

Product: 2008 Acer Aspire 6930/6930G Series Laptop Service Repair Workshop Manual  
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## Aspire 6930/6930G Series Service Guide

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## Revision History

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Please refer to the table below for the updates made on Aspire 6930/6930G Series service guide.

Date	Chapter	Updates

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## Conventions

The following conventions are used in this manual:

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

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## 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.



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# System Specifications

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## Features

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

**NOTE:** Items marked with \* denote only selected models.

## Operating System

- Genuine Windows® Vista™

## Platform

- Intel® Centrino® 2 processor technology, featuring:
  - Intel® Core™ 2 Duo processor
  - Mobile Intel® PM45/GM45 Express Chipset\*
  - Intel® Wireless WiFi Link 5100/5300\*
- Intel® Pentium® dual-core processor\*
- Mobile Intel® PM45/GM45 Express Chipset\*

## System Memory

- Dual-Channel SDRAM support
- Up to 2 GB of DDR2 667 MHz memory, upgradeable to 4 GB using two soDIMM modules

## TV Tuner

- Digital TV-tuner supporting DVB-T\*

## Display and graphics

- 16:9 aspect ratio
- 16" Full HD 1920 x 1080
- 16" HD 1366 x 768
- Mobile Intel® GM45 Express Chipset\*
- NVIDIA® GeForce® 9300M GS\*
- NVIDIA® GeForce® 9600M GS\*
- NVIDIA® GeForce® 9600M GT\*

**NOTE:** Nvidia VGA chipsets apply to Aspire 6930G. The Intel VGA chipset applies to Aspire 6930.

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## Storage subsystem

- 2.5" hard disk drive
- Intel® Turbo Memory supported\*
- Optical drive options:
  - Blu-ray Disc™ /DVD-Super Multi double-layer drive\*
  - DVD-Super Multi double-layer drive\*
- 5-in-1 card reader

## Audio

- Dolby®-epitomized surround sound system with two built-in stereo speakers and one subwoofer\* supporting low-frequency effects
- True5.1-channel surround sound output
- High-definition audio support
- S/PDIF (Sony/Philips Digital Interface) support for digital speakers
- Acer PureZone technology with two built-in stereo microphones
- MS-Sound compatible

## Communication

- Acer Video Conference, featuring:
  - Integrated Acer Crystal Eye webcam\*
  - Acer PureZone technology\*
  - Optional Acer Xpress VoIP phone\*
- WLAN: Intel® Wireless WiFi Link 5100/5300\*
- WPAN: Bluetooth® 2.0+Enhanced Data Rate (EDR)\*
- LAN: Gigabit Ethernet; Wake-on-LAN ready
- Modem: 56K ITU V.92

## Dimensions and Weight

- 385 (W) x 277.5 (D) x 41/43.9 (H) mm (15.71 x 11.49 x 1.61/1.73 inches)
- 3.50 kg (7.71 lbs.) with 2 HDDs and 8-cell battery pack
- 3.40 kg (7.49 lbs.) with 2 HDDs and 6-cell battery pack

## Privacy control

- Acer Bio-Protection fingerprint solution\*
- BIOS user, supervisor, HDD passwords
- Kensington lock slot

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## Power subsystem

- ACPI 3.0
- 71 W 4800 mAh\*
- 48.8 W 4400 mAh\*
- 3-pin 90 W AC adapter\*
- 3-pin 65 W AC adapter\*
- ENERGY STAR® 4.0

## Special keys and controls

- 105/106-key keyboard
- Touchpad pointing device

## I/O interface

- Acer EasyPort IV connector\*
- ExpressCard™/54 slot
- Acer Bio-Protection fingerprint reader\*
- 5-in-1 card reader (SD/MMC/MS/MS PRO/xD)
- 3 USB 2.0 ports
- USB 2.0 / eSATA port \*

**NOTE:** If you plug an eSATA device you will have three USB ports available in the mean time.

- HDMI™ port with HDCP support\*
- External display (VGA) port
- Consumer infrared (CIR) port
- RF-in jack\*
- Headphones/speaker/line-out jack with S/PDIF support\*
- Microphone-in jack
- Line-in jack
- Ethernet (RJ-45) port
- Modem (RJ-11) port
- DC-in jack for AC adapter

## Environment

- Temperature:
  - Operating: 5 °C to 35 °C
  - Non-operating: -20 °C to 65 °C
- Humidity (non-condensing):
  - Operating: 20% to 80%
  - Non-operating: 20% to 80%

**NOTE:** Items marked with \* denote only selected models. The specifications listed above are for reference only. The exact configuration of your PC depends on the model purchased.



# Your Acer Notebook tour

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

## Front View



No.	Icon	Item	Description
1		Acer Crystal Eye webcam	Web camera for video communication (only for certain models).
2		Microphone	Internal microphone for sound recording.
3		Display screen	Also called Liquid-Crystal Display (LCD), displays computer output (Configuration may vary by models).
4		Power button	Turns the computer on and off.
5		Status indicators	Light-Emitting Diodes (LEDs) that light up to show the status of the computer's functions and components.

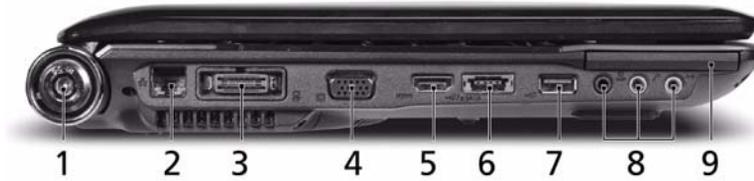
No.	Icon	Item	Description
6		Keyboard	For entering data into your computer.
7		Palmrest	Comfortable support area for your hands when you use the computer.
8		Click buttons (left, center* and right)	The left and right buttons function like the left and right mouse buttons. *The center button serves as Acer Bio-Protection fingerprint reader supporting Acer FingerNav 4-way control function (only for certain models).
9		Touchpad	Touch-sensitive pointing device which functions like a computer mouse.
10	VOL +	Volume Up	Increase system volume/decrease system volume.
	VOL -	Volume Down	
11		Acer MediaTouch keys	For use with Acer Arcade and other media playing programs.
12		Easy-launch buttons	Buttons for launching frequently used programs.
13		Empowering key	Launch Acer Empowering Technology.
14		Speakers	Left and right speakers deliver stereo audio output.

## Closed Front View



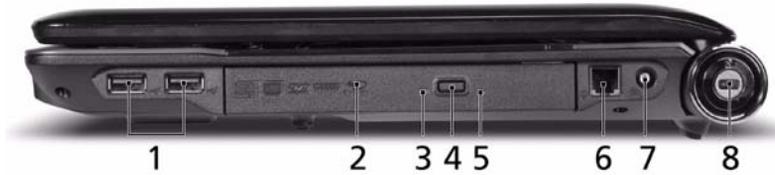
No.	Icon	Item	Description
1		5-in-1 card reader	Accepts Secure Digital (SD), MultiMediaCard (MMC), Memory Stick (MS), Memory Stick PRO (MS PRO), xD-Picture Card (xD). <b>Note:</b> Push to remove/install the card. Only one card can operate at any given time.
2		CIR receiver	Receives signals from a remote control

# Left View



No.	Icon	Item	Description
1		DC in jack	Connects to an AC adapter
2		Ethernet (RJ-45) port	Connects to an Ethernet 10/100/1000-based network.
3		Acer EasyPort IV connector	Connects to Acer EasyPort IV (only for certain models).
4		External display (VGA) port	Connects to a display device (e.g. external monitor, LCD projector).
5	HDMI	HDMI port	Supports high definition digital video connections (only for certain models).
6		USB 2.0 / eSATA port	Connects to USB 2.0 or eSATA devices (only for certain models). <b>Note:</b> If you plug an eSATA device you will have three USB ports available in the mean time.
7		USB 2.0 port	Connect to USB 2.0 devices (e.g. USB mouse, USB camera).
8		Headphones/speaker/line-out jack with S/PDIF support	Connects to audio line-out devices (e.g., speakers, headphones).
		Microphone jack	Accepts inputs from external microphones.
		Line-in jack	Accepts audio line-in devices (e.g., audio CD player, stereo walkman, mp3 player).
9	ExpressCard / 54	ExpressCard/54 slot	Accepts one ExpressCard/54 module.

## Right View



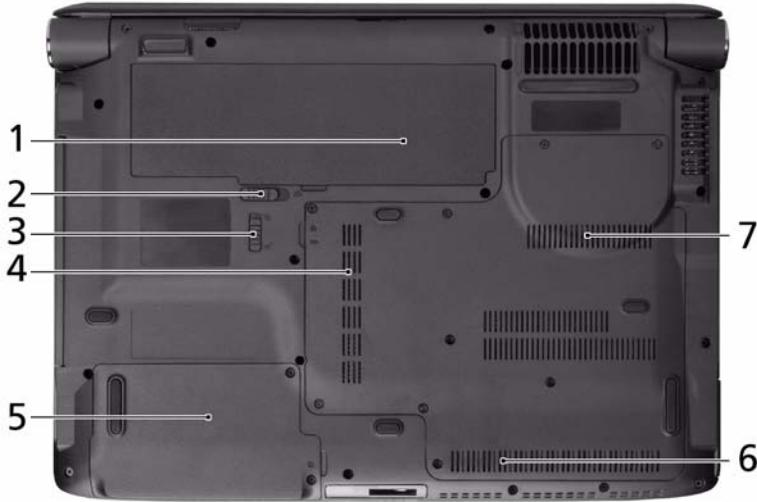
No.	Icon	Item	Description
1		USB 2.0 port	Connect to USB 2.0 devices (e.g. USB mouse, USB camera).
2		Optical drive	Internal optical drive; accepts CDs or DVDs.
3		Optical disk access indicator	Lights up when the optical drive is active.
4		Optical drive eject button	Ejects the optical disk from the drive.
5		Emergency eject hole	Ejects the optical drive tray when the computer is turned off. <b>Note:</b> Insert a paper clip into the emergency eject hole to eject the optical drive tray when the computer is off.
6		Modem (RJ-11) port	Connects to a phone line.
7		RF-in port	Accepts input signals from digital TV Tuner devices (only for certain models).
		Kensington lock slot	Connects to a Kensington-compatible computer security lock.

## Rear View



No.	Item	Description
1	Tuba	The dedicated Tuba CineBass subwoofer pumps out earthshaking movie-house audio.
2	Ventilation slots	Enable the computer to stay cool, even after prolonged use.

# Bottom View



No.	Icon	Item	Description
1		Battery bay	Houses the computer's battery pack.
2		Battery release latch	Releases the battery for removal.
3		Battery lock	Locks the battery in position.
4		Hard disk bay-Main	Houses the computer's hard disk (secured with screws).
5		Hard disk bay-Secondary	Houses the computer's hard disk (secured with screws) (only for certain models).
6		Memory compartment	Houses the computer's main memory.
7		Ventilation slots and cooling fan	Enable the computer to stay cool, even after prolonged use. <b>Note:</b> Do not cover or obstruct the opening of the fan.

---

## Indicators

The computer has several easy-to-read status indicators:

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

Icon	Function	Description
	Bluetooth	Indicates the status of Bluetooth communication.
	WLAN	Indicates the status of wireless LAN communication.
	Power	Indicates the computer's power status.
	Battery	Indicates the computer's battery status.
	HDD	Indicates when the hard disk drive is active.
	Num Lock	Lights up when Num Lock is activated.
	Caps Lock	Lights up when Caps Lock is activated.

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

## Easy-Launch Buttons

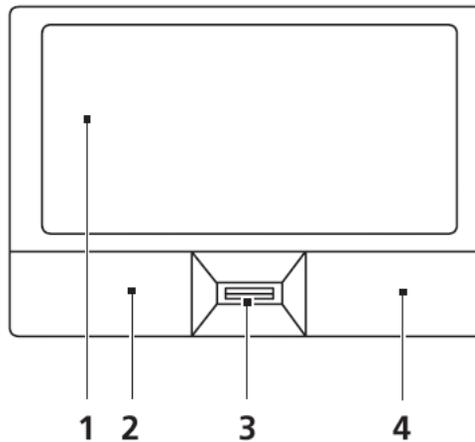
Located beside the keyboard are application buttons. These buttons are called easy-launch buttons. They are: WLAN, Internet, email, Bluetooth, Arcade and Acer Empowering Technology.

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.

Icon	Function	Description
	Empowering Technology	Launch Acer Empowering Technology. (user-programmable)
	Web browser	Internet browser (user-Programmable)
	Mail	Email application (user-Programmable)
	Bluetooth communication switch	Enables/disables the Bluetooth function.
	Wireless communication switch	Enables/disables the wireless function.

# Touchpad Basics (with fingerprint reader)

The following items show you how to use the touchpad with Acer Bio-Protection fingerprint reader:



- 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 Acer Bio-Protection fingerprint reader (3) supporting Acer FingerNav 4-way control function (only for certain models) or the 4-way scroll (3) button (only for certain models) to scroll up or down and move left or right a page. This fingerprint reader or button mimics your cursor pressing on the right scroll bar of Windows applications.

Function	Left Button (1)	Right Button (3)	Main touchpad (2)
Execute	Quickly click twice.		Tap twice (at the same speed as double-clicking a mouse button).
Select	Click once.		Tap once.
Drag	Click and hold, then use finger on the touchpad to drag the cursor.		Tap twice (at the same speed as double-clicking a mouse button); rest your finger on the touchpad on the second tap and drag the cursor.
Access context menu		Click once.	

**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 too hard will not increase the touchpad's responsiveness.

# Using the Keyboard

The keyboard has full-sized keys and an embedded numeric keypad, separate cursor, lock, Windows, function and special keys.

## Lock Keys and embedded numeric keypad

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



Lock key	Description
Caps Lock	When Caps Lock is on, all alphabetic characters typed are in uppercase.
Num Lock <Fn> + <F11>	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>	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 <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 functions.

Key	Description
 Windows key	<p>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:</p> <ul style="list-style-type: none"> <li>&lt;  &gt;: Open or close the Start menu</li> <li>&lt;  &gt; + &lt;D&gt;: Display the desktop</li> <li>&lt;  &gt; + &lt;E&gt;: Open Windows Explore</li> <li>&lt;  &gt; + &lt;F&gt;: Search for a file or folder</li> <li>&lt;  &gt; + &lt;G&gt;: Cycle through Sidebar gadgets</li> <li>&lt;  &gt; + &lt;L&gt;: Lock your computer (if you are connected to a network domain), or switch users (if you're not connected to a network domain)</li> <li>&lt;  &gt; + &lt;M&gt;: Minimizes all windows</li> <li>&lt;  &gt; + &lt;R&gt;: Open the Run dialog box</li> <li>&lt;  &gt; + &lt;T&gt;: Cycle through programs on the taskbar</li> <li>&lt;  &gt; + &lt;U&gt;: Open Ease of Access Center</li> <li>&lt;  &gt; + &lt;X&gt;: Open Windows Mobility Center</li> <li>&lt;  &gt; + &lt;BREAK&gt;: <b>Display</b> the System Properties dialog box</li> <li>&lt;  &gt; + &lt;SHIFT+M&gt;: Restore minimized windows to the desktop</li> <li>&lt;  &gt; + &lt;TAB&gt;: Cycle through programs on the taskbar by using Windows Flip 3-D</li> <li>&lt;  &gt; + &lt;SPACEBAR&gt;: Bring all gadgets to the front and select Windows Sidebar</li> <li>&lt;CTRL&gt; + &lt;  &gt; + &lt;F&gt;: Search for computers (if you are on a network)</li> <li>&lt;CTRL&gt; + &lt;  &gt; + &lt;TAB&gt;: Use the arrow keys to cycle through programs on the taskbar by using Windows Flip 3-D</li> </ul> <p><b>Note:</b> Depending on your edition of Windows Vista, some shortcuts may not function as described.</p>
 Application key	<p>This key has the same effect as clicking the right mouse button; it opens the application's context menu.</p>

# 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.



Hotkey	Icon	Function	Description
<Fn> + <F1>	?	Hotkey help	Displays help on hotkeys.
<Fn> + <F2>		Acer eSettings Management	Launches Acer eSettings Management in Acer Empowering Technology.
<Fn> + <F3>		Acer ePower Management	Launches Acer ePower Management in Acer Empowering Technology.
<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> + <▷>		Brightness up	Increases the screen brightness.
<Fn> + <◁>		Brightness down	Decreases the screen brightness.

---

## Special Key

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



### The Euro symbol

1. Open a text editor or word processor.
2. Hold <Alt Gr> and then press the <5> key at the upper-center of the keyboard.

**NOTE: Note:** Some fonts and software do not support the Euro symbol. Please refer to [www.microsoft.com/typography/faq/faq12.htm](http://www.microsoft.com/typography/faq/faq12.htm) for more information.

### The US dollar sign

1. Open a text editor or word processor.
2. Hold <Shift> and then press the <4> key at the upper-center of the keyboard.

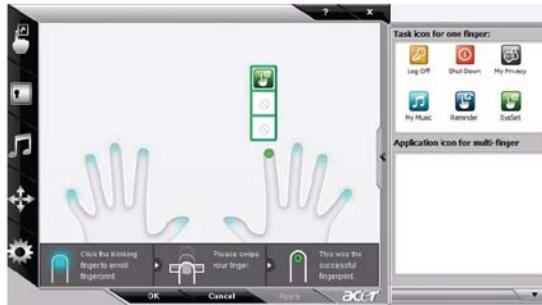
**NOTE:** This function varies by the operating system version.

# Using the System Utilities

Acer Bio-Protection (only for certain models) Acer Bio-Protection Fingerprint Solution is a multi-purpose fingerprint software package integrated with the Microsoft Windows operating system. Utilizing the uniqueness of one's fingerprint features, Acer Bio-Protection Fingerprint Solution has incorporated protection against unauthorized access to your computer with centralized password management with Password Bank, easy music player launching with Acer MusicLaunch, secure Internet favorites via Acer MyLaunch, and fast application/website launching and login with Acer FingerLaunch, while Acer ProfileLaunch can launch up to three applications/websites from a single finger swipe.

Acer Bio-Protection Fingerprint Solution also allows you to navigate through web browsers and documents using Acer FingerNav. With Acer Bio-Protection Fingerprint Solution, you can now enjoy an extra layer of protection for your personal computer, as well as the convenience of accessing your daily tasks with a simple swipe of your finger!

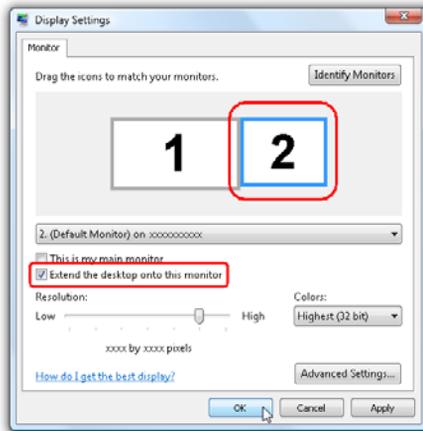
For more information refer to the Acer Bio-Protection help files.



## Acer GridVista (dual-display compatible)

**NOTE:** This feature is only available on certain models.

To enable the dual monitor feature of the 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:

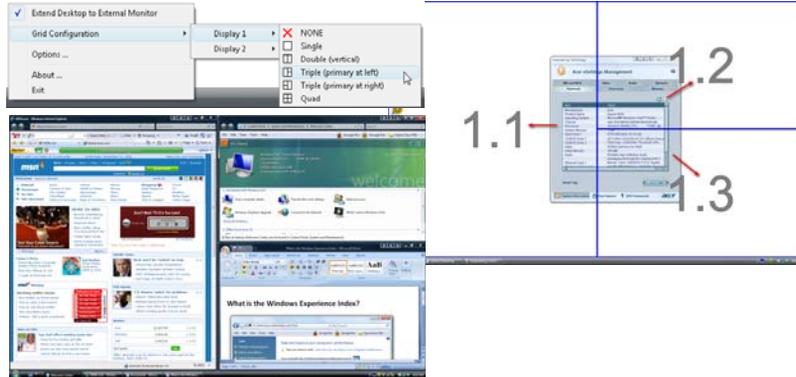


Double (vertical), Triple (primary at left), Triple (primary at right), or Quad Acer GridVista is dual-display compatible, allowing two displays to be partitioned independently.

Acer GridVista is dual-display compatible, allowing two displays to be partitioned independently.

AcerGridVista is simple to set up:

1. Run Acer GridVista and select your preferred screen configuration for each display from the task bar.
2. Drag and drop each window into the appropriate grid.
3. Enjoy the convenience of a well-organized desktop.



**NOTE:** Please ensure that the resolution setting of the second monitor is set to the manufacturer's recommended value.

# Hardware Specifications and Configurations

## Processor

Item	Specification
CPU type	Intel Penryn (dual core)
CPU Features	<ul style="list-style-type: none"> <li>• Supports Intel architecture with Dynamic execution</li> <li>• On-die, primary 32-KB instruction cache and 32-KB write-back data cache</li> <li>• On-die, up to 6MB second level shared cache with advanced transfer cache architecture</li> <li>• Streaming SIMD Extensions 2 (SSE2), Streaming SIMD Extensions 3 (SSE3)</li> <li>• Supplemental streaming SIMD extensions 3 (SSSE3) and SSE4.1 instruction sets</li> <li>• 1066MHz source-synchronous front side bus (FSB)</li> <li>• Advanced power management features including Enhanced Intel SpeedStep®</li> <li>• Technology and dynamic FSB frequency switching</li> <li>• Digital thermal sensor (DTS)</li> <li>• Execute disable bit support for enhanced security</li> <li>• Intel® Dynamic Acceleration Technology and Enhanced Multi Threaded</li> <li>• Thermal Management (EmTTM)</li> <li>• Support enhanced Intel Virtualization Technology</li> </ul>
Power	VCC-CORE: voltage for the future processor will depend on VID0- 6 for battery mode and setting via software for adapter mode for the future processor
CPU package	Intel 479 pin Micro-FCPGA

## Northbridge

Item	Specification
Chipset	Intel Crestline PM45/GM45
Features	<ul style="list-style-type: none"> <li>• Processor host bus supports, 667/800/1066MHz FSB support</li> <li>• Supports Dual Channel DDR2 SDRAM at 667/800 MHz</li> <li>• Supports Dual Channel DDR3 SDRAM at 800/1066 MHz</li> <li>• Integrated SDRAM controller up to 8GB (2 SODIMM support)</li> <li>• External Graphics interface for PCI Express Architecture support</li> <li>• DMI x2 and DMI x 4 for connection between GMCH and ICH9M</li> <li>• Supports ACPI 3.0</li> </ul>
Power	1.05V core, 1.5V,VCCSM(DDR2 = 1.8V/DDR3=1.5V),2.5V,3.3V
Package	FCBGA 1329 balls

## Southbridge

Item	Specification
Chipset	ICH9M
Features	<ul style="list-style-type: none"> <li>Upstream accelerated Hub architecture interface for access to GMCH</li> <li>PCI Express Base Specification, Revision 1.1 support</li> <li>PCI 2.3 interface. (4 PCI Request/Grant pairs)</li> <li>ACPI Power Management Logic Support</li> <li>Enhanced DMA controller, interrupt controller, timers functions</li> <li>Integrated Serial ATA host controllers with independent DMA operation on six ports and AHCI support</li> <li>USB 1.1 &amp; USB 2.0 Host controllers</li> <li>Supports Intel High Definition Audio (Intel HD Audio) Interface</li> <li>Supports Intel® Matrix Storage Technology</li> <li>Supports Intel® Active Management Technology</li> <li>Low Pin Count (LPC) interface</li> <li>6 PCIe ports</li> </ul>
Power	1.05V core,1.5V,3.3V,5V CMOS I/O
Package	BGA 676 balls

## System Board major Chips

Item	Specifications
Core logic	Penryn, Cantiga (GM45/ PM45), ICH9M
VGA	UMA and MXM
LAN	Atheros AR8121
USB	2.0 Integrated with ICH9M
Super I/O controller	N/A
MODEM	<ul style="list-style-type: none"> <li>Foxconn Conexant -Unizion 1.5_3.3v T60M955.02</li> <li>Foxconn Conexant -Unizion 1.5_3.3v AUS T60M955.0x</li> <li>Lite-On Conexant -Unizion 1.5_3.3v AUS RD02-D330</li> </ul>
Wireless LAN	<ul style="list-style-type: none"> <li>Intel WLAN 512AN_HMWG Shirley Peak 5100 MM#895373</li> <li>Intel WLAN 512AN_MMWG Shirley Peak 5100 MM#895361</li> <li>Intel WLAN 533AN_HMWG Shirley Peak MM#895401</li> <li>Intel WLAN 533AN_MMWG Shirley Peak MM#895362</li> <li>QMI Wireless LAN Atheros AR5B91 1x2 BGN</li> <li>Foxconn Wireless LAN Wireless LAN Ralink RT2700E 1x2 BGN</li> <li>Intel WLAN 512AG_MMWG Shirley Peak 5100 MM#897004</li> <li>Intel WLAN 533ANXMMWG Echo Peak 5350 MM#895365</li> </ul>
Bluetooth	Foxconn Bluetooth FOX_BRM_2.0 F/W 300
Media Card Reader	Realtek RTS5158E
Audio Codec	Realtek ALC888S
Clock Generator	Seligo SLG8SP512K05

**CPU Fan True Value Table**

Full Download: <https://www.arepairmanual.com/downloads/2008-acer-aspire-69306930g-series-laptop-service-repair-workshop-manual>

Level	Fan On Temp.	Fan Off Temp.	RPM Throttling	dB(A)
0	50	45	2300	31
1	60	55	2600	34
2	70	65	2800	37
3	80	75	3100	40

- Throttling 50%: On =93C; Off=85C
- OS Shut down: 105C
- H/W Shut down: 110C

Fan default: 3.5V

**BIOS ROM**

Item	Specification
BIOS Vendor	Phoenix
BIOS Version	3120
BIOS ROM Type	W25X16AVSSIG
BIOS ROM Size	16 MB
BIOS Package	8 PIN SOIC
Supported Protocols	SPI
BIOS Password control	Set by setup manual

**System Clock**

Item	Specification
Chipset	Silego SLG8SP512K05
Features	<ul style="list-style-type: none"> <li>• 200/166Mhz for CPU, GMCH</li> <li>• 100MHz clock buffer for GMCH, ICH8M and PCI-E device, SATA, Docking station</li> <li>• 96MHz GMCH</li> <li>• 48Mhz for USB clock inside ICH8M</li> <li>• 33Mhz PCI clock for PCI device, LPC</li> <li>• 14.31818Mhz for ICH8M</li> <li>• Support spread spectrum function, for reducing EMI</li> <li>• Support SM bus interface.</li> </ul>
Power	3.3V
Package	64 pin TSSOP

**Crystal and Oscillator**

Item	Specification
Features	<ul style="list-style-type: none"> <li>• 14.31818Mhz crystal for clock chip</li> <li>• 32.768Khz crystal for RTC inside ICH9M and EC/ WPC775LDG</li> <li>• 25MHZ crystal for Atheros LAN controller AR8121</li> </ul>

Sample of manual. Download All 238 pages at:

<https://www.arepairmanual.com/downloads/2008-acer-aspire-69306930g-series-laptop-service-repair-workshop-manual>