity Management**

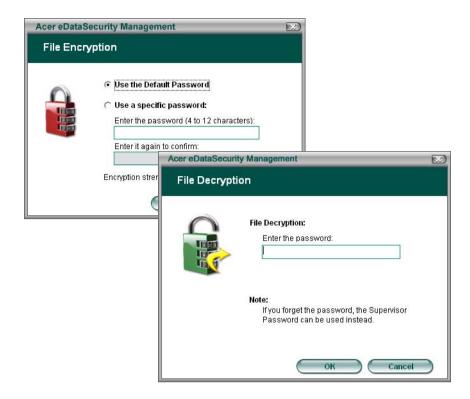
Acer eDataSecurity Management is handy file encryption utility that protects your files from being accessed by unauthorized persons. It is conveniently integrated with Windows explorer as a shell extension for quick and

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 password and the file-specific password. The supervisor password is a "master" password that can decrypt any file on your system; the file-specific password will be used to encrypt files by default, or you can 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 encrypted 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 devices 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.

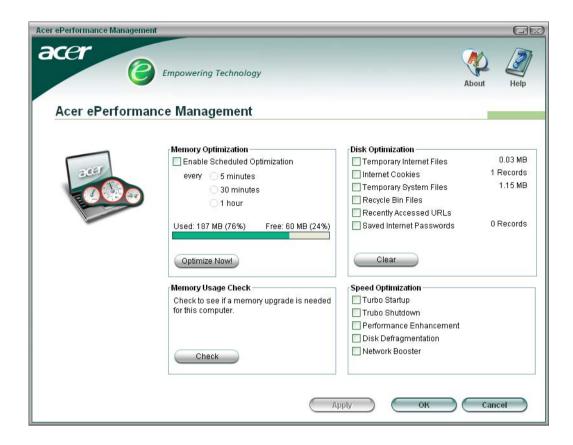
**NOTE:** If you lose your password, there is no method to reset it except by reformatting your notebook or taking your notebook to an Acer Customer Service Center. Be sure to remember or write down your password.



## **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**

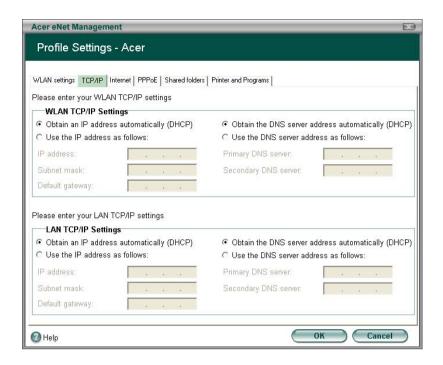
Acer eNet Management helps you to quickly and easily connect to both wired and wireless networks in a variety of locations. To access this utility, either click on the "Acer eNet Management" icon on your notebook, or start the program from the Start menu. You also have the option to set Acer eNet Management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

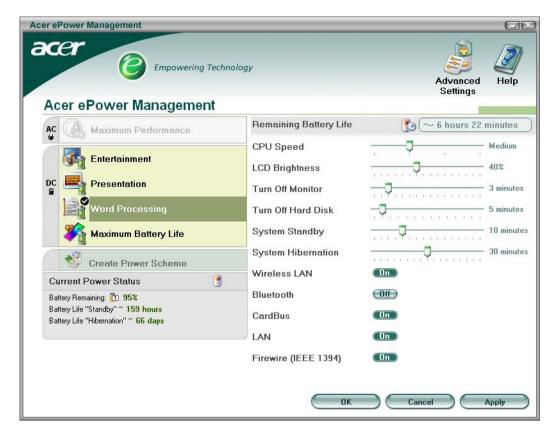
To suit your usage, there are four pre-defined profiles - Entertainment, Presentation, Word Processing, and Maximum Battery. Or, you can define up to three of your own profiles.

#### 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 battery mode.
- 4. Choose which power options best fit your needs, then click OK.
- 5. The new profile will appear on the main screen.

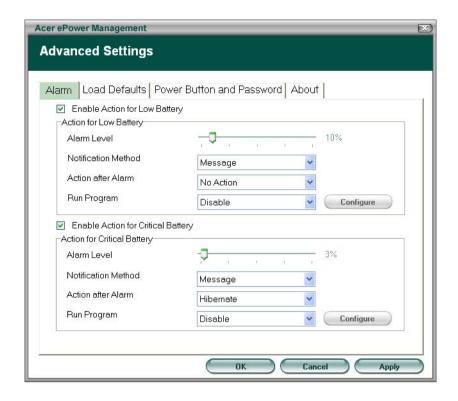
#### **Battery status**

For real-time battery life estimates based on current usage, refer to the panel on the lower left-hand side of the window.



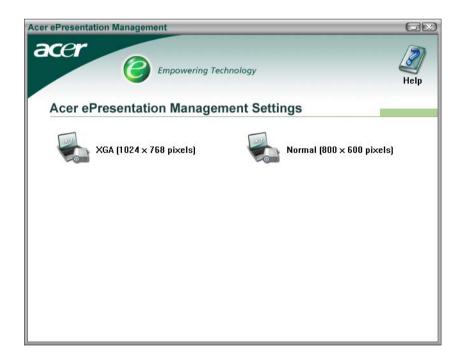
You can also click "Advanced Settings" to:

- □ 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 <sup>®</sup> Core <sup>TM</sup> Duo processor T2300/T2400/T2500/T2600 (2 MB L2 cache, 1.66/1.83/2/2.16GHz, 667 MHz FSB)
Core logic	Intel® 945GM/945PM+ICH7-M
CPU package	μ FCBGA-1466
CPU core voltage	

#### **BIOS**

Item	Specification
BIOS vendor	Phoenix
BIOS Version	V1.10
BIOS ROM type	512K Flash ROM
BIOS ROM size	1MB Flash BIOS
BIOS package	32-pin PLCC
Supported protocols	ACPI 1.0b/2.0/3.0, PCI2.2, System/HDD Password Security Control, INT 13h Extensions, PnP 1.0a, SMBIOS 2.4, BIOS Boot Specification (Compaq, Phoenix, INtel), Simple Boot Flag 1.0, Boot Block, PCI Bus Power Management Interface Specifications USB1.1/2.0, PC Card 95, IrDA 1.0, Intel AC97 CNR Specification, WfM 2.0, PXE 2.1, Boot Integrity Service Application Program Interface (BIS) 1.0, PC99a and Mobile PC2001 Compliant, Intel (R) SpeedStep Technology, Legacy 1394 Device support, DMI 2.0, PS/2 keyboard and mouse
BIOS password control	Set by setup manual

#### **Second Level Cache**

Item	Specification
Cache controller	Built-in CPU
Cache size	2MB for Intel <sup>®</sup> Pentium <sup>®</sup> M 945GM/945PM Processor
1st level cache control	Always enabled
2st level cache control	Always enabled
Cache scheme control	Fixed in write-back

# **System Memory**

Item	Specification
Memory controller	Built-in Intel® 945GM/945PM
Memory size	0MB (no on-board memory)
DIMM socket number	2 sockets
Supports memory size per socket	1024MB
Supports maximum memory size	2G (by two 1024MB SO-DIMM module)
Supports DIMM type	DDR 2 Synchronous DRAM
Supports DIMM Speed	533 MHz
Supports DIMM voltage	1.8V
Supports DIMM package	200-pin soDIMM
Memory module combinations	You can install memory modules in any combinations as long as they match the above specifications.

#### **Memory Combinations**

Slot 1	Slot 2	Total Memory
0MB	128MB	128MB
ОМВ	256MB	256MB
ОМВ	512MB	512MB
ОМВ	1024MB	1024MB
128MB	128MB	256MB
128MB	256MB	384MB
128MB	512MB	640MB
128MB	1024MB	1152MB
256MB	128MB	384MB
256MB	256MB	512MB
256MB	512MB	768MB
256MB	1024MB	1280MB
512MB	128MB	640MB
512MB	256MB	768MB
512MB	512MB	1024MB
512MB	1024MB	1536MB
1024MB	0MB	1024MB
1024MB	128MB	1152MB
1024MB	256MB	1280MB
1024MB	512MB	1536MB
1024MB	1024MB	2048MB

**NOTE:** Above table lists some system memory configurations. You may combine DIMMs with various capacities to form other combinations. On above table, the configuration of slot 1 and slot 2 could be reversed.

#### **LAN Interface**

Item	Specification
Chipset	BroadCom BCM4401E
Supports LAN protocol	10/100Mbps
LAN connector type	RJ45
LAN connector location	Right side
Features	Integrated 10/100 BASE-T transceiver Wake on LAN support compliant with ACPI 2.0 PCI v2.2

#### **Modem Interface**

Item	Specification
Data modem data baud rate (bps)	56K
Supports modem protocol	V.90/V.92
Modem connector type	RJ11
Modem connector location	Right side

#### **Bluetooth Interface**

Item	Specification
Chipset	Built-in Intel <sup>®</sup> ICH7-M

### **Bluetooth Interface**

Item	Specification
Data throughput	723 bps (full speed data rate)
Protocol	Bluetooth 2.0
Interface	USB 1.1
Connector type	Mini-USB

# Wireless Module 802.11b/g (optional device)

Item	Specification
Chipset	Built-in ICH7-M
Data throughput	11~54 Mbps
Protocol	802.11b+g
Interface	Mini-PCI type II (What does PCI Bus means on the system block diagram?)

### **Hard Disk Drive Interface**

Item			
Vendor & Model Name	Seagate 40G ST9402112A Toshiba MK4025GAS Hitachi HTS421240H9AT00 WD WD400UE-22HCT0 Samsung M40MP0402H	Seagate ST96812A Seagate ST960821A Toshiba MK6025GAS HGST HTS541260H9AT00 WD WD600UE-22HCT0	TOSHIBA MK8025GAS HITACHI HTS421280H9AT00 SEAGATE ST9808210A SEAGATE ST98823A TOSHIBA MK8026GAX HGST HTS541280H9AT00 WD WD800UE-22HCT0
Capacity (MB)	40000	60000	80000
Bytes per sector	512	512	512
Data heads	2	3 (for Hitachi and Seagate) 4 (for Toshiba)	4 (for Hitachi) 3 (for Seagate)
Drive Format			
Disks	1	2	2
Spindle speed (RPM)	4200 RPM	4200 RPM	4200 RPM
Performance Sp	pecifications		
Buffer size	2048KB	8192KB	8192KB
Interface	ATA/ATAPI-6; ATA-6	ATA/ATAPI-6; ATA-6	ATA/ATA-6; ATA-6
Max. media transfer rate (disk-buffer, Mbytes/s)	372	350	350
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 Requ	uirements		
Voltage tolerance	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%

#### **Combo Drive Interface**

Item		Specification	
Vendor & model name	DVD/CDRW HLDS GCC-424	DVD/CDRW HLDS GCC-4244N	
Performance Specification	With CD Diskette	With DVD Diskette	
Transfer rate (KB/sec)	Sustained:	Sustained:	
	Max 3.6Mbytes/sec	Max 10.8Mbytes/sec	
Buffer Memory	2MB		
Interface	Enhanced IDE(ATAPI) compa	atible	
Applicable disc format	border), DVD-RW, DVD-RAM CD: CD-DA, CD-ROM, CD-R	DVD: DVD-ROM, (DVD-5, DVD-9, DVD-10, DVD-18),DVD-R (read, single border), DVD-RW, DVD-RAM (2.6GB, 4.7GB) CD: CD-DA, CD-ROM, CD-ROM XA, CD-R, CD-RW Photo (Multisession) Video CD, CD-Extra, (CD+), CD-test	
Loading mechanism	(b) Release by ATA	Load: Manual Release: (a) Electrical Release (Release Button) (b) Release by ATAPI command (c) Emergency Release	
Power Requirement	·		
Input Voltage	5 V +/- 5% (Operating)		

#### **DVD-Dual Interface**

Item	Specification	
Vendor & model name	LITEON SOSW-833S PIONEER DVR-K16RA	
Performance Specification	With CD Diskette With DVD Diskette	
Transfer rate (KB/sec)	Sustained:	Sustained:
	Max 3.6Mbytes/sec	Max 10.8Mbytes/sec
Buffer Memory	2MB	
Interface	Enhanced IDE(ATAPI) compatible	
Applicable disc format	Support disc formats	
	Reads data in each CD-ROM, CD-RC CD-Text	M XA, CD-1, Video CD, CD-Extra and
	2. Reads data in Photo CD (single and N	/lulti-session)
	3. Reads standard CD-DA	
	4. Reads and writes CD-R discs	
	5. Reads and writes CD-RW discs	
	6. Reads and writes in each DVD+R/RW (Ver. 1.1)	
	7. Reads data in each DVD-ROM and DVD-R (Ver. 2.0 for Authoring)	
	8. Reads and writes in each DVD-R (Ver. 2.0 for general), DVD-RW and DVD+R/RW (Ver1.1)	
Loading mechanism	Load: Manual	
	Release: (a) Electrical Release (Release Button)	
	(b) Release by ATAPI comman	d
	(c) Emergency Release	
Power Requirement		
Input Voltage	5 V +/- 5% (Operating)	_

#### **HD Audio Interface**

Item	Specification
Audio Controller	ALC883

#### **HD Audio Interface**

Item	Specification
Audio onboard or optional	Built-in
Mono or Stereo	Stereo
Resolution	Wide range (°V80dB ~ +42dB) volume control with 1.5dB resolution of analog to analog mixer gain  16 bit stereo digital to analog converter  16 bit stereo analog to digital converter
Compatibility	HD Audio
Mixed sound source	Line-in, CD
Voice channel	8/16-bit, mono/stereo
Sampling rate	All DACs support 44.1k/48k/96k/192kHz sample rate All ADCs support 44.1k/48k/96kHz sample rate 16/20/24-bit S/PDIF-OUT supports 44.1k/48k/96k/192kHz sample rate 16/20/24-bit S/PDIF-IN supports 44.1k/48k/96kHz sample rate
Internal microphone	Yes
Internal speaker / Quantity	Yes/2

#### Video Interface

Item	Specification
Chipset	Built-in Intel <sup>®</sup> 945GM for UMA models
	NVIDIA® GeForce® Go 7600 (72MV) for discrete models
Package	35.5 mm x 40 mm 1257 pin mBGA
Interface	internal PCIE
Supports ZV (Zoomed Video) port	Yes
Memory Interface	64-bit
Memory Bandwidth(GB/sec)	5.6
Fill Rate (Gpixels/sec)	1.4
Vertices/Second (Millions)	260
Memory Data Rate (MHz)	700
RAMDACs (MHz)	400

**NOTE:** RAMDAC refers to **R**andom **A**ccess **M**emory **D**igital to **A**nalog **C**onverter: the VGA controller chip that maintains the range of colors and converts data from memory into analog signals for the monitor.

### **Video Memory**

Item	Specification
Chipset	Built-in Intel <sup>®</sup> 945GM for UMA models
	NVIDIA <sup>®</sup> GeForce <sup>TM</sup> Go 7600 for discrete models
Memory size	128MB/256MB (256MB for Aspire 5650 only)
Interface	GDDR2

#### **USB Port**

Item	Specification
Chipset	Built-in ICH7M
USB Compliancy Level	2.0
OHCI	USB 1.1 and USB 2.0 Host controller

### **USB Port**

Item	Specification
Number of USB port	3
Location	Three on the right side
Serial port function control	Enable/Disable by BIOS Setup

## **PCMCIA Port**

Item	Specification
PCMCIA controller	ENE CB714
Supports card type	Type-II
Number of slots	One type-II
Access location	Left panel
Supports ZV (Zoomed Video) port	No ZV support
Supports 32 bit CardBus	Yes

# System Board Major Chips

Item	Controller
Core logic	Intel® 945GM/945PM+ICH7M
VGA	Built in Intel®945GM for UMA models
	NVIDIA® GeForce <sup>TM</sup> Go 7600 for discrete models
LAN	ENE BCM4401E
USB 2.0	Built in ICH7-M
Super I/O controller	SMsC LPC47N207
MODEM	Built-in ICH7-M
Bluetooth	Built-in ICH7-M
Wireless 802.11 b+g	Built-in ICH7-M
PCMCIA	ENE CB714
HD Audio	Realtek ALC883

## Keyboard

Item	Specification
Keyboard controller	ENE KB 910Q
Total number of keypads	88-/89-key
Windows logo key	Yes
Internal & external keyboard work simultaneously	Plug USB keyboard to the USB port directly: Yes

# Battery

Item	Specification
Vendor & model name	Sony (8cell)
	Sanyo (8cell)
Battery Type	Li-ion
Pack capacity	4800 mAH
Number of battery cell	8
Package configuration	4 cells in series, 2 series in parallel

# Battery

Item	Specification
Normal voltage	14.8V
Charge voltage	16.8+-0.2v

## LCD 14.1" inch

Item	Specification			
Vendor & model name	AU B141EW01	CMO N141I1- L02	QDI QD14TL01-03	SAMSUNG LTN141W1-L01
Screen Diagonal (mm)	14.1 inches	14.1 inches	14.1 inches	14.1 inches
Active Area (mm)	304.1x228.1	304.1x228.1	304.1x228.1	
Display resolution (pixels)	1024x768 XGA	1024x768 XGA	1024x768 XGA	
Pixel Pitch	0.297x0.297	0.099x0.297	0.297x0.297	
Pixel Arrangement	R.G.B. Vertical Stripe	R.G.B. Vertical Stripe	R.G.B. Vertical Stripe	
Display Mode	Normally White	Normally White	Normally White	
Typical White Luminance (cd/m²) also called Brightness	180 (5 point average) 150 (5 point average)	160	150	
Luminance Uniformity	N/A	N/A	70	
Contrast Ratio	300	300	250	
Response Time (Optical Rise Time/Fall Time)msec	24/11 15/35	8/17	10/25	
Nominal Input Voltage VDD	+3.3V Typ.	+3.3V	3.3V	
Typical Power Consumption (watt)	5.6/5.7	3.96	N/A	
Weight	550	570	600	
Physical Size(mm)	317.3x242.0x6. 0	317.3x242.0x5. 9	317.3x242.0x6. 5	
Electrical Interface	1 channel LVDS	1 channel LVDS	1 channel LVDS	
Support Color	262K colors (RGB 6-bit data driver)	262,144	262,144	
Viewing Angle (degree)				
Horizontal: Right/Left	40/40	45/45	40/40	
Vertial: Upper/Lower	10/30	15/35	20/40	
Temperature Range(°C) Operating Storage (shipping)	0 to +50 -20 to +60	0 to +50 -25 to +60	0 to +50 -20 to +60	

### **LCD** Inverter

Item	Specification
Vendor & model name	Darfon/V189-301GP
Brightness conditions	N/A
Input voltage (V)	9~21
Input current (mA)	2.56 (max)
Output voltage (V, rms)	780V (2000V for kick off)
Output current (mA, rms)	6.5 (max)
Output voltage frequency (k Hz)	65K Hz (max)

# AC Adaptor

Item	Specification
Input rating	90V AC to 264V AC, 47Hz to 63Hz
Maximum input AC current	1.7A
Inrush current	220A@115VAC
	220A@230VAC
Efficiency	82% min. @115VAC input full load

## **System 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 disc may be power managed in this state.
Suspend to RAM (S3)	CPU set power down VGA Suspend PCMCIA Suspend Audio Power Down Hard Disk Power Down CD-ROM Power Down Super I/O Low Power mode
Save to Disk (S4)	Also called Hibernation Mode. System saves all system states and data onto the disc prior to power off the whole system.