605TCF/605TCFL
USER'S MANUAL

M/B For VIA BravoGiga processor

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TABLE OF CONTENT

USER'S NOTICE

Manual Revision Information

Reversion	Revision History	Date
1.0	First Release	April 2003

Item Checklist

- ☑ 605TCF/605TCFL Motherboard
- ☑ Cable for IDE/Floppy
- ☑ CD for motherboard utilities
- ☑ 605TCF/605TCFL User's Manual

Chapter 1

Introduction of 605TCF/605TCFL Motherboard

1-1 Feature of motherboard

The 605TCF/605TCFL motherboard is design for use VIA C3 BravoGiga processors with 133 MHz Front Side Bus frequency, and the memory size expandable to 1GB (using 256Mb technology). This motherboard integrated VGA, Audio, and PC Health Function with Micro ATX form factor to support total solution for today's computer market.

This motherboard using VIA Apollo PLE133T VT8601T and VT82C686B chipset, whose 133MHz front side bus delivers a clear upgrade path to the future generation of 133MHz processors and PC-100/PC-133 SDRAM. The 605TCF/605TCFL motherboard offers ULTRA DMA 66/100 (ATA 100) to provide speedier HDD throughout that boosts overall system performance.

The 605TCF/605TCFL also has an integrated AC'97 2.1 CODEC on board which is fully compatible with Sound Blaster Pro$^{®}$ that gives you the best sound quality and compatibility. VIA VT8601T chipset also includes integrated 3D Graphic Acceleration to provide a lower cost video display solution.

605TCFL motherboard also integrated PCI LAN Controller supports 10/100 BASE-T Transfer rate for those whom require LAN function for net work.

With USB control as well as capability of expanding to 4 USB connectors support four USB devices, the 605TCF/605TCFL meet future USB demand. Moreover, it has built-in hardware monitor function to monitor and protect your computer.

This motherboard provides high performance & meets future specification demand. It is really wise choice for your computer.

1-2 Specification

Spec	Description
Design	∗ Micro ATX form factor 4 layers PCB size: 24.4 x 19.0 cm
Chipset	∗ VIA Apollo PLE133T VT8601T and VT82C686B Chipset
Clock Generator	∗ Winbond W83194BR-39B Support 66/100/133MHz system Bus Clock (CPU Bus Clock) Support 100/133 MHz system memory clock Support 33MHz PCI Bus clock
CPU	∗ BravoGiga Onboard with VIA C3 processor ∗ Support 133MHz Front Side Bus
Memory Socket	∗ 168-pin DIMM socket x2 ∗ PC-100/PC-133 SDRAM ∗ Expandable to 1GB ∗ Support 3.3V SDRAM DIMM
Expansion Slot & Headers	∗ 32-bit PCI slot x3 ∗ ISA slot x1
Integrate VGA	∗ 64-bit Signal Cycle 2D/3D Graphic Engine ∗ Support 2 to 8 Mbytes of Frame Buffer
Integrate IDE	∗ 2 channel of Bus Master IDE port supporting ULTRA DMA 33/66/100 mode devices
Integrate LAN (for 605TCFL)	∗ Integrated PCI LAN Controller ∗ Support 10/100 BASE-T Transfer rate
BIOS	∗ Award 2Mb Flash ROM
Multi I/O	∗ PS/2 keyboard and PS/2 mouse connectors ∗ Floppy disk drive connector x1 ∗ Parallel port x1 ∗ Serial port x2 ∗ USB connector x2, USB header x2 ∗ Audio connector (Line-in, Line-out/MIC & Game Port)

1-3 Layout Diagram & Jumper Setting

for 605TCFL LAN · **PRINT** · **GAME/MIDI PORT**

PS/2 Mouse

PS/2 Keyboard

USB · COM1 · VGA

MIC

LINE-IN

LINE-OUT

(JKB)
Internal Keyboard Headers

PS2 KB/Mouse Port

USB Port
**/LAN Connector
(for 605TCFL)**

FAN1

PC99 Back Panel

COM2 Connector

ATX Power Conn.

CD Audio

Front Panel Audio

PCI Slot

USB2 Port

2M Flash ROM BIOS

FAN2

ISA Slot

VIA C3 EBGA CPU

PC133 DIMMX2

Floppy Connector

VIA 8601T Chip

ATA 100 IDE Connector

(JBAT1)
Clear CMOS

VIA VT 82C686B Chip

Front Panel Connector

IR Connector

Wake On LAN

Jumpers

Jumper	Name	Description	Page
JBAT1	CMOS RAM Clear	3-pin Block	p.5

Connectors

Connector	Name	Description	Page
ATX	ATX Power Connector	20-pin Block	p.8
PS1	PS/2 Mouse & PS/2 Keyboard Connector	6-pin Female	p.8
USB1	USB Port Connector	4-pin Connector	p.8
PRINT	Parallel Port Connector	25-pin Female	p.9
VGA1	VGA Port Connector	15-pin Female	p.9
LAN (for 605TCFL)	**LAN Connector**	**RJ-45 Connector**	**p.9**
AGC	Audio/Game Connector	3 phone jack+15-pin Connector	p.9
COM1	Serial Port COM1 Connector	9-pin Connector	p.9
FDD	Floppy Driver Connector	34-pin Block	p.9
IDE1	Primary IDE Connector	40-pin Block	p.10
IDE2	Secondary IDE Connector	40-pin Block	p.10

Headers

Header	Name	Description	Page
JKB	Internal Keyboard Headers	4-pin Block	p.11
COM2	COM2 Headers	9-pin Block	p.11
USB2	USB Port Headers	9-pin Block	p.11
HDLED	IDE activity LED	2-pin Block	p.12
TRBLED	Turbo LED switch	2-pin Block	p.12
RESET	Reset switch lead	2-pin Block	p.12
SPEAKER	Speaker connector	4-pin Block	p.12
PWLED	Power LED	2-pin Block	p.12
PWRIN	Power switch	2-pin Block	p.12
FAN1, FAN2	FAN Headers	3-pin Block	p.12
IR	IR infrared module Headers	5-pin Block	p.13
CD_IN	CD Audio-In Headers	4-pin Block	p.13
WOL1	Wake On LAN Connector	3-pin Block	p.13
AUDIO	Line-In/Out, MIC header	9-pin Block	P.14

Expansion Sockets

Socket/Slot	Name	Description	Page
DIMM1, DIMM2	DIMM Module Socket	168-pin DIMM Module Socket	p.6
PCI1, PCI2, PCI3	PCI Slot	32-bit PCI Local Bus Expansion slots	p.7
ISA	ISA Slot	16-bit ISA BUS Expansion Slot	p.7

Chapter 2

Hardware installation

2-1 Hardware installation Steps

Before using your computer, you had better complete the following steps:
1. Check motherboard jumper setting
2. Install CPU and Fan
3. Install System Memory (DIMM)
4. Install Expansion cards
5. Connect IDE and Floppy cables, Front Panel /Back Panel cable
6. Connect ATX Power cable
7. Power-On and Load Standard Default
8. Reboot
9. Install Operating System
10. Install Driver and Utility

2-2 Checking Motherboard's Jumper Setting

(1) CMOS RAM Clear (3-pin): JBAT1

A battery must be used to retain the motherboard configuration in CMOS RAM short 1-2 pins of JBAT1 to store the CMOS data.

To clear the CMOS, follow the procedure below:
1. Turn off the system and unplug the AC power
2. Remove ATX power cable from ATX power connector
3. Locate JBAT1 and short pins 2-3 for a few seconds
4. Return JBAT1 to its normal setting by shorting pins 1-2
5. Connect ATX power cable back to ATX power connector

Note: When should clear CMOS
1. Troubleshooting
2. Forget password
3. After over clocking system boot fail

JBAT1　**3 1**

1-2 closed　Normal

JBAT1　**3 1**

2-3 closed　Clear CMOS
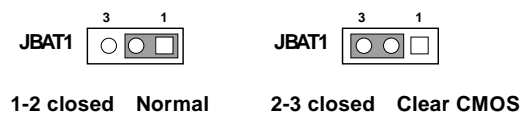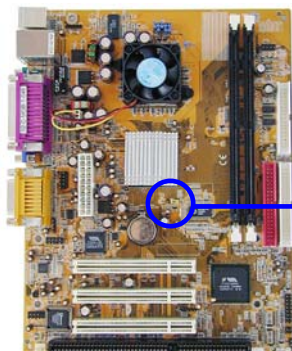
CMOS RAM Clear Setting

2-3 Install Memory

This motherboard provides two 168-pin DUAL INLINE MEMORY MODULES (DIMM) sites for memory expansion available from minimum memory size over 32MB to maximum memory size of 1GB SDRAM.

Valid Memory Configurations

DIMM1	DIMM2	System Accept or Not	Total Memory
			Min. ~ Max.
DS/SS		Accept	32MB~512MB
	DS/SS	Accept	32MB~512MB
DS/SS	DS/SS	Accept	32MB~1GB

DS : Double Sided DIMM   SS : Single Sided DIMM

NOTE! Make sure the total installed memory does not exceeds 1GB, otherwise the system may hang during startup.

Generally, installing SDRAM modules to your motherboard is very easy, you can refer to figure 2-4 to see what a 168-Pin PC100 & PC133 SDRAM module looks like.
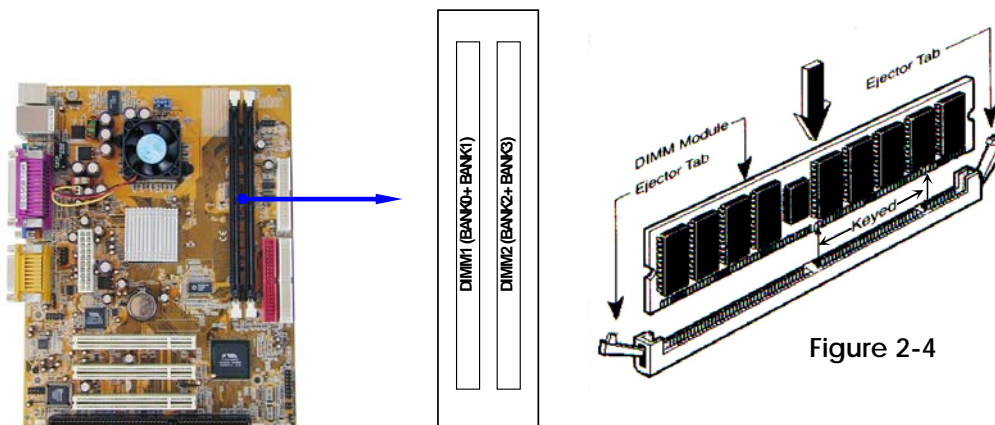
Figure 2-4

NOTE!   When you install DIMM module fully into the DIMM socket the eject tab should be locked into the DIMM module very firmly and fit into its indention on both sides.

WARNING! If the SDRAM CLOCK is set at 133MHz, you must use only PC133-compliant DIMMs. When this motherboard operate at 133Mhz, most system will not even boot if non-compliant SDRAM modules are used because of the strict timing issues, if your DIMM are not PC133-compliant, set the SDRAM clock to 100MHz to ensure system's stability.

2-4 Expansion Cards

WARNING!   Turn off your power when adding or removing expansion cards or other system components. Failure to do so may cause severe damage to both your motherboard and expansion cards.

2-4-1 Procedure For Expansion Card Installation

1. Read the documentation for your expansion card and make any necessary hardware or software setting for your expansion card such as jumpers.
2. Remove your computer's cover and the bracket plate on the slot you intend to use.
3. Align the card's connectors and press firmly.
4. Secure the card on the slot with the screen you remove above.
5. Replace the computer system's cover.
6. Set up the BIOS if necessary.
7. Install the necessary software driver for your expansion card.

2-4-2 Assigning IRQs For Expansion Card

Some expansion cards need an IRQ to operate. Generally, an IRQ must exclusively assign to one use. In a standard design, there are 16 IRQs available but most of them are already in use.

Standard Interrupt Assignments

IRQ	Priority	Standard function
0	1	System Timer
1	2	Keyboard Controller
2	N/A	Programmable Interrupt
3 *	11	Communications Port (COM2)
4 *	12	Communications Port (COM1)
5 *	13	Sound Card (sometimes LPT2)
6	14	Floppy Disk Controller
7 *	15	Printer Port (LPT1)
8	3	System CMOS/Real Time Clock
9 *	4	ACPI Mode when enabled
10 *	5	IRQ Holder for PCI Steering
11 *	6	IRQ Holder for PCI Steering
12 *	7	PS/2 Compatible Mouse Port
13	8	Numeric Data Processor
14 *	9	Primary IDE Channel
15 *	10	Secondary IDE Channel

* These IRQs are usually available for ISA or PCI devices.

2-4-3 Interrupt Request Table For This Motherboard

Interrupt request are shared as shown the table below:

	INT A	INT B	INT C	INT D
PCI slot1	Not Shared	—	—	—
PCI slot2	—	—	—	Shared
PCI slot3	—	—	Not Shared	—
Onboard LAN	—	Shared	—	—
Onboard VGA	—	—	—	—
AC97/MC97	—	Shared	—	—
Onboard USB	—	—	—	Shared

IMPORTANT! If using PCI cards on shared slots, make sure that the drivers support "Shared IRQ" or that the cards don't need IRQ assignments. Conflicts will arise between the two PCI groups that will make the system unstable or cards inoperable.

2-5 Connectors, Headers

2-5-1 Connectors

(1)   Power Connector (20-pin block) : ATX
ATX Power Supply connector. This is a new defined 20-pins connector that usually comes with ATX case. The ATX Power Supply allows to use soft power on momentary switch that connect from the front panel switch to 2-pins Power On jumper pole on the motherboard. When the power switch on the back of the ATX power supply turned on, the full power will not come into the system board until the front panel switch is momentarily pressed. Press this switch again will turn off the power to the system board.

PIN	ROW2	ROW1
1	3.3V	3.3V
2	-12V	3.3V
3	GND	GND
4	Soft Power On	5V
5	GND	GND
6	GND	5V
7	GND	GND
8	-5V	Power OK
9	+5V	+5V (for Soft Logic)
10	+5V	+12V

Pin 1
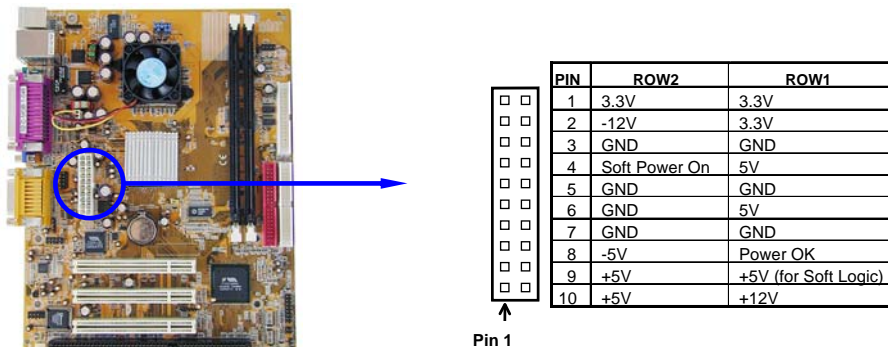
(2)   PS/2 Mouse & PS/2 Keyboard Connector: PS1
If you are using a PS/2 mouse, you must purchase an optional PS/2 mouse set which connects to the 5-pins block and mounts to an open slot on your computer's case.

(3)   USB Port connector: USB1
The connectors are 4-pins connector that connect USB devices to the system board.

(4) Parallel Port Connector (25-pin female): PRINT
Parallel Port connector is a 25-pin D-Subminiature Receptacle connector. The On-board Parallel Port can be disabled through the BIOS SETUP. Please refer to Chapter 3 "INTEGRATED PERIPHERALS SETUP" section for more detail information.

(5) VGA Connector (15-pin female): VGA1
This connector is for on board VGA display connection only. If you insert any external VGA card in PCI slot, you should have the connection to your VGA card's connector. And you have to set "Init Display First" to PCI under Integrated Peripherals option in BIOS Setup Utility to get display from PCI VGA card.

(6) LAN Port connector: LAN (Only for 605TCFL)
This connector is standard RJ45 connector for Network connector.

(7) Audio and Game Connector: AGC
This Connector are 3 phone Jack for LINE-OUT, LINE-IN, MIC and a 15-pin D-Subminiature Receptacle Connector for joystick/MIDI Device.
Line-out :   Audio output to speaker
Line-in :   Audio input to sound chip
MIC :   Microphone Connector
Game/MIDI :   For joystick or MIDI Device

(8) Serial Port COM1: COM1
COM1 is the 9-pin D-Subminiature mail connector. The On-board serial port can be disabled through BIOS SETUP. Please refer to Chapter 3 "INTEGRATED PERIPHERALS SETUP" section for more detail information.
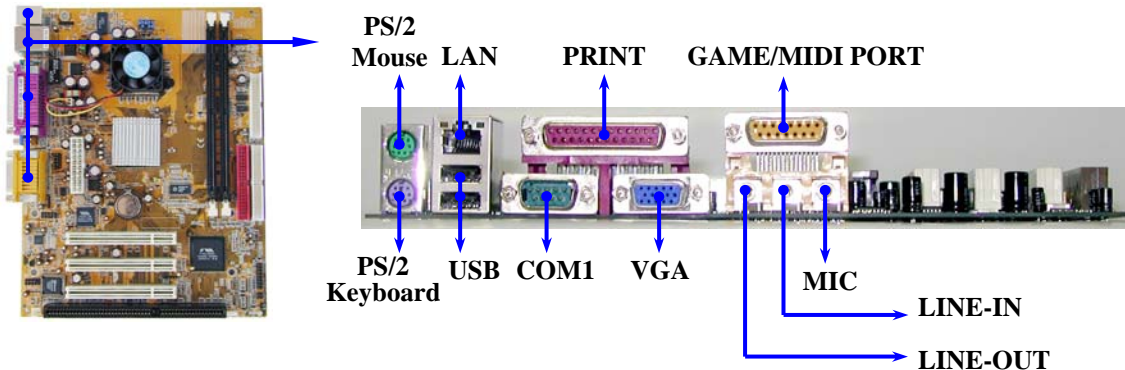
(9) Floppy Drive Connector (34-pin block): FDD
This connector supports the provided floppy drive ribbon cable. After connecting the single plug end to motherboard, connect the two plugs at other end to the floppy drives.

Floppy Drive Connector
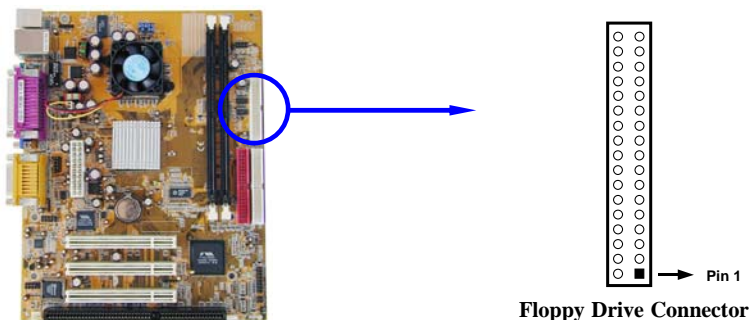
(10) Primary IDE Connector (40-pin block): IDE1

This connector supports the provided IDE hard disk ribbon cable. After connecting the single plug end to motherboard, connect the two plugs at other end to your hard disk(s). If you install two hard disks, you must configure the second drive to Slave mode by setting its jumpers accordingly. Please refer to the documentation of your hard disk for the jumper settings.

Primary IDE Connector
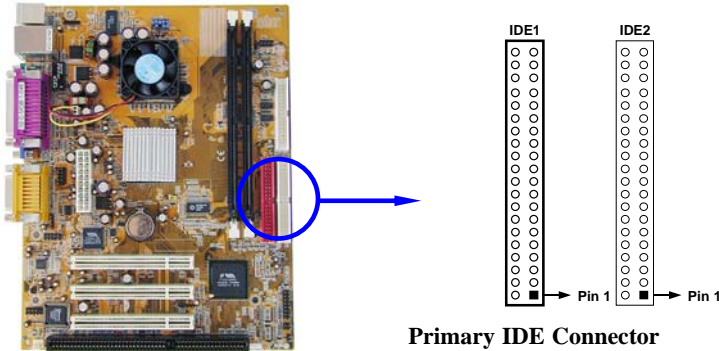
(11) **Secondary IDE Connector (40-pin block): IDE2**
This connector connects to the next set of Master and Slave hard disks. Follow the same procedure described for the primary IDE connector. You may also configure two hard disks to be both Masters using one ribbon cable on the primary IDE connector and another ribbon cable on the secondary IDE connector.

Secondary IDE Connector
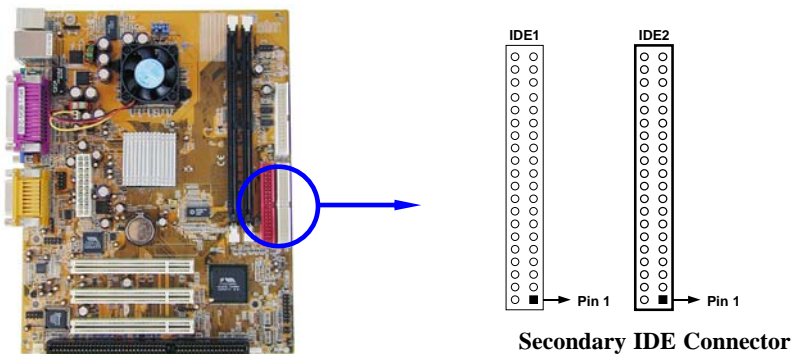
- Two hard disks can be connected to each connector. The first HDD is referred to as the "Master" and the second HDD is referred to as the "Slave".

- For performance issues, we strongly suggest you don't install a CD-ROM or DVD-ROM drive on the same IDE channel as a hard disk. Otherwise, the system performance on this channel may drop.

2-5-2 Headers

(1) Internal Keyboard Headers (4-pin header) : JKB


```
            JKB
Pin 1 →  ■  ○ ○ ○
```

Internal Keyboard Headers
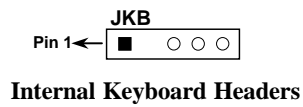
(2) COM2 Headers (9-pin header) : COM2
This board has another serial port COM2, it come with cable providing serial port COM2.


```
Pin 1 →  ■ ○
         ○ ○
         ○ ○
         ○ ○
         ○ ○
```

Note: Orient the read marking on the COM2 ribbon cable to pin 1

COM2
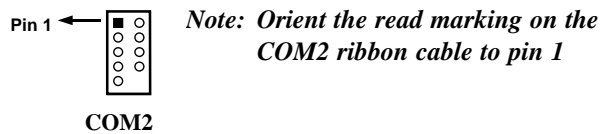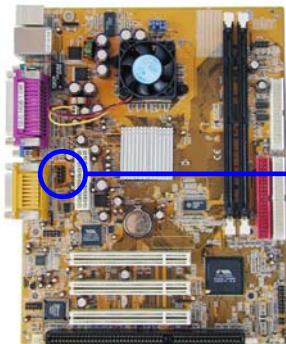
(3) USB Port Headers (9-pin header): USB2
These headers are used for connecting the additional USB port plug. By attaching an option USB cable, your can be provided with two additional USB plugs affixed to the back panel.


```
USB2     VCC
         −DATA
         +DATA
         GND
         NC
         ↑ ↑ ↑ ↑ ↑
         ○ ○ ○ ○
Pin1 →  ■ ○ ○ ○ ○
         ↓ ↓ ↓ ↓ ↓
         VCC
         −DATA
         +DATA
         GND
         NC
```

USB Port Headers
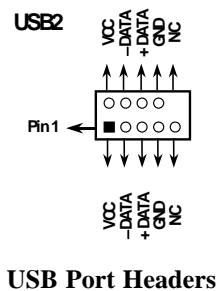
(4) IDE Activity LED: HDLED
This connector connects to the hard disk activity indicator light on the case.

(5) Turbo LED switch: TRBLED

Since the motherboard's turbo function is always on. The turbo LED will remain constantly on while the system power is on. You may wish to connect the Power LED from the system case to this lead. See the figure below.

(6) Reset switch lead: RESET

This 2-pin connector connects to the case-mounted reset switch for rebooting your computer without having to turn off your power switch. This is a preferred method of rebooting in order to prolong the lift of the system's power supply. See the figure below.

(7) Speaker connector: SPEAKER

This 4-pin connector connects to the case-mounted speaker. See the figure below.

(8) Power LED: PW LED

The Power LED is light on while the system power is on. Connect the Power LED from the system case to this pin.

(9) Power switch: PWRIN

This 2-pin connector connects to the case-mounted power switch to power ON/OFF the system.

System Case Connections
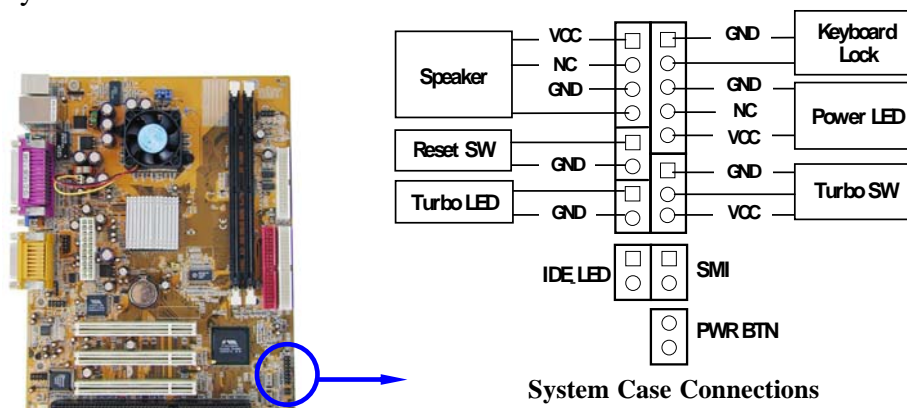
(10) FAN Headers (3-pin) : FAN1, FAN2

These connectors support cooling fans of 350mA (4.2 Watts) or less, depending on the fan manufacturer, the wire and plug may be different. The red wire should be positive, while the black should be ground. Connect the fan's plug to the board taking into consideration the polarity of connector.

FAN1 1

3

FAN2 3 1
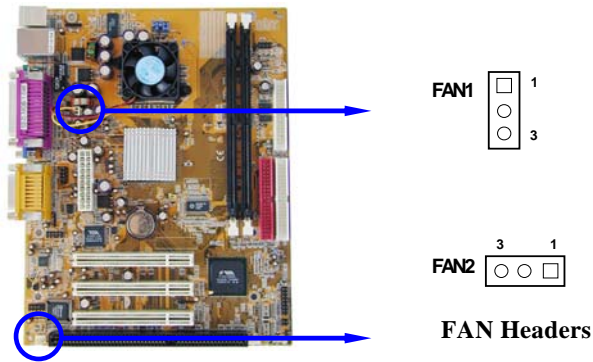
FAN Headers

(11) IR infrared module Headers (5-pin) : IR

This connector supports the optional wireless transmitting and receiving infrared module. You must configure the setting through the BIOS setup to use the IR function.

IR   VCC IRRX GND IRTX

Pin1

Infrared Module Headers
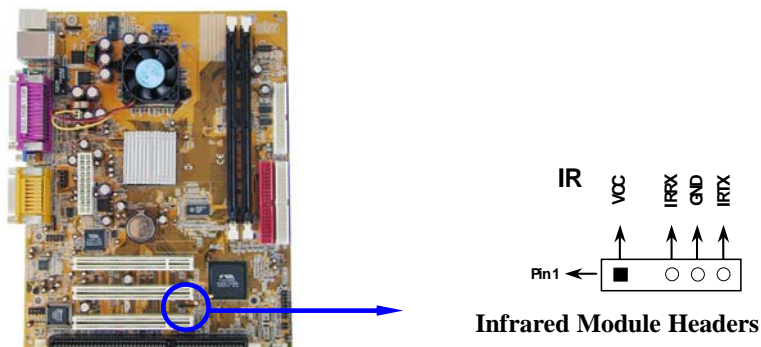
(12) CD Audio-In Headers (4-pin) : CD_IN

CD_IN is the connector for CD-Audio Input signal. Please connect it to CD-ROM CD-Audio output connector.

CD_IN 1

4

CD Audio-In Headers
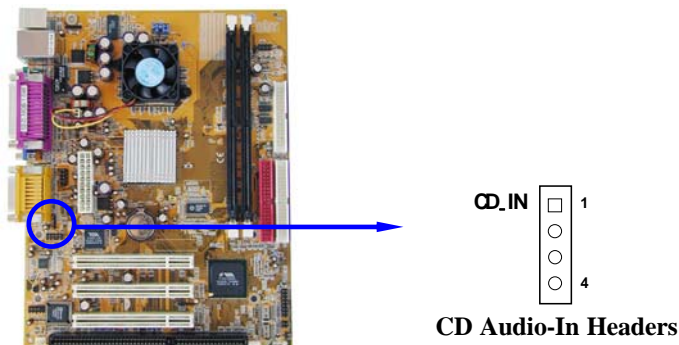
(13) Wake On-LAN Headers (3-pin) : WOL1

This connector connects to a LAN card with a WAKE ON-LAN output. This connector power up the system when a wake up signal is received through the LAN card.

NOTE: This feature requires that BIOS Wake-Up by PCI Card is enabled.

WOL1

WOL — GND — 5VSB

3   1
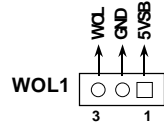
Wake-On-LAN Headers

(14) Line-In/Out, MIC Header (9-pin): AUDIO

This header connect to Front Panel Line-In, Line-out, MIC connector with cable.

AUDIO

L-IN-R — GND — MICP — GND — L-OUT-R

Pin1 →

L-IN-L — GND — MIC — L-OUT-L
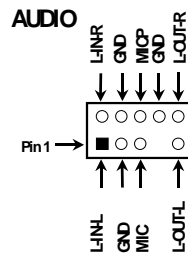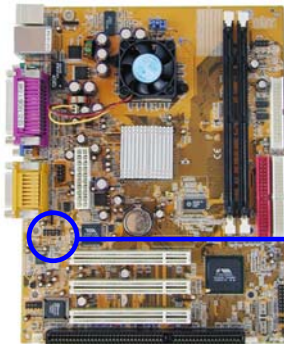
Line-In/Out, MIC Headers

2-6 Starting Up Your Computer

1. After all connections are made, close your computer case cover.

2. Be sure all the switch are off, and check that the power supply input voltage is set to proper position, usually in-put voltage is 220V~240V or 110V~120V depending on your country's voltage used.

3. Connect the power supply cord into the power supply located on the back of your system case according to your system user's manual.

4. Turn on your peripheral as following order:
   a. Your monitor.
   b. Other external peripheral (Printer, Scanner, External Modem etc…)
   c. Your system power. For ATX power supplies, you need to turn on the power supply and press the ATX power switch on the front side of the case.

5. The power LED on the front panel of the system case will light. The LED on the monitor may light up or switch between orange and green after the system is on. If it complies with green standards or if it is has a power standby feature. The system will then run power-on test. While the tests are running, the BIOS will alarm beeps or additional message will appear on the screen.

   If you do not see any thing within 30 seconds from the time you turn on the power. The system may have failed on power-on test. Recheck your jumper settings and connections or call your retailer for assistance.

Beep	Meaning
One short beep when displaying logo	No error during POST
Long beeps in an endless loop	No DRAM install or detected
One long beep followed by three short beeps	Video card not found or video card memory bad
High frequency beeps when system is working	CPU overheated System running at a lower frequency

6. During power-on, press <Delete> key to enter BIOS setup. Follow the instructions in BIOS SETUP.

7. **Power off your computer:** You must first exit or shut down your operating system before switch off the power switch. For ATX power supply, you can press ATX power switching after exiting or shutting down your operating system. If you use Windows 9X, click **"Start"** button, click **"Shut down"** and then click **"Shut down the computer?"** The power supply should turn off after windows shut down.

Chapter 3

Introducing BIOS

The BIOS is a program located on a Flash Memory on the motherboard. This program is a bridge between motherboard and operating system. When you start the computer, the BIOS program gain control. The BIOS first operates an auto-diagnostic test called POST (power on self test) for all the necessary hardware, it detects the entire hardware device and configures the parameters of the hardware synchronization. Only when these tasks are completed done it gives up control of the computer to operating system (OS). Since the BIOS is the only channel for hardware and software to communicate, it is the key factor for system stability, and in ensuring that your system performance as its best.

In the BIOS Setup main menu of Figure 3-1, you can see several options. We will explain these options step by step in the following pages of this chapter, but let us first see a short description of the function keys you may use here:

- Press <Esc> to quit the BIOS Setup.
- Press ↑↓←→ (up, down, left, right) to choose, in the main menu, the option you want to confirm or to modify.
- Press <F10> when you have completed the setup of BIOS parameters to save these parameters and to exit the BIOS Setup menu.
- Press Page Up/Page Down or +/− keys when you want to modify the BIOS parameters for the active option.

3-1 Entering Setup

Power on the computer and by pressing <Del> immediately allows you to enter Setup.

If the message disappears before your respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt> and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to

   Press <F1> to continue, <Ctrl-Alt-Esc> or <Del> to enter Setup

3-2 Getting Help

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu/Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window, press <Esc>.

3-3 The Main Menu

Once you enter Award® BIOS CMOS Setup Utility, the Main Menu (Figure 3-1) will appear on the screen. The Main Menu allows you to select from fourteen setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

```
     CMOS Setup Utility - Copyright(C) 1984-2003 Award Software
┌─────────────────────────────────────────────────────────────────┐
│                                                                   │
│   Standard CMOS Features        Miscellaneous Control             │
│                                                                   │
│   Advanced BIOS Features         Load optimized Defaults          │
│                                                                   │
│   Advanced Chipset Features      Load Standard Defaults           │
│                                                                   │
│   Integrated Peripherals         Set Supervisor Password          │
│                                                                   │
│   Power Management Setup          Set User Password               │
│                                                                   │
│   PnP/PCI Configurations         Save & Exit Setup                │
│                                                                   │
│   PC Health Status               Exit Without Saving              │
├─────────────────────────────────────────────────────────────────┤
│   Esc : Quit                          ↑↓→← : Select Item          │
│   F10 : Save & Exit Setup                                         │
├─────────────────────────────────────────────────────────────────┤
│                  Time, Date, Hard Disk Type…                      │
└─────────────────────────────────────────────────────────────────┘
```

Figure 3-1

Standard CMOS Features

Use this Menu for basic system configurations.

Advanced BIOS Features

Use this menu to set the Advanced Features available on your system.

Advanced Chipset Features

Use this menu to change the values in the chipset registers and optimize your system's performance.

Integrated Peripherals

Use this menu to specify your settings for integrated peripherals.

Power Management Setup

Use this menu to specify your settings for power management.

PnP/PCI configurations

This entry appears if your system supports PnP/PCI.

PC Health Status

This entry shows your PC health status.

Miscellaneous Control

Use this menu to specify your settings for Miscellaneous Control.

Load Optimized Defaults

Use this menu to load the BIOS default values that are factory settings for optimal performances system operations. It is provided for the convenience of power user who wants to push the motherboard to get better performance. The Optimized setting does not go through all the detail reliability and compatibility test, it is tested only with limited configuration and loading (for example, a system that contains only a VGA card and one DIMM. Use Optimized setting only when you fully understand the items in chipset setup menu.

Load Standard Defaults

Use this menu to load the BIOS default values for the optimum system performance. Standard Defaults setting are relatively safer than Optimized Defaults. All the product verification, compatibility test report and manufacture quality control are based on "Load Standard Defaults". We recommend to use this setting for normal operation. "Load Standard Defaults" is not slowest setting for this motherboard. If you need to verify an unstable problem, you may manually set the parameter in "Advanced Chipset Features" get slowest and safer setting.

Set Supervisor/User Password

Use this menu to set User and Supervisor Passwords.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

3-4 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into several categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

```
              CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                               Standard CMOS Features
┌──────────────────────────────────────────────────┬───────────────────────────┐
│ Date (mm:dd:yy)            Wed, Apr, 09 2003       │        Item Help          │
│ Time (hh:mm:ss)            15 : 41 : 28            │                           │
│                                                    ├───────────────────────────┤
│ IDE Primary Master         Press Enter None        │ Menu Level >              │
│ IDE Primary Slave          Press Enter None        │                           │
│ IDE Secondary Master       Press Enter None        │ Change the day, moth,     │
│ IDE Secondary Slave        Press Enter None        │ year and century          │
│                                                    │                           │
│ Drive A                    1.44M, 3.25 in.         │                           │
│ Drive B                    None                    │                           │
│                                                    │                           │
│ Video                      EGA/VGA                 │                           │
│ Halt On                    All Errors              │                           │
│                                                    │                           │
│ Base Memory                   640K                 │                           │
│ Extended Memory             64512K                 │                           │
│ Total Memory                65536                  │                           │
├──────────────────────────────────────────────────┴───────────────────────────┤
│ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help  │
│      F5:Previous Values       F6:Optimized Defaults    F7:Standard Defaults    │
└───────────────────────────────────────────────────────────────────────────────┘
```

3-5 Advanced BIOS Features

```
              CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                               Advanced BIOS Features
┌──────────────────────────────────────────────────┬───────────────────────────┐
│ Virus Warning                [Disabled]           │        Item Help          │
│ CPU Internal Cache            Enabled             │                           │
│ External Cache                Enabled             ├───────────────────────────┤
│ CPU L2 Cache ECC Checking     Disabled            │ Menu Level >              │
│ Processor Number Feature      Disabled            │                           │
│ Quick Power On Self Test      Enabled             │ Allows you to choose      │
│ First Boot Device             Floppy              │ the VIRUS warning         │
│ Second Boot Device            HDD-0               │ feature for IDE Hard      │
│ Third Boot Device             CDROM               │ disk boot sector          │
│ Boot Other Device             Enabled             │ protection. If this       │
│ Swap Floppy Drive             Disabled            │ function is enabled        │
│ Boot Up Floppy Seek           Enabled             │ and someone attempt to     │
│ Boot Up NumLock Status        On                  │ write data into this       │
│ Gate A20 Option               Normal              │ area, BIOS will show a      │
│ Typematic Rate Setting        Disabled            │ warning message on         │
│ Typematic Rate (Chars/Sec)    6                   │ screen and alarm beep      │
│ Typematic Delay (Msec)        250                 │ enabled copies Video       │
│ Security Option               Setup               │ BIOS to shadow RAM         │
│ OS Select For DRAM > 64MB     Non-OS2             │ improves performance       │
│ HDD S.M.A.R.T. Capability     Disabled            │                           │
│ Video BIOS Shadow             Enabled             │                           │
├──────────────────────────────────────────────────┴───────────────────────────┤
│ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help  │
│      F5:Previous Values       F6:Optimized Defaults    F7:Standard Defaults    │
└───────────────────────────────────────────────────────────────────────────────┘
```

Virus Warning

Allows you to choose the VIRUS Warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.

Disabled (default) No warning message to appear when anything attempts to access the boot sector or hard disk partition table.

Enabled Activates automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector of hard disk partition table.

3-6 Advanced Chipset Features

The Advanced Chipset Features Setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.

```
           CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                          Advanced Chipset Features
 ┌────────────────────────────────────────────────┬──────────────────────────┐
 │  Advanced DRAM Control      [Press Enter]       │                          │
 │  Advanced AGP  Control       Press Enter        │       Item Help          │
 │  Memory Hole                 Disabled           │                          │
 │  System BIOS Cacheable       Disabled           │                          │
 │  Video RAM Cacheable         Disabled           │    Menu Level >          │
 │  Memory Parity/ECC Check     Disabled           │                          │
 │                                                 │                          │
 │                                                 │                          │
 │                                                 │                          │
 │                                                 │                          │
 │                                                 │                          │
 │                                                 │                          │
 │                                                 │                          │
 │                                                 │                          │
 │                                                 │                          │
 ├─────────────────────────────────────────────────┴─────────────────────────┤
 │  ↑↓→←:Move   Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
 │      F5:Previous Values       F6:Optimized Defaults    F7:Standard Defaults │
 └──────────────────────────────────────────────────────────────────────────┘
```

Note: Change these settings only if you are familiar with the chipset.

Advanced DRAM Control
Please refer to section 3-6-1

3-6-1 Advanced DRAM Control

The "Advanced DRAM Control" includes settings for the chipset dependents features. These features are related to system performance. Make sure you fully understand the items contained in this menu before you try to change anything. You may change the parameter settings to improve system performance. However, it may cause your system to be unstable if the setting is not correct for your system configuration.

```
            CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                            Advanced DRAM Control
┌─────────────────────────────────────────────────────┬──────────────────────┐
│    Auto Configuration          [Optimized]           │                      │
│    Precharge Command            3T                   │      Item Help       │
│    Active to CMD Command        6T                   │                      │
│    Write Recovery Time          2T                   ├──────────────────────┤
│    SDRAM Cycle Length           By SPD               │                      │
│    Bank Interleave              By SPD               │   Menu Level >>      │
│    DRAM Drive Strength          Auto                 │                      │
│    Delay DRAM Read Latch        1.0 ns               │                      │
│    Memory Data Drive            Normal               │                      │
│    Memory CMD Drive             Strong               │                      │
│    DDSKEW/REFCLK Delay          No Delay             │                      │
│    In-Order Queue               1-Level              │                      │
│    P2C/C2P Concurrency          Disabled             │                      │
│    Fast R-W Turn Around         Disabled             │                      │
│    I/O Recovery Time            Disabled             │                      │
│    CPU to PCI Write Buffer      Enabled              │                      │
│    PCI Dynamic Bursting         Disabled             │                      │
│    PCI Master 0 WS Write        Disabled             │                      │
│    PCI Delay Transaction        Disabled             │                      │
│    PCI#2 Access #1 Retry       [Disabled]            │                      │
├─────────────────────────────────────────────────────┴──────────────────────┤
│ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help│
│     F5:Previous Values      F6:Optimized Defaults    F7:Standard Defaults    │
└─────────────────────────────────────────────────────────────────────────────┘
```

Precharge Command
If an insufficient number of cycles is allowed for the RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete and the DRAM may fail to retain date. *Fast* gives faster performance; and *Slow* gives more stable performance. This field applies only when synchronous DRAM is installed in the system. The settings are: 2 and 3.

Active Command
This field let's you insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. *Fast* gives faster performance; and *Slow* gives more stable performance. This field applies only when synchronous DRAM is installed in the system. The settings are: 2 and 3.

Active to CMD Command
Select the number of SCLKs for an access cycle. The settings are: 5/7 and 6/8.

SDRAM Cycle Length
When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. The settings are: 2 and 3.

PCI Delay Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select Enabled to support compliance with PCI specification version 2.1. The settings are: Enabled and Disabled.

3-7 Integrated Peripherals

```
          CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                           Integrated Peripherals
┌──────────────────────────────────────────────┬─────────────────────────┐
│  > OnChip IDE Function          [Press Enter] │        Item Help        │
│  > OnChip DEVICE Function        Press Enter  │                         │
│  > OnChip SUPERIO Function       Press Enter  ├─────────────────────────┤
│   Init Display First             PCI Slot     │  Menu Level >           │
│                                               │                         │
│                                               │                         │
│                                               │                         │
│                                               │                         │
│                                               │                         │
│                                               │                         │
│                                               │                         │
│                                               │                         │
├──────────────────────────────────────────────┴─────────────────────────┤
│  ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│      F5:Previous Values      F6:Optimized Defaults   F7:Standard Defaults │
└──────────────────────────────────────────────────────────────────────────┘
```

OnChip IDE Function

Please refer to section 3-7-1

OnChip DEVICE Function

Please refer to section 3-7-2

OnChip SUPERIO Function

Please refer to section 3-7-3

Init Display First

This item allows you to decide to activate whether PCI Slot or AGP VGA first. The settings are: PCI Slot, AGP Slot.

3-7-1 OnChip IDE Function

```
        CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                          OnChip IDE Function
┌──────────────────────────────────────────────────┬─────────────────────┐
│  OnChip IDE Channel0            [Enabled]          │      Item Help      │
│  OnChip IDE Channel1             Enabled           │                     │
│  IDE 32bit Transfer Mode         Disabled          ├─────────────────────┤
│  Primary Master   PIO            Auto              │  Menu Level >>      │
│  Primary Slave    PIO            Auto              │                     │
│  Secondary Master PIO            Auto              │                     │
│  Secondary Slave  PIO            Auto              │                     │
│  Primary Master UDMA             Auto              │                     │
│  Primary Slave  UDMA             Auto              │                     │
│  Secondary Master UDMA           Auto              │                     │
│  Secondary Slave  UDMA           Auto              │                     │
│  IDE HDD Block Mode              Enabled           │                     │
│  IDE Prefetch Mode               Disabled          │                     │
│                                                    │                     │
│                                                    │                     │
├──────────────────────────────────────────────────┴─────────────────────┤
│  ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│      F5:Previous Values      F6:Optimized Defaults   F7:Standard Defaults │
└──────────────────────────────────────────────────────────────────────────┘
```

3-7-2 OnChip DEVICE Function

```
        CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                         OnChip DEVICE Function
┌──────────────────────────────────────────────────┬─────────────────────┐
│  OnChip AUDIO Function      [Press Enter]          │                     │
│  VIA LAN Function           Enabled    → (For 605TCFL) │                 │
│  OnChip USB                 Enabled                │                     │
│  USB Keyboard Support       Disabled               ├─────────────────────┤
│                                                    │  Menu Level >>      │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
│                                                    │                     │
├──────────────────────────────────────────────────┴─────────────────────┤
│  ↑ ↓ →←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│      F5:Previous Values      F6:Optimized Defaults   F7:Standard Defaults │
└──────────────────────────────────────────────────────────────────────────┘
```

3-7-3 OnChip SUPERIO Function

```
              CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                            OnChip SUPERIO Function
```

Onboard FDD Function	[Enable]	Item Help
Onboard Serial Port 1	Auto	
Onboard Serial Port 2	Auto	
UART 2 Mode	Normal	Menu Level >>
IR Duplex Mode	Half	
TX,RX Inverting enable	Ho, Yes	
Onboard Parallel Port	378/IRQ7	
Onboard Parallel Mode	SPP	
ECP Mode Use DMA	3	
Parallel Port EPP Type	EPP1.9	

```
 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
     F5:Previous Values      F6:Optimized Defaults    F7:Standard Defaults
```

3-8 Power Management Setup

The Power Management Setup allows you to configure your system to most effectively save energy saving while operating in a manner consistent with your own style of computer use.

```
              CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                            Power Management Setup
```

ACPI Function	[Enabled]	Item Help
> Power Management	Press Enter	
PM Control by APM	Yes	
Video off Option	Suspend -> Off	Menu Level >
Video Off Method	V/H SYNC+Blank	
MODEM Use IRQ	3	
Soft-Off by PWRBTN	Instant-Off	
> Wake Up Events	Press Enter	

```
 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
     F5:Previous Values      F6:Optimized Defaults    F7:Standard Defaults
```

Wake-Up Events

Please refer to section 3-8-2

3-8-1 Power Management

```
            CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                            Power Management
┌─────────────────────────────────────────────────┬──────────────────────┐
│                                                   │                      │
│  Power Management          [User Define]          │      Item Help       │
│  HDD Power Down             Disabled              │                      │
│  Doze Mode                  Disabled              ├──────────────────────┤
│  Suspend Mode               Disabled              │                      │
│                                                   │  Menu Level >>       │
│                                                   │                      │
│                                                   │                      │
│                                                   │                      │
│                                                   │                      │
│                                                   │                      │
│                                                   │                      │
├─────────────────────────────────────────────────┴──────────────────────┤
│  ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│     F5:Previous Values      F6:Optimized Defaults    F7:Standard Defaults │
└─────────────────────────────────────────────────────────────────────────┘
```

3-8-2 Wake Up Events

```
            CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                             Wake Up Events
┌─────────────────────────────────────────────────┬──────────────────────┐
│    VGA                      [OFF]                 │                      │
│    LPT & COM                 LPT/COM             │      Item Help       │
│    HDD & FDD                 ON                   │                      │
│    PCI Master                OFF                  ├──────────────────────┤
│    Modem Ring Resume         Disabled            │                      │
│    RTC Alarm Resume          Disabled            │  Menu Level >>       │
│  x Date (of Month)            0                   │                      │
│  x Resume Time (hh:mm:ss)    0 : 7 : 0           │                      │
│  > IRQs Activity Monitoring  Press Enter          │                      │
│                                                   │                      │
│                                                   │                      │
│                                                   │                      │
├─────────────────────────────────────────────────┴──────────────────────┤
│  ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help │
│     F5:Previous Values      F6:Optimized Defaults    F7:Standard Defaults │
└─────────────────────────────────────────────────────────────────────────┘
```

IRQs Activity Monitoring

Please refer to section 3-8-2.1

3-8-2.1 IRQs Activity Monitoring

```
             CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                              IRQs Activity Monitoring
```

Primary INTR	**[ON]**		Item Help
IRQ3 (COM 2)	Enabled		
IRQ4 (COM 1)	Enabled		
IRQ5 (LPT 2)	Enabled		Menu Level >>>
IRQ6 (Floppy Disk)	Enabled		
IRQ7 (LPT 1)	Enabled		
IRQ8 (RTC Alarm)	Disabled		
IRQ9 (IRQ2 Redir)	Disabled		
IRQ10 (Reserved)	Disabled		
IRQ11 (Reserved)	Disabled		
IRQ12 (PS/2 Mouse)	Enabled		
IRQ13 (Coprocessor)	Enabled		
IRQ14 (Hard Disk)	Enabled		
IRQ15 (Reserved)	Disabled		

```
  ↑↓→← Move Enter:Select Item +/-/PU/PD:Value F10:Save ESC:Exit  F1:General Help
           F5:Previous Values  F6:Optimized Defaults F7:Standard Defaults
```

3-9 PnP/PCI Configuration Setup

This section describes configuring the PCI bus system. PCI, or **P**ersonal **C**omputer **I**nterconnect, is a system which allows I/O devices to operate at speeds nearing the speed the CPU itself uses when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

```
             CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                              PnP/PCI Configurations
```

PNP OS Installed	**[No]**		Item Help
Reset Configuration Data	Disabled		
Resources Controlled By	Auto(ESCD)		Menu Level >
x IRQ Resources	Press Enter		
x DMA Resources	Press Enter		Default is Disabled.
			Select Enabled to
PCI/VGA Palette Snoop	Disabled		reset Extended System
Assign IRQ For VGA	Enabled		Configuration Data
Assign IRQ For USB	Enabled		ESCD) when you exit
			Setup if you have
			installed a new add-on
			and the system
			reconfiguration has
			caused such a serious
			conflict that the OS
			cannot boot

```
  ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
       F5:Previous Values     F6:Optimized Defaults    F7:Standard Defaults
```

Resource Controlled By

The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as Windows®95/98. If you set this field to "manual" choose specific resources by going into each of the sub menu that follows this field (a sub menu is preceded by a ">").

The settings are: Auto (ESCD), Manual.

IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

PCI/VGA Palette Snoop

Leave this field at *Disabled.* The settings are Enabled, Disabled.

3-10 PC Health Status

This section shows the Status of you CPU, Fan, Warning for overall system status. This is only available if there is Hardware Monitor onboard.

```
            CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                              PC Health Status

   Show PC Health in Post        [Enabled]              Item Help
   Vcore                          1.91V
    2.5V                          2.50V
    3.3V                          3.40V          Menu Level >
     5V                           5.10V
    12V                          11.95V
   Current CPU Temp.            33°C/91°F
   Current System Temp.         21°C/69°F
   Current FAN1 Speed           5100 RPM
   Current CPUFAN2 Speed           0




  ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
      F5:Previous Values      F6:Optimized Defaults     F7:Standard Defaults
```

Show PC Health in Post

During Enabled, it displays information list below. The choice is either Enabled or Disabled

Current CPU Temperature/Current System Temp/Current FAN1,FAN2 Speed/ Vcore/Vtt/Vcc3.3/+5V/+12V/-12V/-5V (V)

This will show the CPU/FAN/System voltage chart and FAN Speed.

3-11 Miscellaneous Control

This section is for setting CPU Frequency Control.

```
              CMOS Setup Utility – Copyright(C) 1984-2003 Award Software
                              Miscellaneous Control
  ┌──────────────────────────────────────────────┬────────────────────────────┐
  │  Auto Detect DIMM/PCI Clock      Enabled      │                            │
  │  Spread Spectrum                 Disabled     │        Item Help           │
  │  ** Current DRAM Clock is 66MHz **            ├────────────────────────────┤
  │  DRAM Clock at Next Boot is [66]MHz           │    Menu Level >            │
  │                                               │                            │
  │                                               │                            │
  │                                               │                            │
  │                                               │                            │
  │                                               │                            │
  ├──────────────────────────────────────────────┴────────────────────────────┤
  │ ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help│
  │    F5:Previous Values       F6:Optimized Defaults    F7:Standard Defaults   │
  └─────────────────────────────────────────────────────────────────────────────┘
```

Auto Detect DIMM/PCI Clock

This item allows you to enable/disable auto detect DIMM/PCI Clock.
The settings are: Enabled, Disabled.

Spread Spectrum

This item allows you to set the CPU Host/PCI clock Spread Spectrum.
The choice are: Disabled and Enabled.

DRAM Clock at Next Boot is

This item allows you to select SDRAM Frequency to add or to decrease.

3-12 Load Standard/Optimized Defaults

Load Standard Defaults

When you press <Enter> on this item, you get confirmation dialog box with a message similar to:
      Load Standard Defaults (Y/N)? N
Pressing <Y> loads the BIOS default values for the most stable, minimal-performance system operations.

Load Optimized Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:
      Load Optimized Defaults (Y/N)? N
Pressing <Y> loads the default values that are factory settings for optimal performance system operations.

3-13 Set Supervisor/User Password

You can set either supervisor or user password, or both of them. The differences are:

Supervisor password: Can enter and change the options of the setup menus.

User password: Can only enter but do not have the right to change the options of the setup menus. When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

ENTER PASSWORD:

Type the password, up to eight characters in length, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To disable a password, just press <Enter> when you are prompted to enter the password. A message will confirm that the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

PASSWORD DISABLED.

When a password has been enabled, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

Additionally, when a password is enabled, you can also require the BIOS to request a password every time your system is rebooted. This would prevent unauthorized use of your computer.

You determine when the password is required within the BIOS Features Setup Menu and its Security option. If the Security option is set to "System", the password will be required both at boot and at entry to Setup. If set to "Setup", prompting only occurs when trying to enter Setup.

Chapter 4

DRIVER & FREE PROGRAM INSTALLATION

Check your package and there is A MAGIC INSTALL CD included. This CD consists of all DRIVERS you need and some free application programs and utility programs. In addition, this CD also include an auto detect software which can tell you which hardware is installed, and which DRIVERS needed so that your system can function properly. We call this auto detect software MAGIC INSTALL.

MAGIC INSTALL Supports WINDOWS 95/98/98SE/ME/NT4.0/2000/XP

Insert CD into your CD-ROM drive and the MAGIC INSTALL Menu should appear as below. If the menu does not appear, double-click MY COMPUTER/double-click CD-ROM drive or click START/click RUN/type X:\SETUP.EXE (assuming X is your CD-ROM drive).

From MAGIC INSTALL MENU you may make 11 selections:
1. VIA 4 IN 1 install VIA Service Pack 4 IN 1 driver
2. VGA   install on-board VGA driver
3. SOUND   install AC97 Audio Codec Installing driver
4. LAN   install VIA 6105 LAN controller driver **(for 605TCFL)**
5. PC-HEALTH install VIA PC-HEALTH hardware monitor driver
6. Magic BIOS install BIOS Live Update Utility
7. PC-CILLIN install PC-CILLIN 2002 anti-virus program
8. DIRECTX8 install Microsoft DirectX 8.1 driver
9. MiniportIDE install IDE driver for ZIP device
10. BROWSE CD to browse the contents of the CD
11. EXIT   to exit from MAGIC INSTALL menu

Each selection is illustrated as below:

4-1 VIA 4 IN 1 Install VIA Service Pack 4 IN 1 Driver

* The path of the file is X:\VIA\DRIVER\SETUP.EXE

IDE :　　　　　VIA ATAPI VENDOR SUPPORT DRIVER IS USED TO FIXED COMPATIBILITY ISSUE FOR IDE DEVICES

AGPVXD :　　　VIA AGPVXD DRIVER IS TO BE INSTALLED, IF YOU ARE USING AN AGP VGA CARD, VIAGART.VXD WILL PROVIDE SERVICE ROUTINES TO YOUR VGA DRIVER AND INTERFACE DIRECTLY TO HARDWARE, PROVIDING FAST GRAPHIC ACCESS

IRQ ROUTING : VIA PCI IRQ MINIPORT DRIVER IS TO BE INSTALLED UNDER WIN98 ONLY, IT WILL FIX PCI IRQ ROUTING SEQUENCE

INF :　　　　　VIA REGISTRY DRIVER IS TO BE INSTALLED UNDER WINDOWS
　　　　　　　　THE DRIVER WILL ENABLE VIA POWER MANAGERMENT CONTROLLER
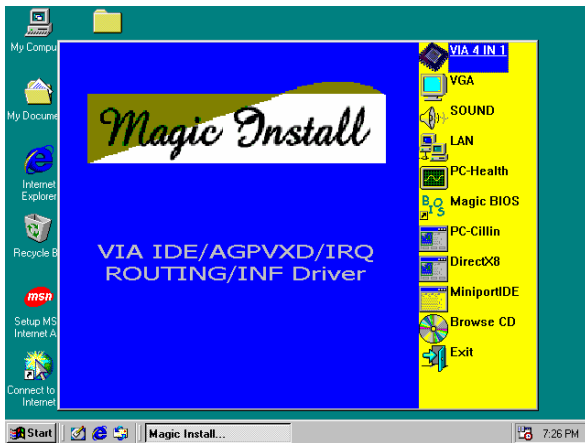
1. Click IDE when MAGIC INSTALL MENU appears
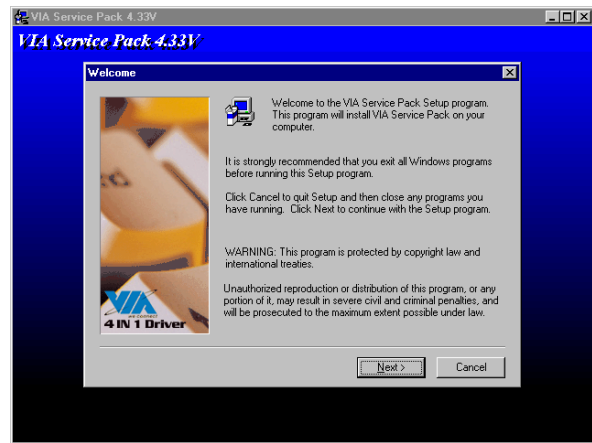
2. Click NEXT when VIA Service Pack Wizard appears
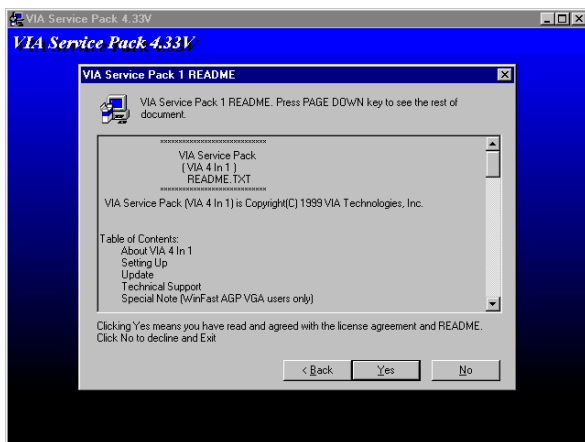
3. This is to announce the Copy Write, click Yes
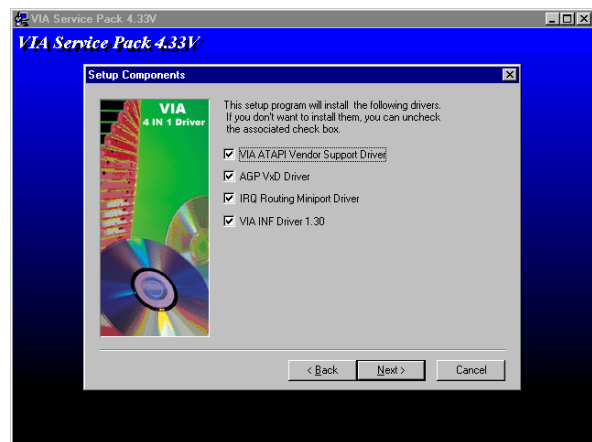
4. Click NEXT to choose all driver
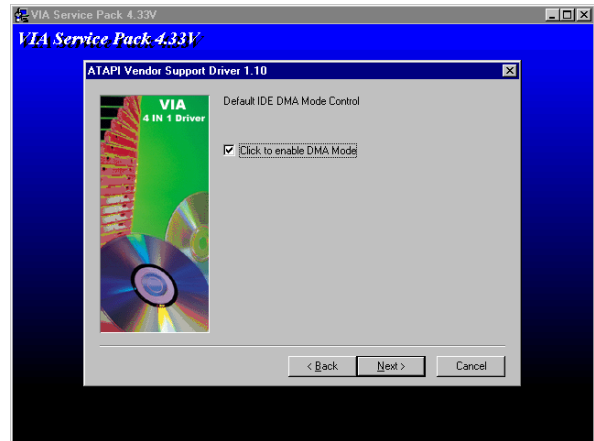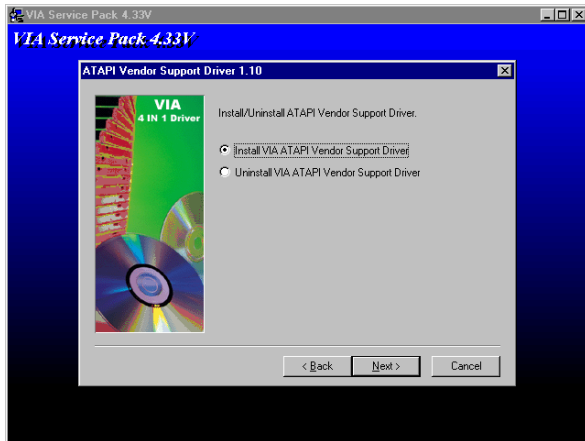
5. Click NEXT to Install ATAPI Vender Support Driver

6. Click NEXT to choose enabled DMA Mode
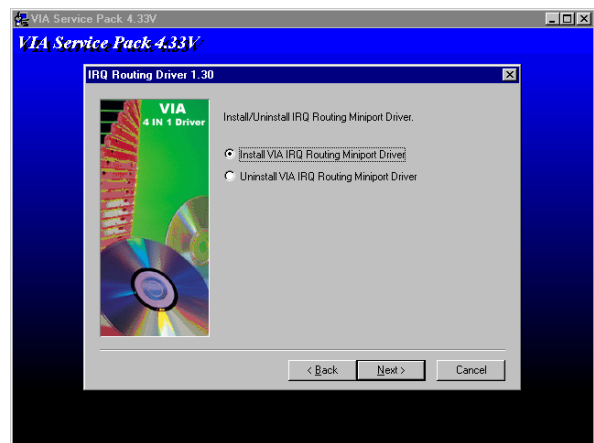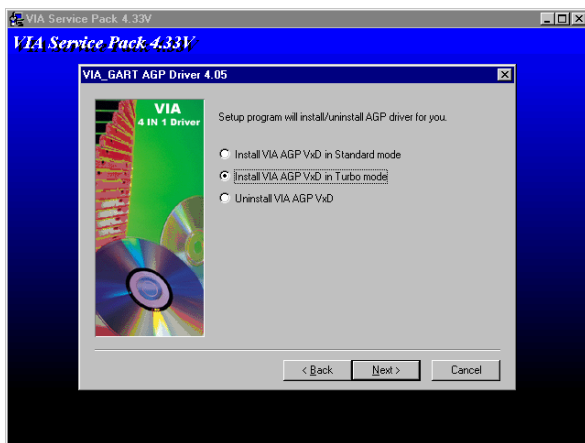
7. Click NEXT to Install VIA AGP VXD Driver

8. Click NEXT to Install VIA IRQ Routing Mini port Driver
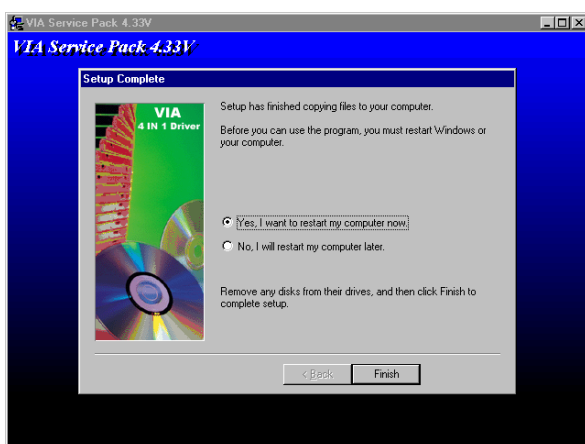
9. Click Finish to restart computer

4-2 VGA   Install VIA 8601 VGA Driver

For WINDOWS 95/98/98SE/ME/NT4.0/2000
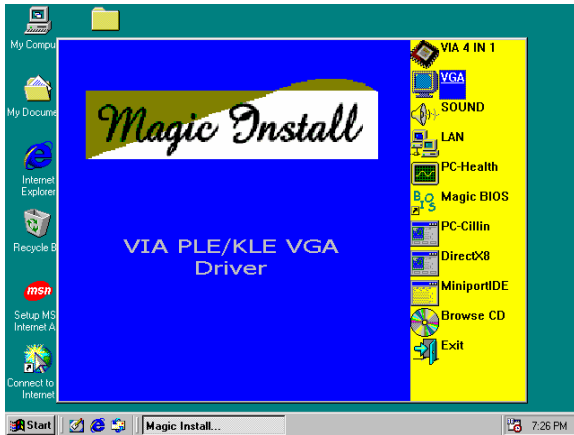
1. Click VGA when MAGIC INSTALL MENU appears

2. Click NEXT when VIA Display Driver Setup appears

3. Click FINISH to Restart Computer

NOTE: **The path of the file**
For WINDOWS 95/98/98SE is X:\VIA\8601VGA\WIN9X\SETUP.EXE
For WINDOWS ME is X:\VIA\8601VGA\WINME\SETUP.EXE
For NT4.0 is X:\VIA\8601VGA\NT4\SETUP.EXE

For WINDOWS 2000 is X:\VIA\8601VGA\WIN2000\SETUP.EXE

4-3 SOUND Install Audio Codec Driver
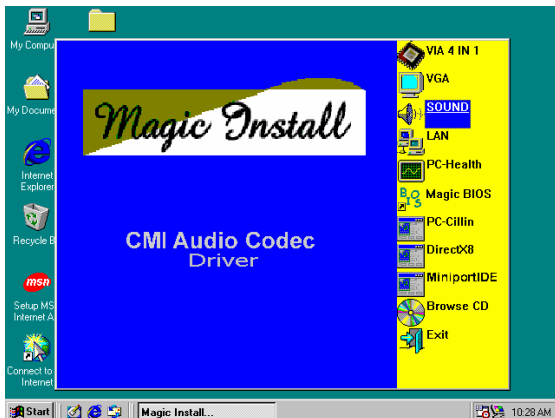
1. Click SOUND when MAGIC INSTALL MENU appears

2. Choose Install component in Installation Package

3. Click Next when copyright Issue appears, click Next or choose BROWSE to change the path for the file to be store

4. Enter Program folders name or click Next
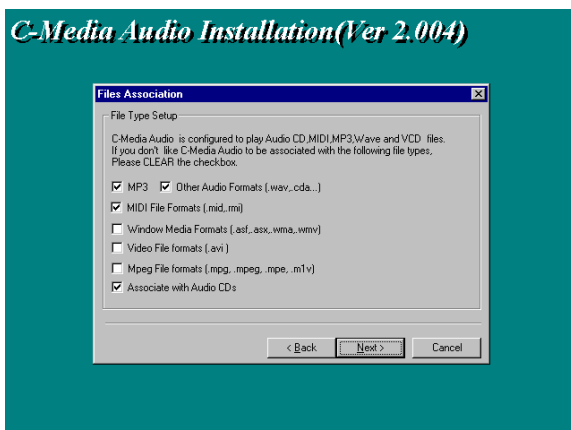
5. C-Media Media Rack can Auto Play following Format file choose need component and Click Next
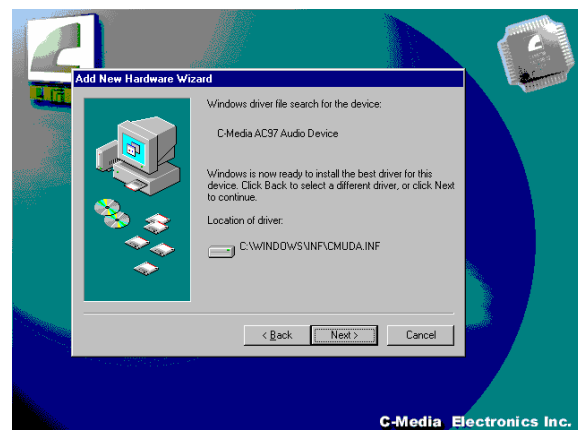
6. Click Next when Start copying files windows appears, OS can Auto Find C-Media AC97 Audio Device Click Next

34
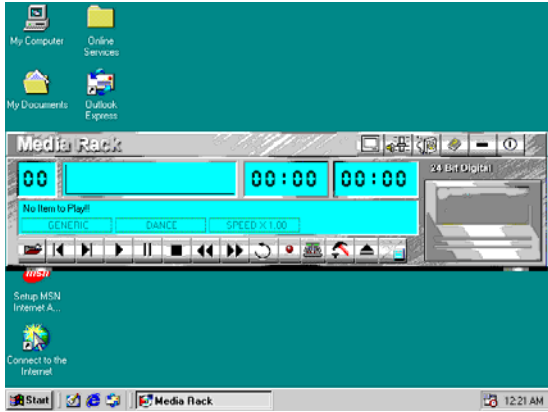
7. C-Media Media Rack Play table
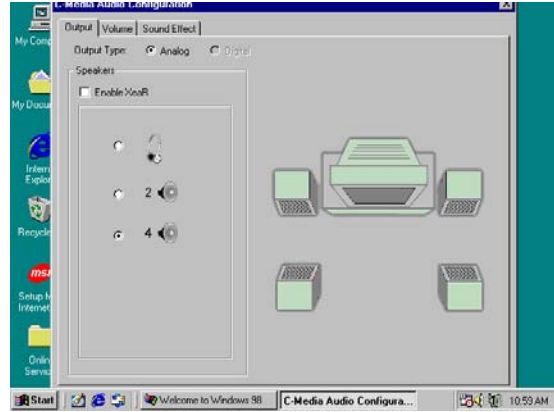
8. C-Media Audio Configuration setting

9. C-Media Multi-Channel Audio Demo Program, you can Test speaker position
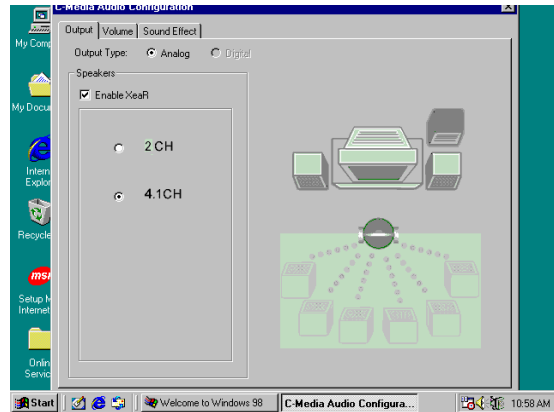
10. When Enabled XeaR, you can plug earphone in Speak-Out connector as a Rear speaker, and 2-channel speaker plug in Line-In as Front Speaker to get 4-channel effect

4-4 LAN Install VIA6105 LAN Controller Driver (Only for 605TCFL)

WINDOWS 98SE/98ME/2000/XP Setup
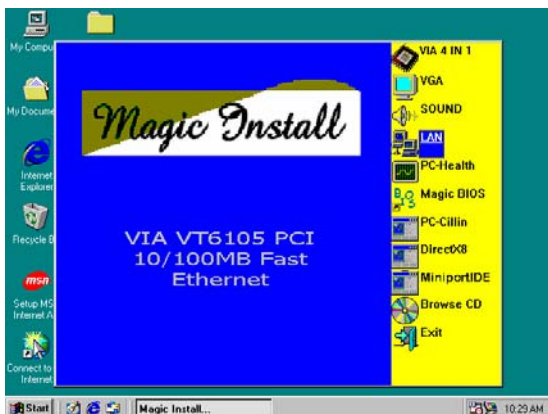
1. Click LAN when Magic Install Menu appear
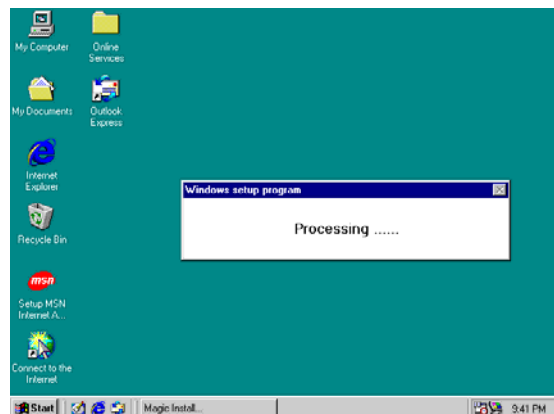
2. Install VIA VT6105 PCI 10/100M Fast Ethernet Driver
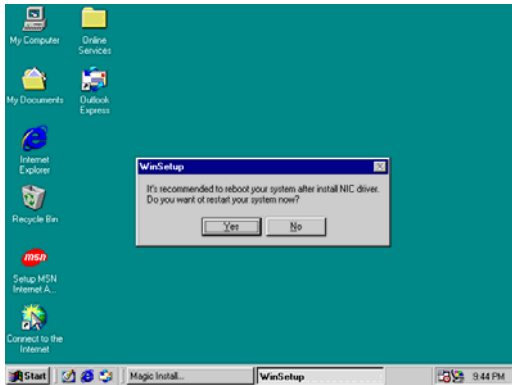
3. Select YES and Restart your computer
   X:\RTLLAN\WIN98 (If OS is win9X)

4-5 PC-HEALTH   Install VIA Hardware Monitor Driver
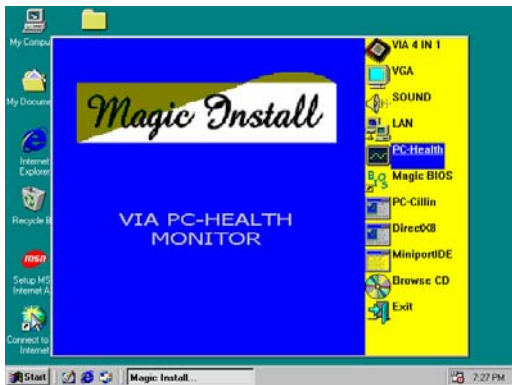
1. Click PC-HEALTH when Magic Install MENU appears

2. Click NEXT when VIA Hardware Monitor Wizard appears

3. Click Next to install Driver in C:\VIAHM

4. Click Next to use default Program Folders name

4-5-1 How To Use VIA Hardware Monitor Application Software
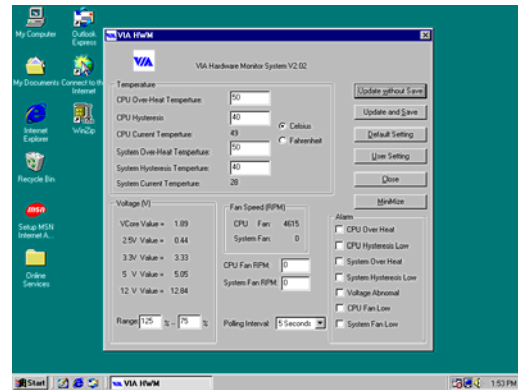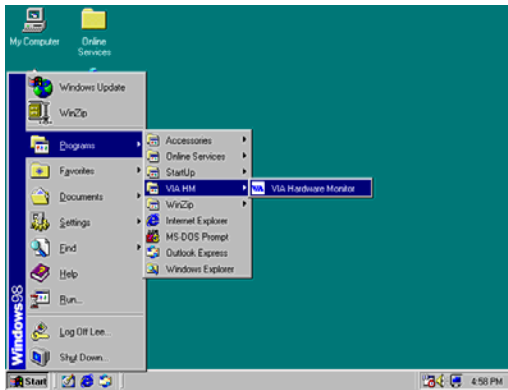
1. Click Programs, VIA HM and will show next screen

4-6 MAGIC BIOS Install BIOS Live Update Utility
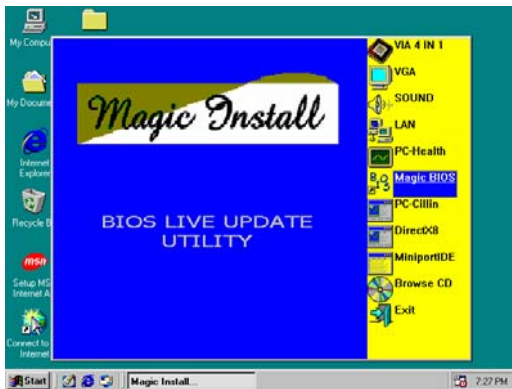
1. Click Magic BIOS when Magic Install MENU appears

2. Click Next to install the Magic BIOS in Destination Folder
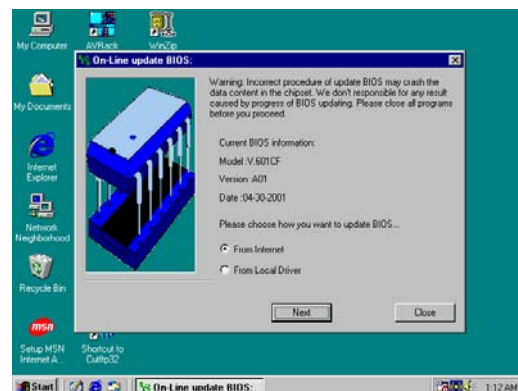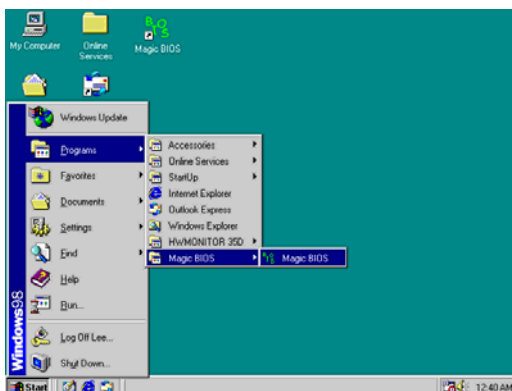
3. After finish Setup you will have a Magic BIOS icon in your screen

4. Double click the Magic BIOS icon you will have this picture, choose from internet you can upgrade BIOS On-line
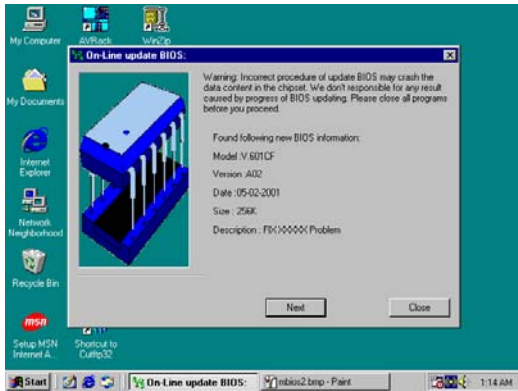
5. When On-line update BIOS the program will auto-check your BIOS version
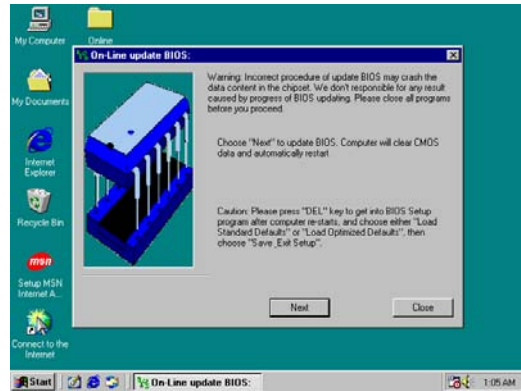
6. Click Next if you need update BIOS, after upgrade BIOS, the system will clear CMOS and automatically restart
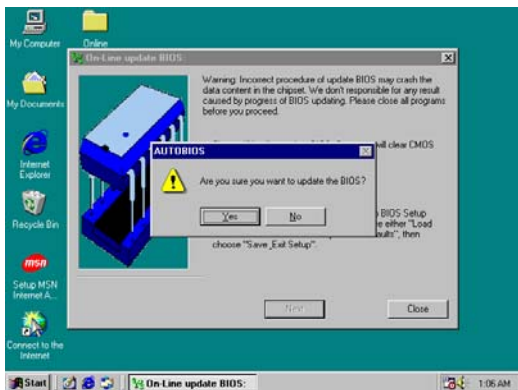
7. Click Yes if you want to update the BIOS otherwise choose No to exit
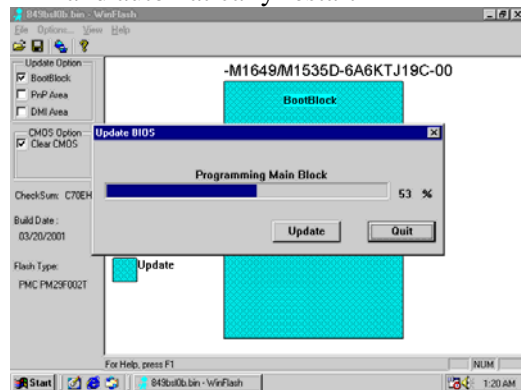
8. When System programming BIOS don't turn off power, after finish update BIOS, the system will clear CMOS and automatically Restart
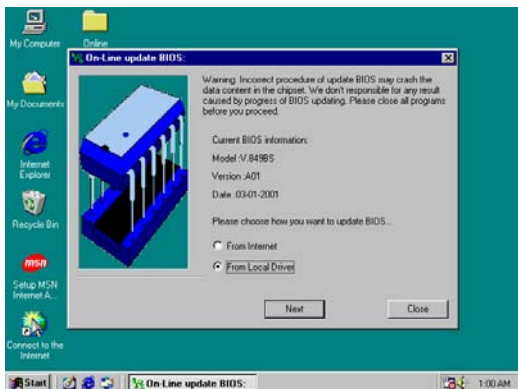
9. When choose From Local Driver to update BIOS, you must have the correct BIOS file in your Local Driver

10. Choose the correct BIOS file to update BIOS

4-7 PC-CILLIN Install PC-CILLIN 2002 Anti-virus program

1. Click PC-CILLIN when MAGIC INSTALL MENU appear
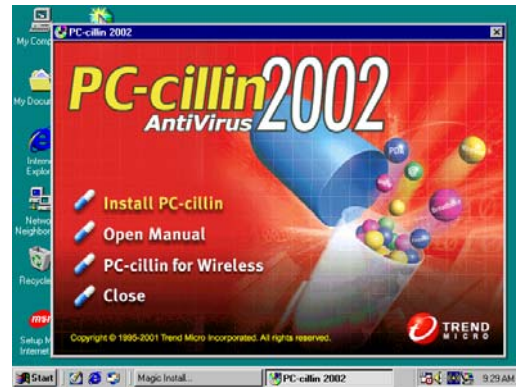
2. (1) Click "Install PC-CILLIN" when PC-CILLIN 2002 main menu appears, and Click NEXT when "Install Shield Wizard For PC-CILLIN 2002"
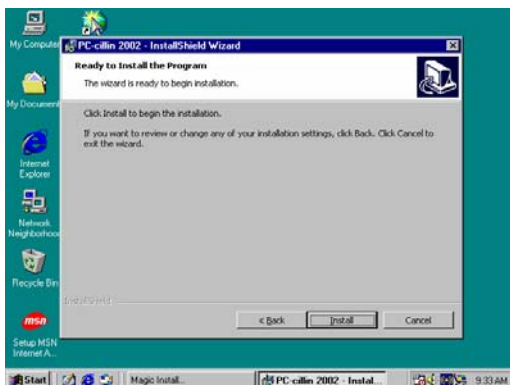
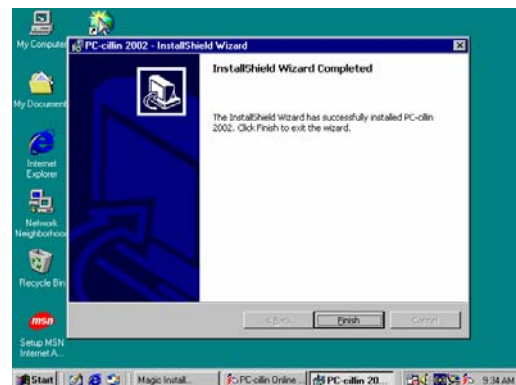   (2) Click Open Manual. you can learn PC-CILLIN 2002 how to use
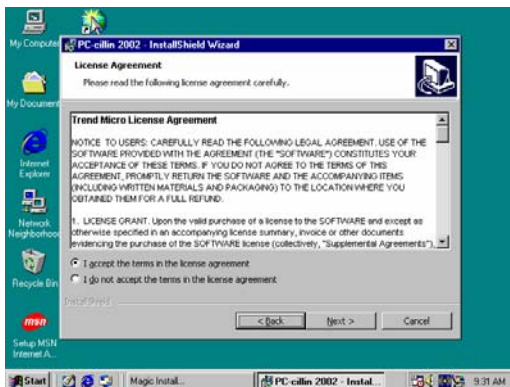
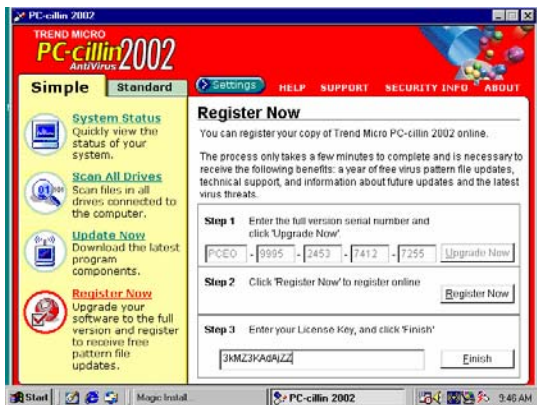3. This is license agreement, select "I Accept the terms" and Click NEXT
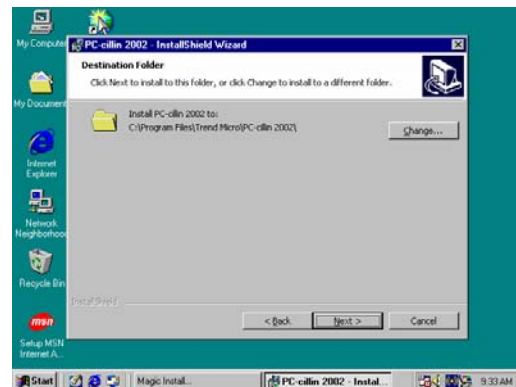
4. Click NEXT and Enter your Customer Information, Click NEXT or choose Change to change the path for the file to be stored

5. Click INSTALL, Start to install the software

6. Setup Complete and click FINISH

7. After PC-CILLIN 2002 complete, Please register your information and get LICENSE KEY from TREND MICRO web site, enter your license key and click FINISH

8. Finish register process, we recommend select update item to download newest engine code and virus code

Note : **Please install ACROBAT READER, Before you read PC-CILLIN 2002 User Manual, the path at X:\acrobat\ar500eng.exe**

4-8   HOW TO DISABLE ON-BOARD SOUND

Enter BIOS SETUP choose INTEGRATE PERIPHERALS choose ON-CHIP DEVICE FUNCTION choose AC97 AUDIO Disable on-board sound function by press PAGE DOWN KEY to Disable

4-9   HOW TO UPDATE BIOS

Method 1.   Use "Magic BIOS" update BIOS in Windows 98 (refer)

Method 2.   In DOS Mode

STEP 1. Prepare a boot disc. (you may make one by click START click RUN type SYS A: click OK)

STEP 2. Copy utility program to your boot disc. You may copy from DRIVER CD X:\FLASH\AWDFLASH.EXE or download from our web site.

STEP 3. Copy latest BIOS for 605TCF from our web site to your boot disc.

STEP 4. Insert your boot disc into A:,

start the computer, type "Awdflash A:\605TCFxxx.BIN/SN/PY/CC/R"

605TCFxxx.BIN is the file name of latest BIOS it can be 605TCFA3.BIN or 605TCFB2.BIN

SN   means   don't save existing BIOS data
PY   means   renew existing BIOS data
CC   means   clear existing CMOS data
R   means   restart computer

STEP 5. Push ENTER and the BIOS will be updated, computer will be restarted automatically.