



SOM-ETX CPU Board

Model Number AW-BS610

VIA Eden CPU card with VGA/LCD/LVDS, LAN, TV-Out & Audio

User's Manual

Version 1.0

User's Manual

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Chapter 1. General Information

1.1 Introduction

The AW-BS610 is a VIA EPGA low power consumption processor System On Module (SOM). Using a VIA EDEN processor up to 733MHz, the AW-BS610 achieves good performance on the SOM-ETX CPU module. On-board features include two TTL (16550 compatible) serial ports, one bi-directional parallel (ECP/EPP/SPP) port, four USB ports, one FPC type floppy disk connector, SIR IrDA 1.1 compliant and a keyboard/PS2 mouse interface. The two IDE devices supports Ultra DMA 33/66/100 mode with data transfer rate up to 100MB/sec. In addition, the board's watchdog timer can automatically reset the system or generate an interrupt if the system stops due to a program bug or EMI. The built-in VIA BT82C686B supports temperatures, fan speed and voltages monitoring function. The small size (94mm x 114mm) and use of four high capacity connector based on the proven SOM-ETX form factor, allow the SOM-ETX modules to be easily and securely mounted onto a customized solution board or our standard AW-BP100 5.25" SOM-ETX base board.

The AW-BS610 is a highly integrated multimedia SOM that combines audio, video and network functions. It provides CRT/24-bit TTL TFT LCD and LVDS interface, integrated AGP 4X 2D/3D graphic accelerator with system memory 8/16/32MB. The AW-BS610 also support TV-Out that supports NTSC/PAL format and audio controller based on Realtek® ALC650 AC97 codec for multimedia applications.

1.2 Specification

General Functions

CPU	VIA Eden (EBGA packing) CPU
BIOS	Award® 512KB Flash BIOS
Chipset	VIA VT8606 + VT82C686B
I/O Chipset	VT82C686B built-in
Memory	Onboard one 144-pin SO-DIMM socket supports up to 512MB SDRAM
Enhanced IDE	Supports up to two IDE devices (Ultra DMA33/66/100)

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FDD interface	Support one FPC type floppy disk connector
Parallel port	One bi-directional parallel ports and can be reconfigure to FDD interface; supports SPP/ECP/EPP modes
Serial port	Two TTL (16550 compatible) serial ports
IR interface	Supports SIR IrDA 1.1 compliant
KB/Mouse connector	Support PS/2 keyboard/mouse
USB connectors	Support four USB ports
Watchdog Timer	Can generate a system reset, supports software selectable timeout interval
System Monitoring	Built in VIA VT82C686B supports temp, fan speed and voltages monitoring
Expansion interface	Supports ISA & PCI expansion interface

Flat Panel/CRT Interface

Chipset	VIA Twister-T chip with integrated Savage4 2D/3D/Video Accelerator
Display memory	Share system memory 8/16/32MB
Memory	Display memory Share system memory 8/16/32MB
Interface	4X AGP VGA/LCD interface, support for 9,12,15,18,24 bit TFT and optional 16- or 24-bit DSTN panel
Display type	Support CRT, 24bit TTL TFT LCD and LVDS interface
Output connector	TTL TFT LCD connector on board, CRT & LVDS on base board

Ethernet Interface

Chipset	Realtek® RTL8139C 100BASE-Tx Fast Ethernet controller
Output connector	RJ-45 connector x 1 on the base board

TV-out Interface

Chipset	VIA1621 digital TV encoder
TV format	Supports NTSC and PAL signals format
Output connector	Provides RCA (Composite) video and S-video connector on base board

Audio Interface

Chipset	Realtek® ALC650 AC97 codec
Output connector	Audio connectors on base board

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Form factor	ETX form factor
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Mechanical and Environmental

Power supply voltage	VCC (4.75V to 5.25V)
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Max. Power Requirement	5A @5V
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Operating temperature	32 to 140 (0 to 60)
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Board size	4.5"(L) x 3.7"(W) (114mm x 94mm)
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1.3 Package

Please make sure that the following materials have been packed with the board before starting install your AW-BS610.

1. AW-BS610 SOM-ETX Board
2. Quick Setup Manual
3. Cable List:
 - 46-ICOM00-00 2.54mm COM Port Cable
 - 46-IUSB08-002.54mm USB Cable

Optional Cable

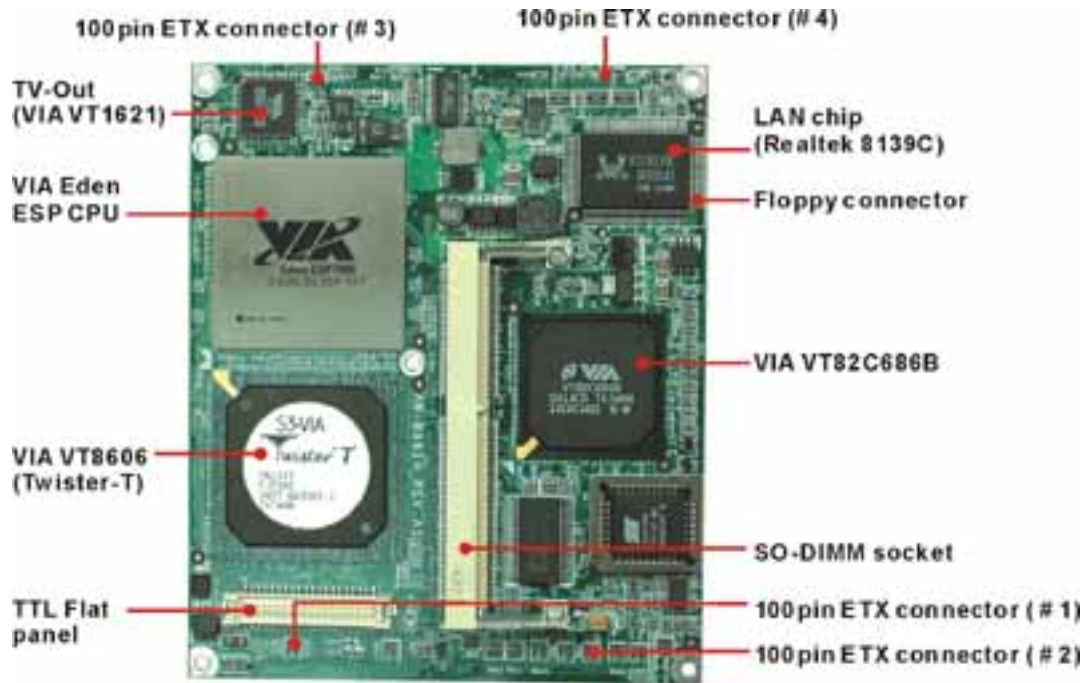
- 46-ATA660-00 IDE Cable
4. CD-ROM for Drivers, Utilities

If any of these parts are missing or damaged, please contact your distributor or sales representatives immediately.

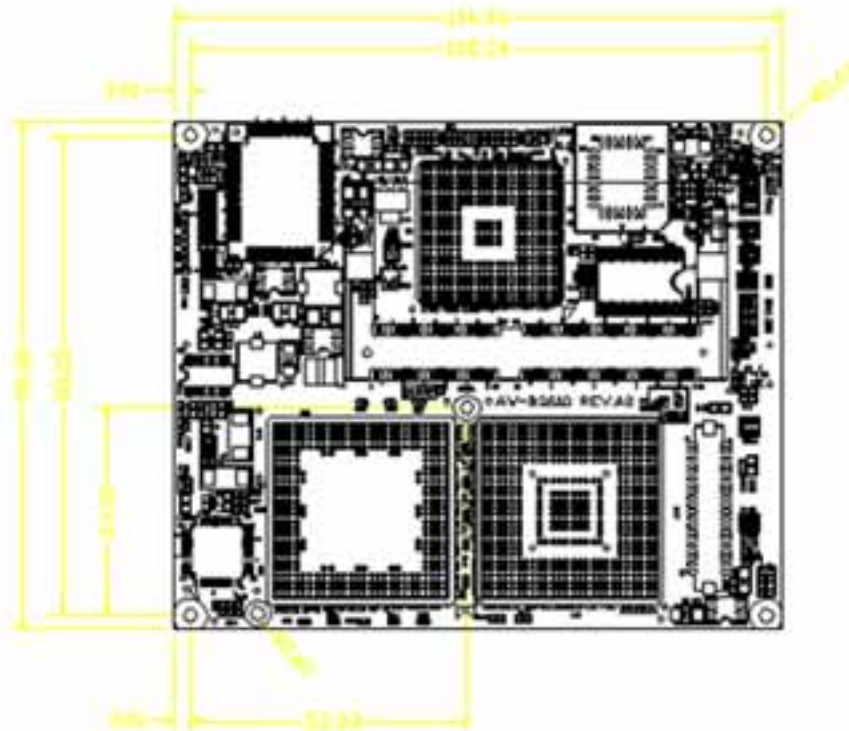
Note: for detailed contents of the AW-BS610, please refer to the attached CD-ROM.

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1.4 Board Layout



1.5 Board Dimension



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Chapter 2. Installing Process

2.1 Installing Memory:

To insert a SDRAM Memory: The AW-BS610 onboard with one 144-pin DDR DIMM sockets supports up to 512Mbytes DDR SDRAM.



To Insert a DIMM Memory: Please align the module with the socket key and press down until the levers at each end of the socket snap close up.

There are two directions for installing a module in the socket. Do not attempt to force the module into the socket incorrectly.



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To Remove a DIMM Memory: To remove a DIMM, press down on the levers at both end of the module until the module pops out

There is only one direction for installing a module in the socket. Do not attempt to force the module into the socket incorrectly.



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Chapter 3. BIOS Setup

The ROM chip of your AW-A695 board is configured with a customized Basic Input/Output System (BIOS) from Phoenix-Award BIOS. The BIOS is a set of permanently recorded program routines that give the system its fundamental operational characteristics. It also tests the computer and determines how the computer reacts to instructions that are part of programs.

The BIOS is made up of code and programs that provide the device-level control for the major I/O devices in the system. It contains a set of routines (called POST, for Power-On Self Test) that check out the system when you turn it on. The BIOS also includes CMOS Setup program, so no disk-based setup program is required CMOS RAM stores information for:

- Date and time
- Memory capacity of the main board
- Type of display adapter installed
- Number and type of disk drives

The CMOS memory is maintained by battery installed on the AW-A695 board. By using the battery, all memory in CMOS can be retained when the system power switch is turned off. The system BIOS also supports easy way to reload the CMOS data when you replace the battery of the battery power lose.

3.1 Quick Setup

In most cases, you can quickly configure the system by choosing the following main menu options:

1. Choose "Load Optimized Defaults" from the main menu. This loads the setup default values from the BIOS Features Setup and Chipset Features Setup screens.
2. Choose "Standard COS Features" from the main menu. This option lets you configure the date and time, hard disk type, floppy disk drive type, primary display and more.
3. In the main menu, press F10 ("Save & Exit Setup") to save your changes and reboot the system.

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3.2 Entering the CMOS Setup Program

Use the CMOS Setup program to modify the system parameters to reflect the options installed in your system and to customized your system. For example, you should run the Setup program after you:

- Received an error code at startup
- Install another disk drive
- Use your system after not having used it for a long time
- Find the original setup missing
- Replace the battery
- Change to a different type of CPU
- Run the Phoenix-Award Flash program to update the system BIOS

Run the CMOS Setup program after you turn on the system. On-screen instructions explain how to use the program.

↓ Enter the CMOS Setup program's main menu as follows:

1. Turn on or reboot the system. After the BIOS performs a series of diagnostic checks, the following message appears:
"Press DEL to enter SETUP"
2. Press the key to enter CMOS Setup program. The main menu appears:



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3. Choose a setup option with the arrow keys and press <Enter>. See the following sections for a brief description of each setup option.

In the main menu, press F10 ("Save & Exit Setup) to save your changes and reboot the system. Choosing "EXIT WITHOUT SAVING" ignores your changes and exits the program. Pressing <ESC> anywhere in the program returns you to the main menu.

3.3 Menu Options

The main menu options of the CMOS Setup program are described in the following and the following sections of this chapter.

STANDARD CMOS FEATURES:

Configure the date & time, hard disk drive type, floppy disk drive type, primary display type and more

ADVANCED BIOS FEATURES:

Configure advanced system options such as enabling/disabling cache memory and shadow RAM

ADVANCED CHIPSET FEATURES:

Configure advanced chipset register options such DRAM timing

INTEGRATED PERIPHERALS:

Configure onboard I/O functions

POWER MANAGEMENT SETUP:

Configure power management features such as timer selects

PNP/PCI CONFIGURATION:

Configure Plug & Play IRQ assignments and PCI slots

PC HEALTH STATUS:

Configure the CPU speed and, if the optional Winbond W83627HF system monitor IC is installed, view system information

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FREQUENCY/VOLTAGE CONTROL

Use this menu to specify your settings for frequency/voltage control

LOAD FAIL-SAFE DEFAULT:

Loads BIOS default values. Use this option as diagnostic aid if your system behaves erratically

LOAD OPTIMIZED DEFAULTS:

Use this menu to load the BIOS default values that are factory settings for optimal performance system operations.

SET SUPERVISORS & USER PASSWORD:

Configure the system so that a password is required when the system boots or you attempt to enter the CMOS setup program. When you log in with this password, you will be able to enter the COS Setup main menu, but you can not enter other menus in the CMOS Setup program.

SAVE & EXIT SETUP:

Save changes of values to CMOS and exit the CMOS setup program

EXIT WITHOUT SAVING:

Abandon all CMOS changes and exit the CMOS setup program

Standard CMOS Features Setup

↓ Use the Standard CMOS Setup option as follows:

1. Choose "Standard CMOS Features" from the main menu. The following screen appears:

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2. Use the arrow keys to move between fields. Modify the selected field using the PgUP/PgDN/+/- keys. Some fields let you enter numeric values directly.

Date and Time Configuration:

Type the current date

Hard Disks:

Choose from "Auto", "User" or "None"

If your drive is not one of the predefined types, choose "User" and enter the following drive specifications: Cylinders, heads, Wpcom, L-Zone, sectors and mode.

Consult the documentation received with the drive for the values that will give you optimum performance.

Drive A & B:

Select the correct specifications for the floppy disk drive installed in the computer.

None: No floppy disk drive installed

360K/1.2M 5.25" standard drive

720K/1.44M/2.88M 3.5" standard drive

Video:

Choose: EGA/VGA

CGA 40 Color Graphics adapter, power up in 40 columns mode

CGA 80 Color Graphics adapter, power up in 80 columns mode

Mono Monochrome adapter, includes high resolution monochrome adapters

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Halt On:

Controls whether the system stops in case of an error detected during power up.

Choose: All Errors (Default)

No Errors

All, But Keyboard

All, But Diskette

All, But Disk/Key

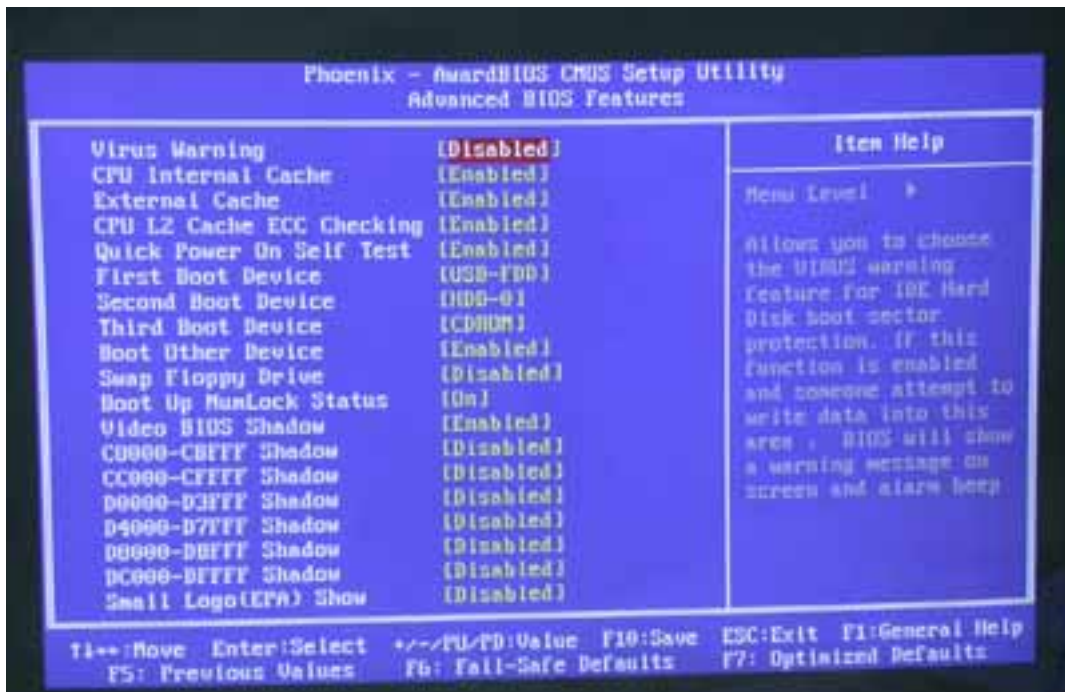
3. After you have finished with the Standard CMOS Features program, press the <ESC> key to return to the main menu.

4.

Advanced BIOS Features Setup

↓ Use the Advanced BIOS Features Setup option as follows:

1. Choose "Advanced BIOS Features Setup" from the main menu. The following screen appears:



2. Use the arrow keys to move between items and to select values. Modify the selected fields using the PgUP/PgDN keys. Press the <F1> "Help" key for information on the available options:

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Virus Warning:

When enabled, any attempt to write to the boot sector and partition table will halt the system and cause a warning message to appear. If this happens, you can use an anti-virus utility on a virus-free, bootable floppy disk to reboot and clean your system. The default setting is **disabled**.

CPU Internal/External Cache:

The Cache memory is additional memory that is much faster than conventional system memory. Most of modern PCs have additional external cache memory. When the CPU requests data, the system transfers the requested data from the main DRAM into cache memory. The external cache field may not appear if your system doesn't have external cache memory.

Choose: Enabled, Disabled

CPU L2 Cache ECC Checking:

When you select Enabled, memory checking is enabling when the external cache contains ECC SRAM.

Quick Power On Self-Test:

Select Enabled to reduce the amount of time required to run the power-on-self-test (POST). A quick POST skips certain steps. The manufacturer recommends that you normally disable quick POST.

Choose: Enabled, Disabled

First/Second/Third Boot Device:

The BIOS attempts to load the operating system from the devices in the sequence selected in these items.

Choose: Floppy, LS-120, HDH-0, 1, 2, 3, SCSI, CDROM, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, USB-HDD, LAN, Disabled

Boot Other Device:

If your boot device is not included the following devices Floppy, LS120, HDD0/1, SCSI, CDROM, you may set First/Second/Third boot devices to disable and enable the boot other device function, the system will automatically boot the other device.

Choose: Enabled, Disabled

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Boot Up NumLock Status:

Choose On or Off. On puts the numeric keypad in Num Lock mode at boot-up. Off puts the numeric keypad in arrow key mode at boot-up

Security Option:

Choose Setup or System. This lets you specify whether a password is required every time the system boots or only when an attempt is made to enter the CMOS Setup program.

“Setup” – The password prompt only appears if you attempt to enter the CMOS setup program.

“System” – The password prompt appears each time the system is booted.

Note: The password function is disabled by default. For a description of enabling the password function, refer to the section: Supervisor Password & User Password later in this chapter.

Baud Rate:

The data transfer rate (bit per second) to agent. Choose 9600/19200/38400/57600/115200 item.

Agent Wait Time (Min):

Agent negotiates time choose 1/2/4/8 min.

Agent After Boot:

Choose enabled to enable agent administrate this board after boot.

Console Redirection:

Set the Console Redirection <Enabled>

This function is let you to connect the Server by hyper terminal to monitor Client, it has to be worked under DOS mode. The Client terminal doesn't need the graphic function.

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Advanced Chipset Features Setup

↓ Use the Advanced Chipset Features Setup option as follows:

1. Choose "Advanced Chipset Features Setup" from the main menu. The following screen appears:



2. Move between items and select values by using the arrow keys. Modify the selected fields using the PnUP/PgDN keys. For information on the various options, press <F1> key.

DRAM Timing By SPD:

It lets you select the value in this field, depending on the board paged DRAMs or EDO (Extended Data Output) DRAMs.

Choose: Enabled / Disabled

DRAM Clock:

It lets you control the DRAM speed.

Choose: Host Clock, HCLK-33M, HCLK+33M

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SDRAM Cycle Length:

It sets the CAS latency timing.

Choose: 3 / 2

Bank Interleave:

Choose: 2 Bank / 4 Bank / Disabled

Memory Hole:

Choose Enabled or Disabled. You can reserve this area of system memory for ISA adapter ROM. When this area is reserved, it cannot be cached. The user information of peripherals that need to use this area of system memory usually discusses their memory requirement.

System BIOS Cacheable:

Choose Enabled or Disabled. When enabled, caching of the system BIOS at F0000h-FFFFFh, enhancing system performance. However, if any program writes to this memory area, a system error may result.

Video RAM Cacheable:

Choose: Enabled / Disabled

Frame Buffer Size:

Choose: 2M / 4M / 8M / 16M / 32M

AGP Aperture Size:

Enter a value from 4MB to 128MB to determine the effective size of the graphics aperture used in the particular PAC configuration. The larger the value, the better the AGP performance.

OnChip USB:

You could enable this function if the system contains USB (Universal Serial Bus) controller and USB keyboard. When disabled, the system will not be able to access USB keyboard.

Choose: Enabled / Disabled

USB Keyboard/Mouse Support:

You could enable this function if the system contains USB controller and USB keyboard/mouse

Choose: Enabled / Disabled

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PCI Dynamic Bursting:

When enabled, every write transaction goes to the write buffer. Burstable transaction then burst on the PCI bus and nonburstable transaction do not.

Choose: Enabled/Disabled

PCI Master 0 WS Write:

When enabled, writes to the PCI bus are executed with zero wait state.

Choose: Enabled/Disabled

PCI Delay Transaction:

The chipset has an embedded 32-bit posted write buffer to support delay transaction cycles. Select enabled to support compliance with PCI specification version 2.1.

Choose: Enabled/Disabled

PCI#2 Access #1 Retry:

When enabled, PCI#2 will be disconnected if max retried are attempted without success (Default). When disabled PCI#2 will be connected until access finished.

AGP Master 1 WS Write:

System will run single wait state delay before write data from buffer, the system will run twice wait states if set to disable.

AGP Master 1 WS Read:

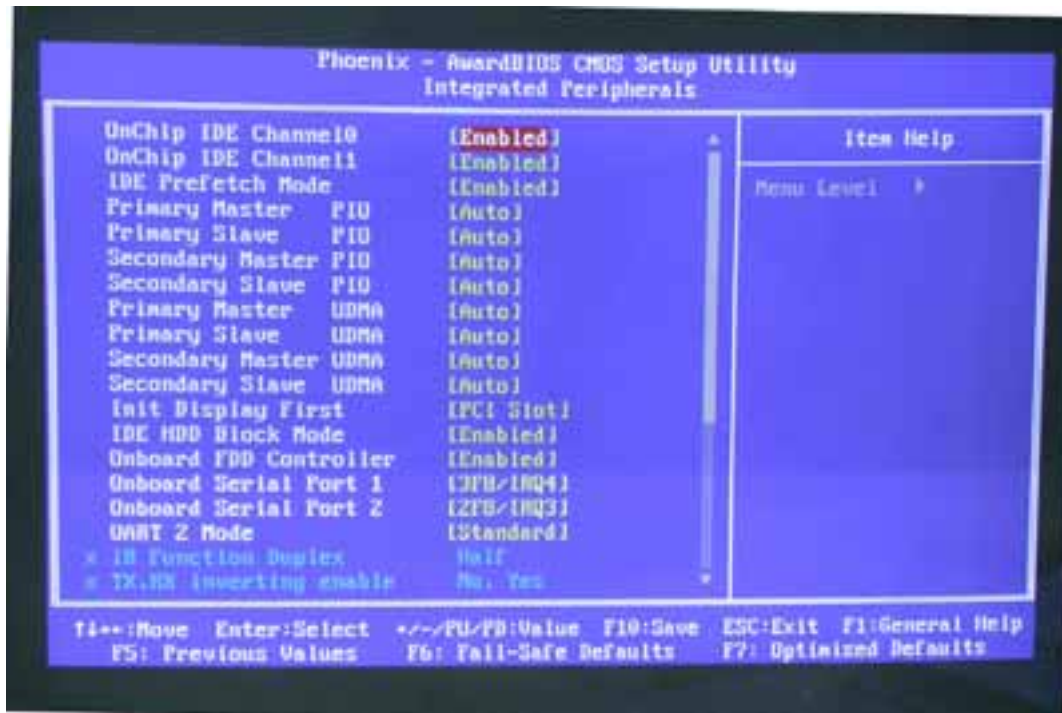
System will run single wait state delay before read data from buffer, the system will run twice wait states if set to disable

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Integrated Peripherals

↓ Use the Integrated Peripherals Setup option as follows:

1. Choose "Integrated Peripherals Setup" from the main menu. The following screen appears:



2. Move between items and select values by using the arrow keys. Modify the selected fields using the PgUP/PgDN keys. Please press the <F1> key for information on the various options.

On-Chip IDE Channel 0 and Channel 1:

The system supports for two IDE channels. Select Enabled to activate the primary IDE interface. Select Disabled to deactivate this interface

IDE Prefetch Mode:

The onboard IDE interface supports IDE Prefetch Mode, for faster drive accesses. If you install a primary and/or secondary add in IDE interface, set the field to Disabled if the interface doesn't support prefetch.

Choose: Enable/Disable

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IDE Primary/Secondary Master/Slave PIO:

Auto/Mode0/Mode1/Mode2/Mode3/Mode4

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

IDE Primary/Secondary Master/Slave UDMA:

Auto, Mode0, Mode1, Mode2, Mode3, Mode4

UltraDMA33/66/100 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver. If your hard drive and your system software both support UltraDMA33/66/100, select Auto to enable BIOS support.

Init Display First:

This item allows you to active PCI slot or onboard first

IDE HDD Block Mode:

Select Enabled only if your hard drives support block mode.

Onboard Serial Port 1 and Serial Port 2:

Choose: Auto

Power Management Setup

The Power Management Setup controls the board's "green" features. To save energy these features shut down the video display and hard disk drive.

↓ **Use the Power Management Setup option as follows:**

1. Choose "Power Management Setup" from the main menu. The following screen appears.

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2. Move between items and select values by using the arrow keys. Modify the selected field the PgUP/PgDN keys. For information on the various options, press <F1> key.

Power Management:

Choose Disable, User Define, Min Saving or Max. Saving.

“User Define” – Lets you specify when the HDD and system will shut down

“Min Saving” - Predefine timer value of 4-12 min.

“Max Saving” – Predefine timer value of 1 minute

PM Control by APM:

When the advanced power management is installed on the system, users would select “Yes” to save more power.

Choose: Yes / No

Video Off Option:

Select the power saving modes when the monitor is blank.

Always on: Monitor remains “on” during power Saving modes.

Suspend-off: Monitor is blank when system is in suspension mode

Suspend: Off monitor is blank when the

Standby-off: System is in either suspension or standby mode.

All modes-off: Monitor is blank when the system is in any power saving mode.

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Video Off Method:

Choose V/H SYNC+Blank, DPMS, Blank Screen

When power management blanks the screen and turns off vertical and horizontal scanning. The DPMS (Display Power Management System) setting allows the BIOS to control the video card if it has the DPMS features. If you don't have a Green monitor, use the Blank Screen option

Modem Use IRQ:

Choose the IRQ used by the modem.

Default: Disabled

Soft-Off by PWRTBN:

Press the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has "hung:

Default: Instant-Off

3. After you have finished with the Power Management Setup, press the <ESC> key to return to the main menu.

PNP/PCI Configuration

This option is used to configure Plug and Play assignments and route PCI interrupts to designated ISA interrupts.

↓ **Use the PNP/PCI Configuration Setup option as follows:**

1. Choose "PNP/PCI Configuration Setup" from the main menu, the following screen appears.

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2. Move between items and select values by using the arrow keys. Modify the selected fields using the PgUP/PgDN keys. For information on the various options, please press <F1> key.

PNP OS Installed:

Select Yes if the system operating environment is Plug and Play aware.

Select No if you need the BIOS to configure non-boot devices

Choose: No, Yes

Reset Configuration Data:

Choose Enable or Disable

“Enable” – PNP configuration data is reset in BIOS

“Disable” – PNP configuration data is retained in BIOS

Resources Controlled By:

Choose Auto or Manual. This option specifies whether resources are controlled by automatic or manual configuration

IRQ Resources:

IRQ-3 Assigned to <PCI Device>

IRQ-4 Assigned to <PCI Device>

IRQ-5 Assigned to <PCI Device>

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IRQ-7 Assigned to <PCI Device>
IRQ-9 Assigned to <PCI Device>
IRQ-10 Assigned to <PCI Device>
IRQ-11 Assigned to <PCI Device>
IRQ-12 Assigned to <PCI Device>
IRQ-14 Assigned to <PCI Device>
IRQ-15 Assigned to <PCI Device>

PCI/VGA Palette Snoop:

Enabling this item informs the PCI/VGA card to keep silent when palette register is updated

Assign IRQ for VGA/USB:

Choose Enabled/Disabled to specify whether the VGA/USB uses on IRQ or not.
an IRQ or not.

3. Please press the <ESC> key to return the main menu after finishing with the PNP/PCI Configuration Setup.

PC Health Status Configuration Setup

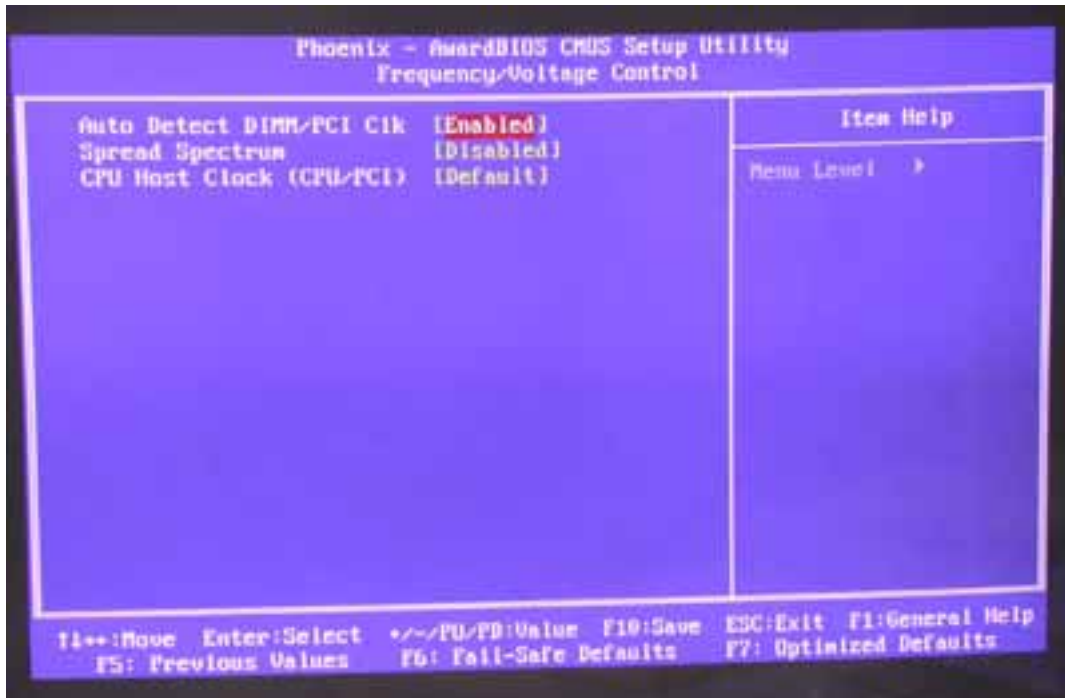
Choose "PC Health Status Configuration Setup" from the main menu, the following screen appears:



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Frequency/Voltage Control Option

Choose the "Frequency/Voltage Control" from main menu, the following screen appears:



Load Fail-Safe Defaults

This option loads the troubleshooting default values permanently stored in the BIOS ROM. This is useful if you are having problems with the main board and need to debug or troubleshoot the system. The loaded default settings do not affect the Standard CMOS Setup screen.

To use this feature, highlight it on the main screen and press <Enter>. A line will appear on the screen asking if you want to load the BIOS default values. Press the <Y> key and then press <Enter> if you want to load the BIOS default.

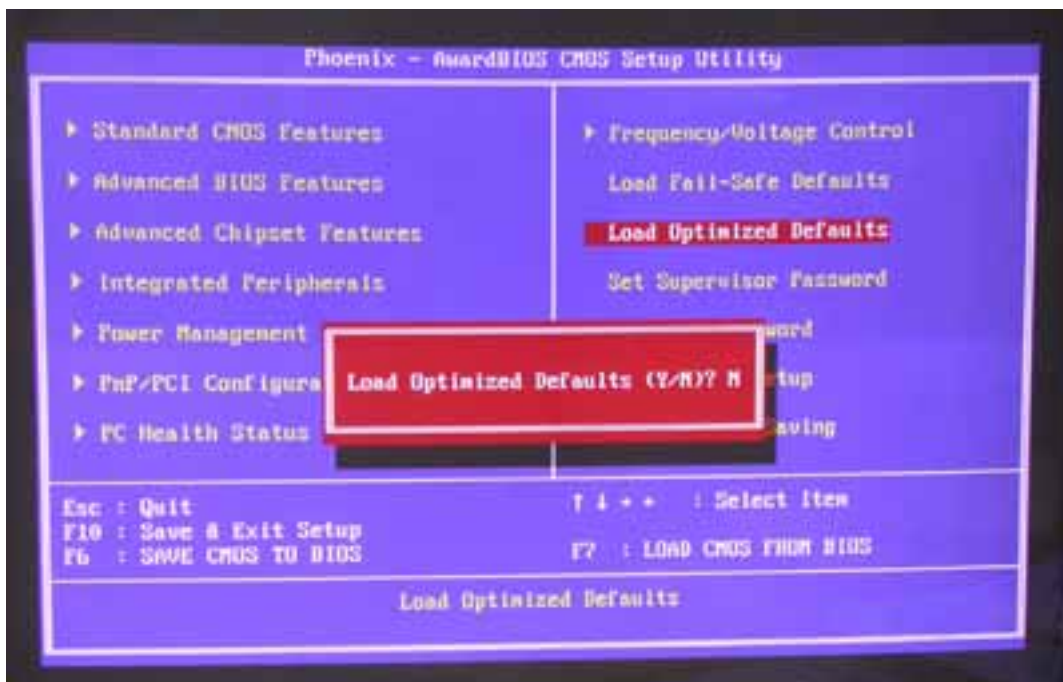
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Load Optimized Defaults

This option loads optimized settings stored in the BIOS ROM. The auto-configured settings do not affect the Standard CMOS Setup screen.

To use this feature, highlight it on the main screen and press <Enter>. A line will appear on the screen asking if you want to load the Optimized Default Values. Press the <Y> key and then press <Enter> if you want to load the SETUP default.



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Supervisor/User Password

The password options let you prevent unauthorized system boot-up or unauthorized use of CMOS setup. The Supervisor Password allows both system and CMOS Setup program access; the User Password allows access to the system and the CMOS Setup Utility main menu.

The password functions are disabled by default. You can use these options to enable a password function or, if a password function is already enabled, change the password.

To change a password, first choose a password option from the main menu and enter the current password. Then type your new password at the prompt. The password is case sensitive and you can use up to 8 alphanumeric characters. Press <Enter> after entering the password. At the Next Prompt, confirm the new password by typing it and pressing <Enter> again.



After you use this option to enable a password function, use the "Security Option" in "BIOS Feature Setup" to specify whether a password is required every time the system boots or only when an attempt is made to enter the CMOS Setup program.

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Save and Exit Setup

This function automatically saves all CMOS values before exiting Setup.



Exit Without Saving

Use this function to exit Setup without saving the CMOS value.



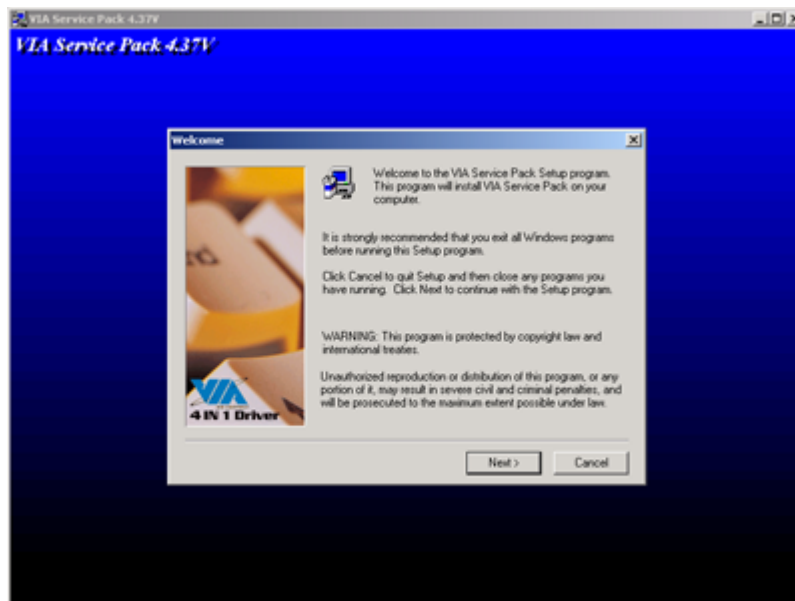
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Chapter 4. Driver Utility

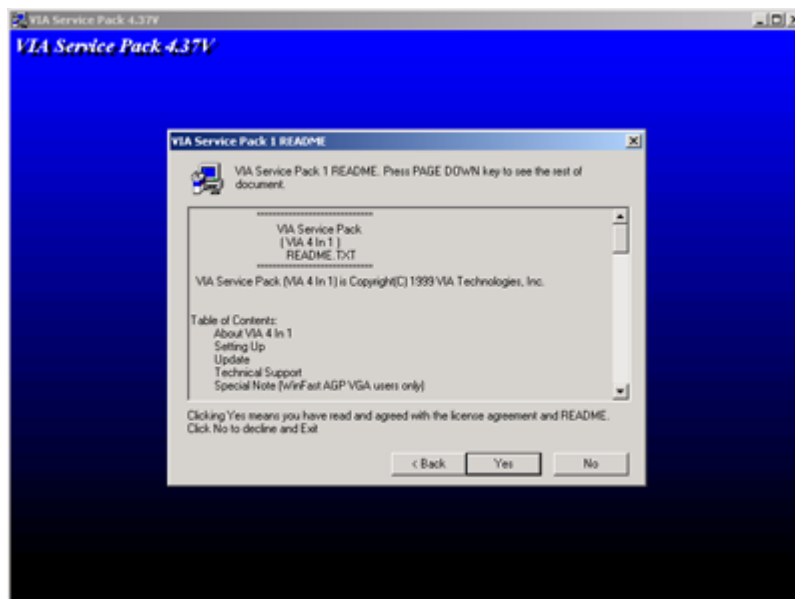
The system driver installation procedure must be performed first.

4.1 System Driver Installation

1. Insert the AW-BS610 CD-ROM driver into the CD-ROM Drive
2. Select the Drivers/system file to click the Setup icon.
3. Click **Next**

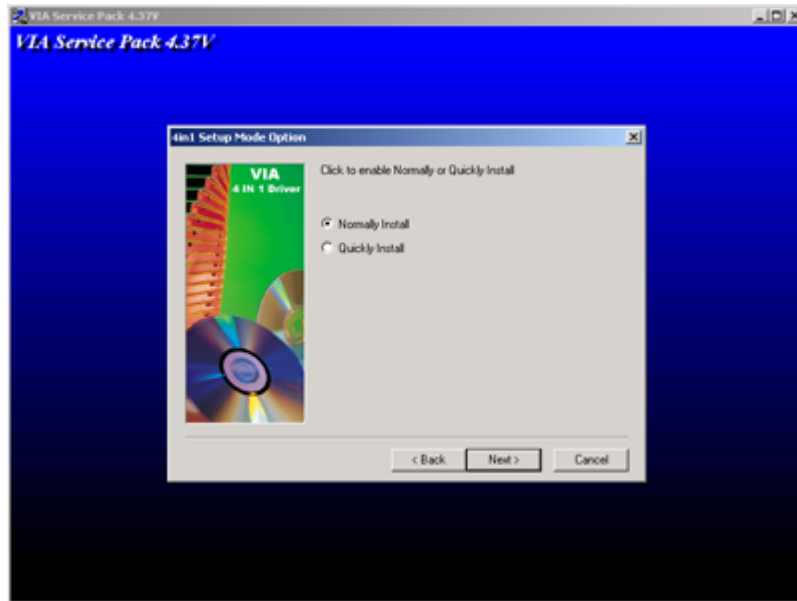


4. Click **Yes**

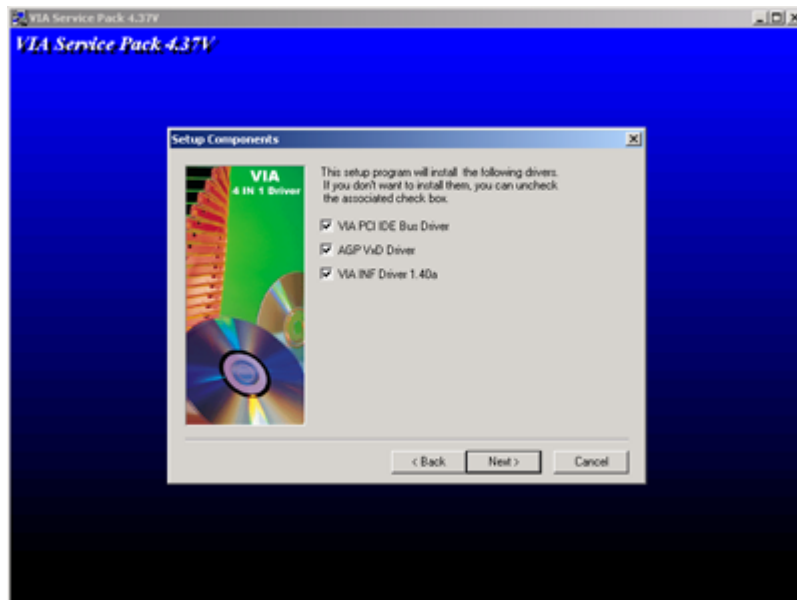


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5. Select **Normally Install**, and then click **Next**

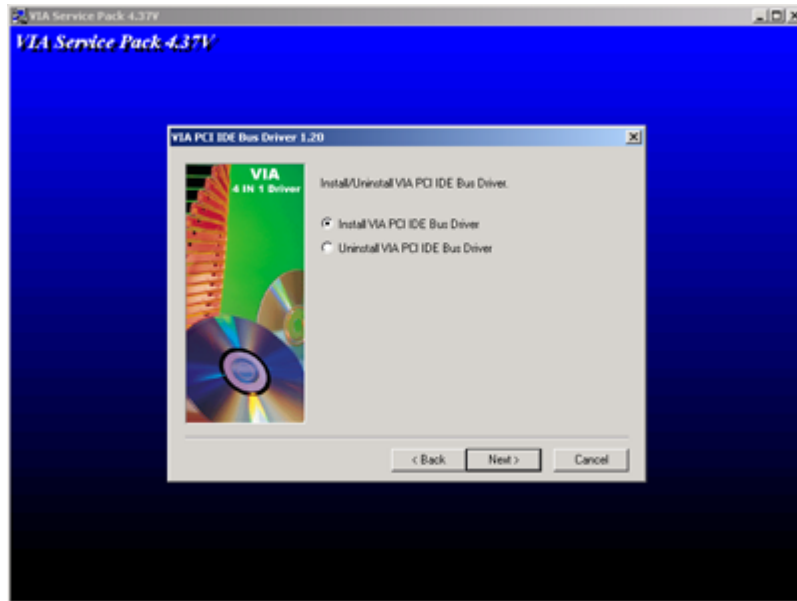


6. Remain the default setting, and then click **Next**

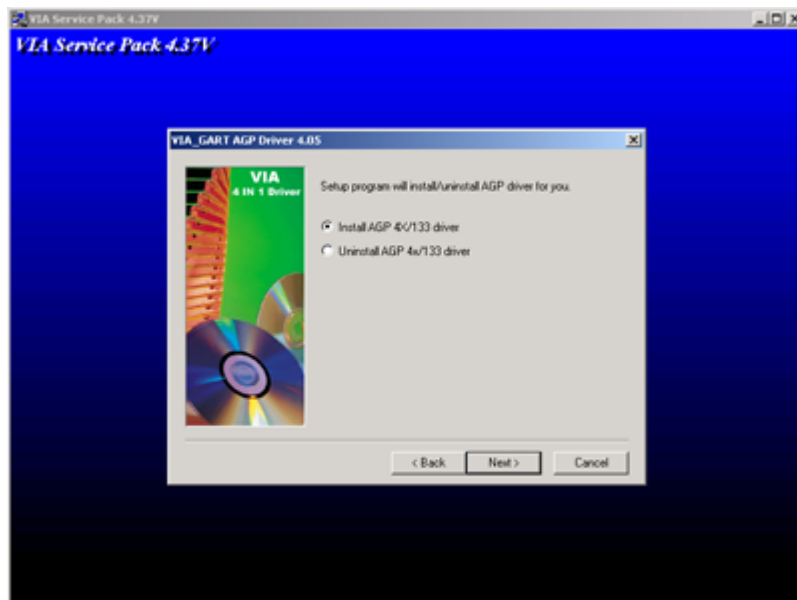


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7. Click **Next**

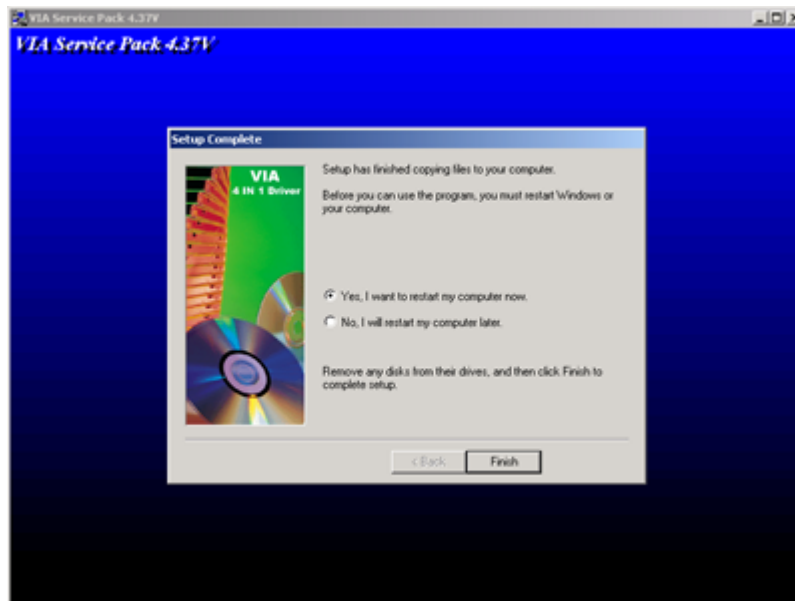


8. As the following picture, click **Install VIA AGP 4X/133 driver**, and click **Click**



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9. Click Finish



Installation process is completed and allowed the system to reboot.

4.2 VGA Driver Installation

1. Install the AW-BS610 CD ROM into the CD-ROM Drive
2. Select the Twister Drivers Setup file

A driver installation screen will appear, please follow the onscreen instruction to install the driver in sequence



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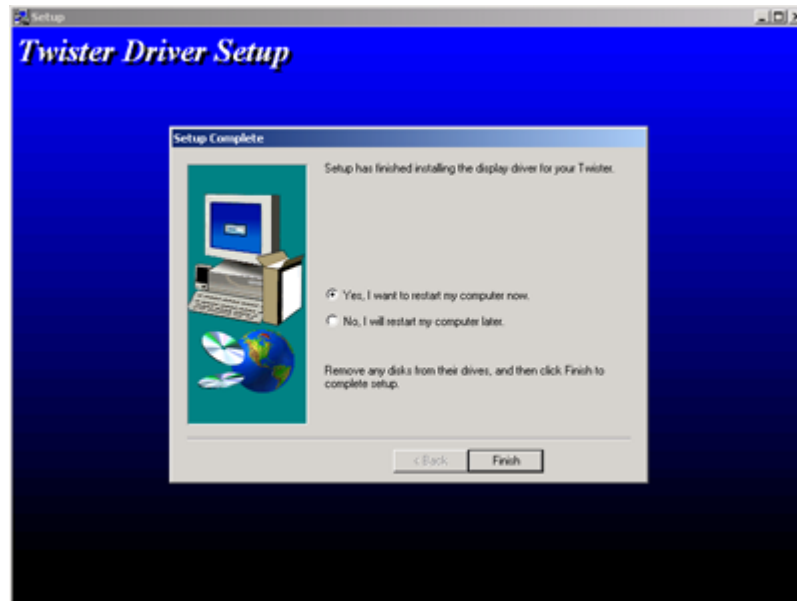
3. At last, click **Next**



4. Click **Next**



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Installation process is completed and allowed the system to reboot

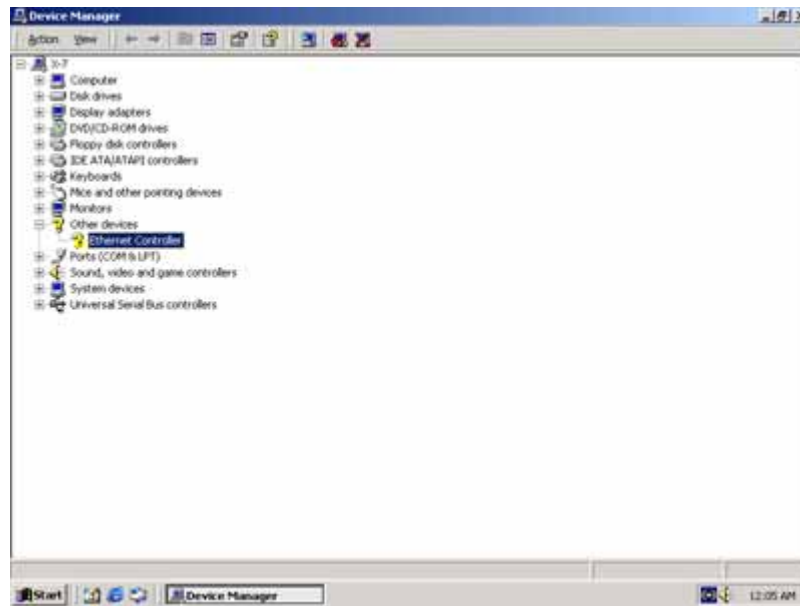
4.3 Ethernet Driver Installation

The AW-BS610 supports four Ethernet Controller by using Realtek[®] RTL8139C

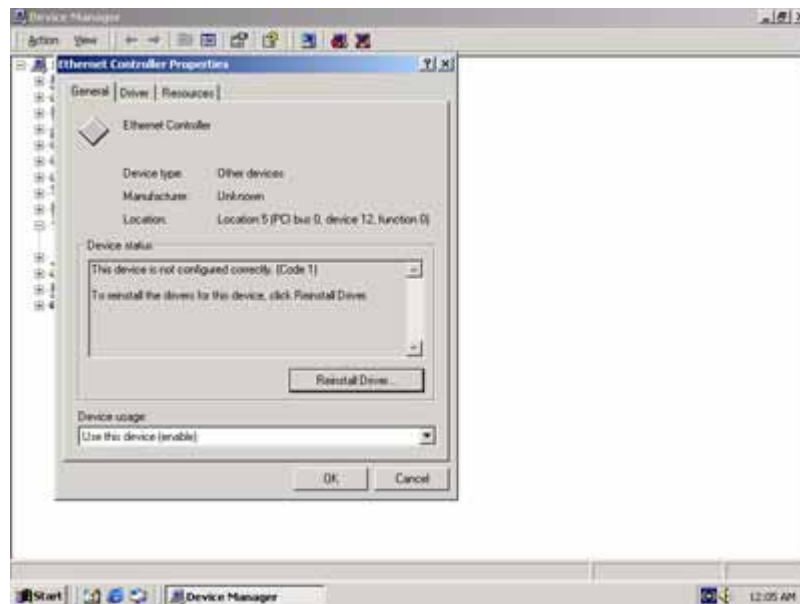
4.3.1 Realtek 8139C Ethernet Installation

1. Insert the AW-BS610 CD ROM into the CD-ROM Drive
2. Click the **Start** button
3. Select the **Setting** item
4. Click the **Control Panel** item
5. Select the **Systems** icon to open the **System Properties** box
6. Click the **Device Manager** tab

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7. Select the **Network Adapters** item



Another file will appear below this file, and then click on the file

8. Click the **Driver** Tab

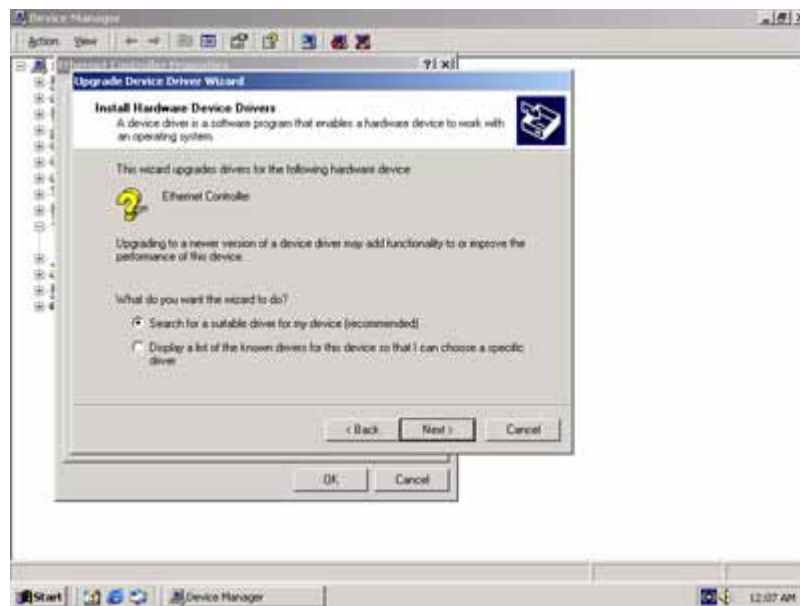
9. Click the **Update Driver** Button

The **Update Device Driver Wizard** will appear

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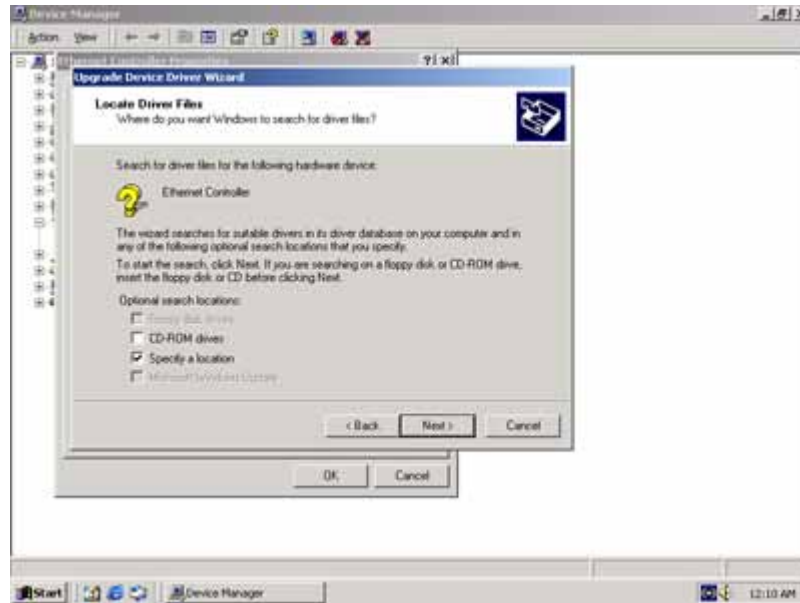


10. Click Next



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11. Select “Specify a location” and click “Next”

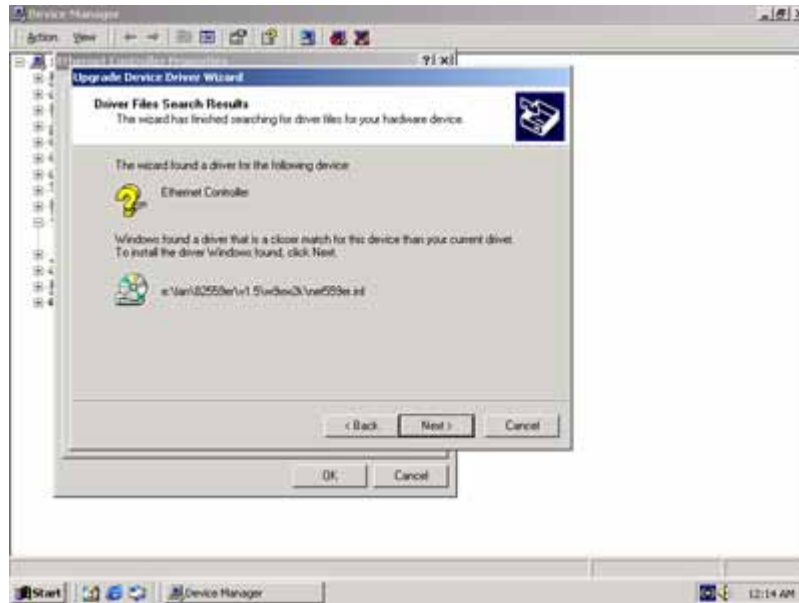


12. Select “Driver's place” and click “open”



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13. Select “Next”



14. Click “Finish”



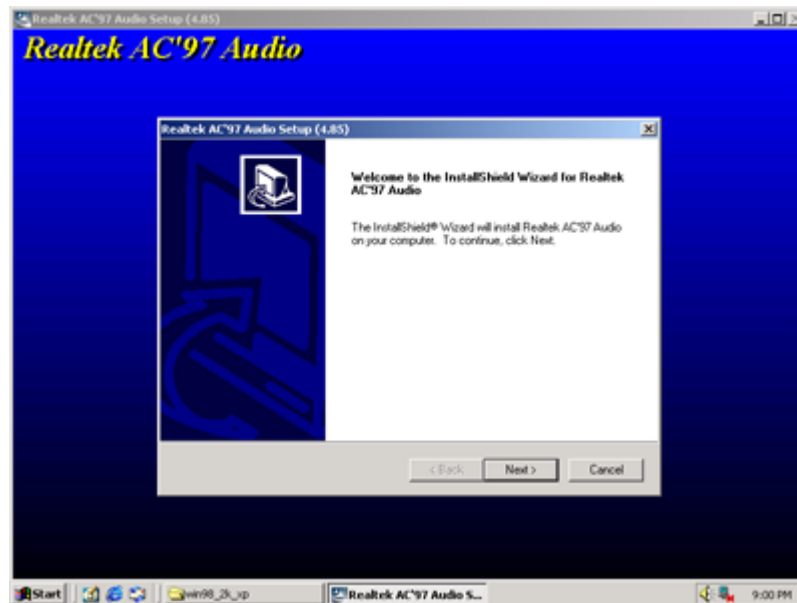
Installation process is completed shutdown the computer and will allow the system to reboot

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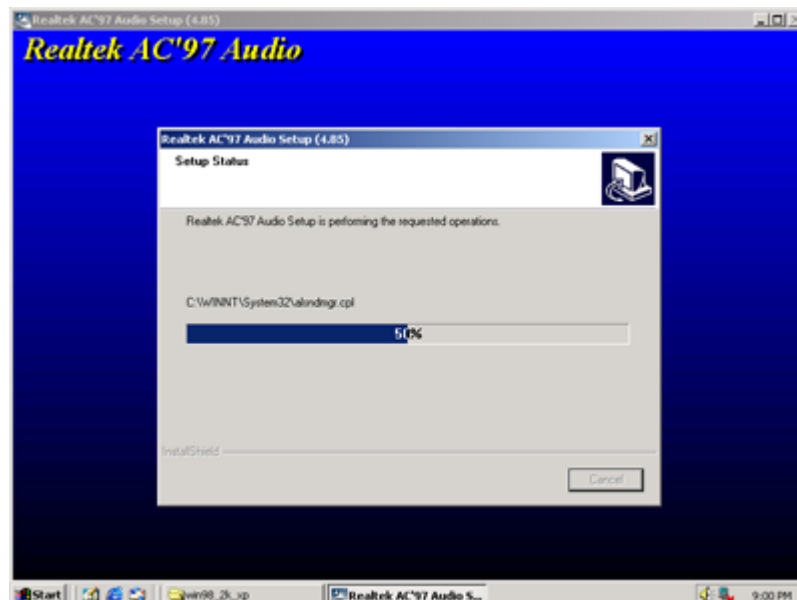
4.4 Audio Driver Installation

1. Select the Realtek AC 97 Audio file and click Setup icon

A driver installation screen will appear, please follow the onscreen instruction to install the driver in sequence

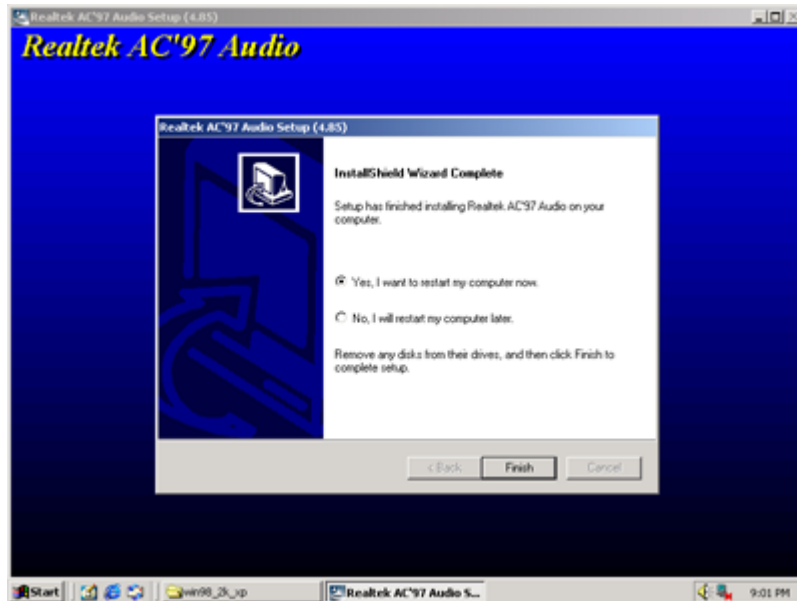


2. Click "Next"



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3. Click "Finish"



Appendix A: Optional Cable List

Part No.	Cable Description	AW-BS610 Connector	Terminating Connector
46-ICOM00-00	COM Port Cable	CN11	2.54mm,22cm, COM2 D-Sub Cable
46-ATA660-00	IDE Cable	CN12	2.54mm, 46cm, ATA-66/100 IDE Cable
46-IUSB04-00	Two-channel USB Cable	CN9	2.54mm, 2-channel USB Cable

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AW-BS610 Cable

