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ITEM CHECKUP

- Mainboard
- Support CD
- Bundled Bonus Pack CD
- Bundled Bonus Pack Manual
- Temperature Sensor Cable (Optional)
- ATA66/100/133 IDE Cable
- FDD Cable
- User Manual
- RS232 Cable (optional)
- USB Cable (optional)

Chapter 1 Specification

Introduction

This Mainboard features an integration of the powerful processor Intel Pentium 4 and the single-chip North Bridge VIA Apollo P4X266E plus South Bridge VT8233A, by which the whole system performance can be upgraded to 533MHz system bus.

The Intel P4 processor is a rapid execution engine providing 4X100/4X133MHz quadpumped system bus to allow 3.2GB data transfer rates possible, while VIA Apollo P4X266E plus VT8233A supports Intel P4 processor to implement the 4X133 Front Side Bus, AGP4X/2X external bus, the LPC Super I/O, the DDR SDRAM and UATA 133/100/66 data transfer rate. This chapter is to introduce to users every advanced function of this high performance integration.

Topics included in this chapter are:

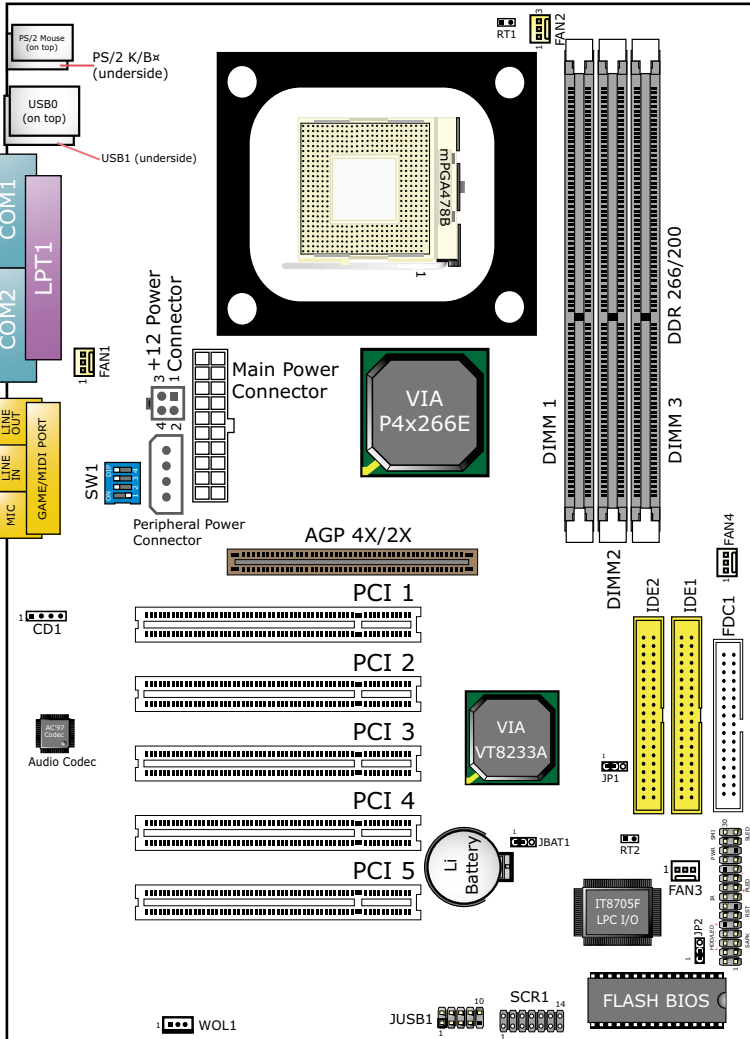
1-1 Mainboard Layout

1-2 Mainboard Specifications

1-3 Mainboard Specification Table

1-4 Chipset Diagram

1-1 85DRV4-C Components and Options



1-2 Mainboard Specifications

1-2.1 CPU Socket

CPU Socket 478B on board, supporting Intel® Pentium 4 processors in 478-pin package for :

- 533/400MHz System Bus;
- Hyper-pipelined technology;
- Advanced dynamic execution;
- Advanced transfer cache;

1-2.2 System Chipsets

- North Bridge VIA P4X266E for managing and supporting 4X133/4X100MHz system Bus, DDR 266/200 SDRAM memory interface, Hub interface and AGP4X/2X interface
- South Bridge VIA VT8233A working with North Bridge supporting the V-Link Bus, LPC Super I/O, upstream Hub interface, PCI interface, IDE interface, USB interface, as well as AC'97 Audio interface

1-2.3 Memory

3 DDR DIMM 184-pin slots on board for DDR 266/200 SDRAMs :

- Supporting unregistered, non-ECC DDR 266/200 SDRAM up to 3 GBs
- Supporting installation of mixed volumes yet same type of DDR SDRAM modules

1-2.4 Award BIOS

- Supporting Plug & Play V1.0
- Flash Memory for easy upgrade
- Supporting BIOS Writing Protection and Year 2000 compliant
- Supporting BIOS Setup (See Chapter 4 BIOS Setup)

1-2.5 Accelerated Graphics Port (AGP) Interface

AGP Controller embedded on board, supporting:

- 1.5V(4X) /3.3V (2X) power mode, 1 AGP Slot supported
- 4x AD and SBA signaling, AGP pipelined split-transection longburst transfers up to 2GB/sec.
- AGP 4X/2X, AGP v2.0 compliant

1-2.6 Advanced System Power Management:

- ACPI 1.0B compliant (Advanced Configuration and Power Interface)
- APM V1.2 compliant (Legacy Power Management)
- ACPI POS (Power On Suspend)
- PS/2 Keyboard & Mouse Power On
- Supporting Ring Power Up Control for Wake-on-LAN (via Connector WOL1)
- Real Time Clock (RTC) with date alarm, month alarm, and century field

1-2.7 Multi-I/O Functions :

- PCI EIDE Controller, supporting:
 - 2x Ultra ATA133/100/66 IDE connectors supporting up to 4 IDE devices
- Dedicated IR Functions:
 - Third serial port dedicated to IR function either through the two complete serial ports or the third dedicated port Infrared-IrDA (HPSIR) and ASK (Amplitude Shift Keyed) IR
- Multi-mode parallel data transfer:
 - Standard mode, high speed mode ECP and enhanced mode EPP
- Floppy Disk connector:
 - One FDD connector supporting 2 floppy drives with drive swap support
- Universal Serial Bus Transfer Mode:
 - USB V1.1 compliant
 - 2 built-in USB connectors and 1 USB Header (JUSB1) which requires 1 optional USB cable to provide 2 more optional USB ports
- PS/2 Keyboard and PS/2 Mouse
- UARTs (Universal Asynchronous Receiver / Transmitter):
 - Two complete serial ports (COM1 & COM2) on board

1-2.8 Expansion Slots

- 5 PCI bus Master slots
- 1 AGP 4X/2X slot
- 3 DDR DIMM slots

1-2.9 AC'97 Audio Codec on board

- AC'97 Audio Codec, 2-channel Audio supported
- AC'97 Audio Codec Driver enclosed in Support CD for user's installation.

1-2.10 Hardware Monitor on board

- Hardware Monitor integrated in Super I/O IT8705F, providing monitoring and alarm for flexible desktop management of hardware voltage, temperatures and fan speeds.
- Utility Software SmartGuardian for displaying Monitoring status is enclosed in Support CD for user's installation.

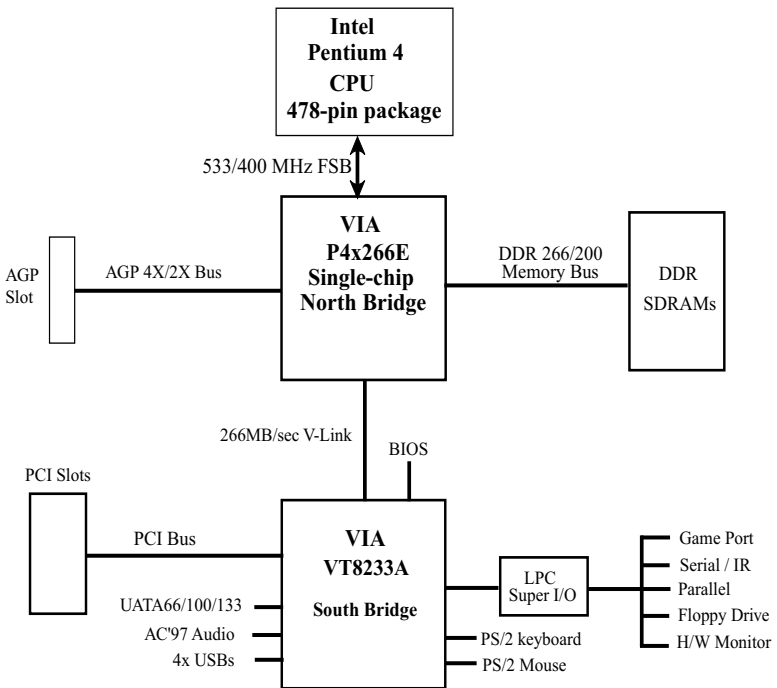
1-2.11 Form Factor

- ATX form factor, ATX power supply, version 2.03 compliant, supported by one Main Power Connector, one +12V Power Connector and one Peripheral Power Connector
- Mainboard size: 305mm x 220mm

1-3 Mainboard Specification Table

SL-85DRV4-C Specifications and Features	
CPU	Socket 478B for Intel Pentium 4 CPUs
North Bridge	VIA P4X266E, supporting 533/400MHz FSB
South Bridge	VIA VT8233A
BIOS	AwardBIOS
Memory	Supporting DDR 266/200 SDRM, up to 3GB in 3 DDR DIMM slots
I/O Chip	IT8705F
AGP interface	1.5V AGP4X/2X mode
Audio	AC'97 Audio 2-channel compliant
IDE Interface	2 UATA 66/100/133 IDE ports
Networking	No LAN Controller integrated
PCI Slots	5 PCI Master slots on board
I/O Connectors	4xUSB ports (V1.1), 1xFDD port, 2xCOM ports, 1xLPT, 1xIrDA, 1xPS/2 K/B, 1xPS/2 Mouse,
VGA Display	VGA not integrated on board
Other Features	BIOS Writing Protection; Hardware Monitor keyboard/Mouse Power On; ATX 2.03 Power Supply; ATX form factor

1-4 Chipset System Block Diagram



Intel Pentium 4 + VIA P4X266E + VIA VT8233A

Chapter 2 Hardware Setup

To Get things ready for hardware setup !

1. We recommend to install your CPU before any other components. For detailed installation instructions of processor, you can also refer to the pamphlet enclosed in your CPU package.
2. Installing a cooling fan with a good heatsink is a must for proper heat dissipation for your CPU. Get ready an appropriate fan with heatsink for proper installation. Improper fan and installation will damage your CPU.
3. In case CPU Vcore, CPU clock or Frequency Ratio is adjustable on board, please follow the instructions described in the User Manual for proper setup. Incorrect setting will cause damage to your CPU.

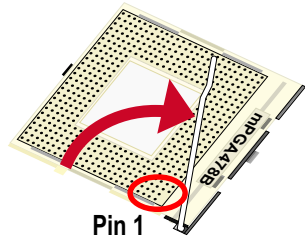
The following topics are included in this chapter:

2-1 CPU Installation with Socket 478B

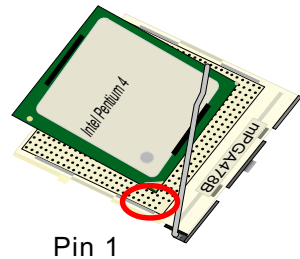
This series is built with CPU Socket 478B (478-pin) supporting the Intel Pentium 4 CPU:

- Follow the steps described in this section to install the 478-pin Pentium 4 CPU into the on board Socket 478.
- After installation of Pentium 4 CPU, you must also install the specific Pentium 4 CPU fan designed in tandem with this CPU. This CPU Fan installation is described in next section.

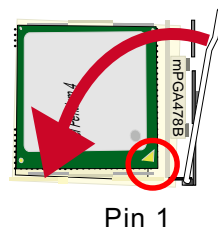
1. First pull sideways the lever of Socket 478, and then turn it up 90° so as to raise the upper layer of the socket from the lower platform.



2. Configure Pin 1 of CPU to Pin 1 of the Socket, just as the way shown in the diagram on the right. Adjust the position of CPU until you can feel all CPU pins get into the socket with ease.

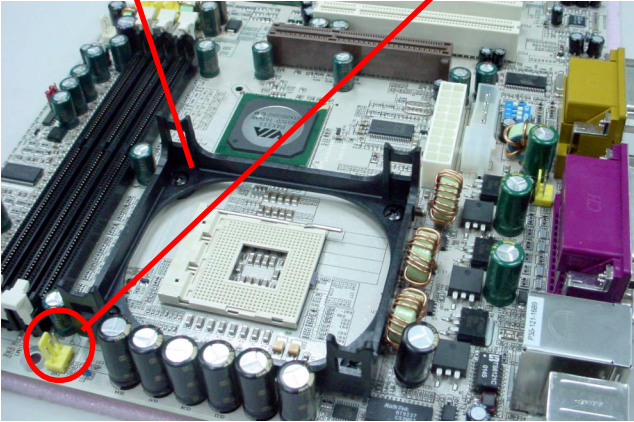


3. Make sure that all CPU pins have completely entered the socket and then lower down the lever to lock up CPU to socket.

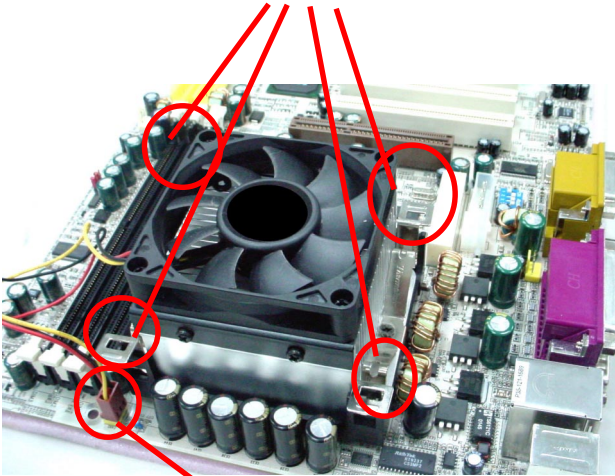


2-2 Pentium 4 CPU Fan Installation

Pentium 4 Fanbase CPU Fan Connector



Press down 4 corners to lock fan to fanbase



Connect Fan Connector to CPU FAN connector

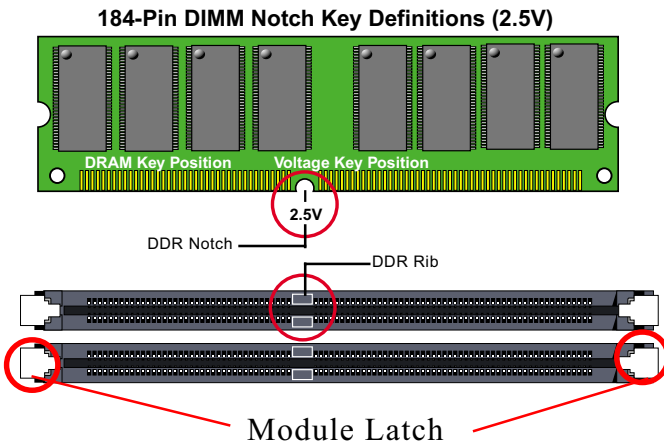
2-3 Memory Installation

How to tackle the memory Modules:

- Make sure to unplug your power supply before adding or removing memory module. Failure to do so may cause severe damage to both your mainboard and the memory module.
- Pay attention to the orientation of the DIMM slots. Forcing a DIMM into a slot improperly will damage the memory module and slot itself.
- Make sure you have the right type of memory module for your mainboard.

2-3.1 To Install DDR SDRAM Module

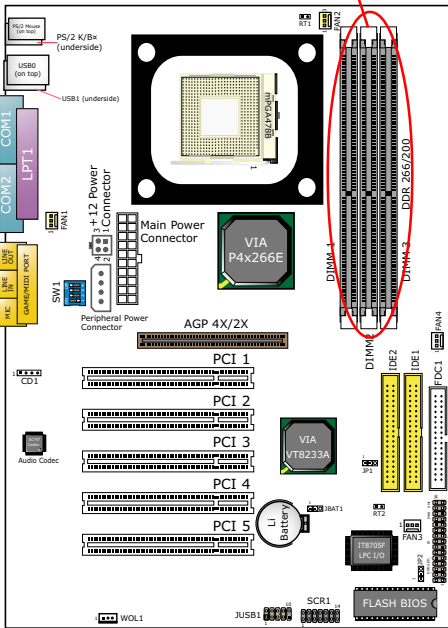
- This Mainboard supports up to 3GB unbuffered DDR 266/200 SDRAM, with 3 DDR DIMM slots on board. Do not insert other type of modules into these slots.
- DDR DIMM slot has 184-pins and one notch. Insert a DDR SDRAM vertically into the 184-pin slot with the notch-to-rib matching. Press the Module down in a gradual way until it surely reaches the bottom and clicks straight up the two latches on the left and right of the slot. If any one of the latches has not turned up completely, you should unplug the module and press it down a bit more firmly.



2-3.2 To Remove a DIMM

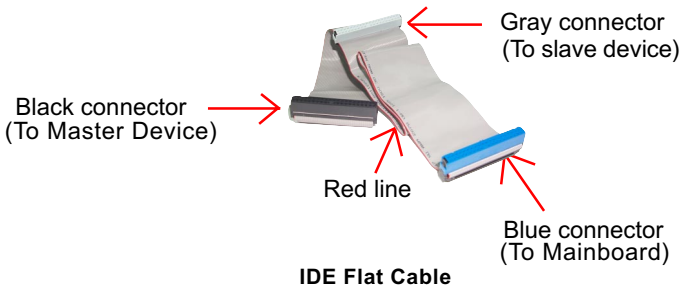
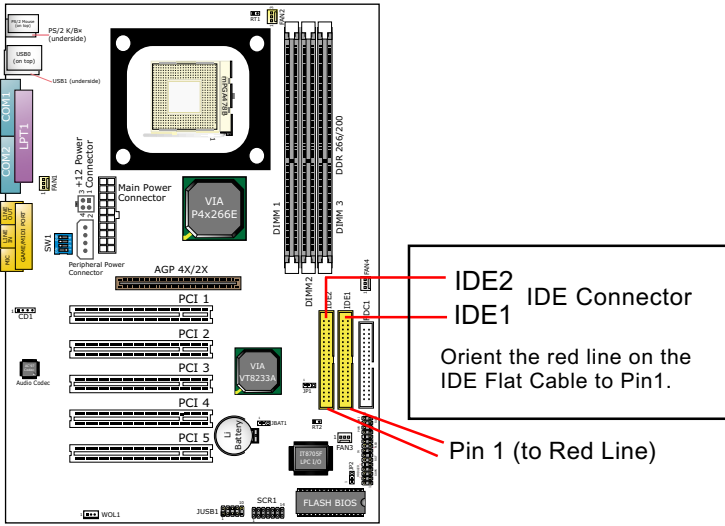
Power off system and press down the holding latches on both sides of slot to release the module from the DIMM slot.

DDR DIMM Slots
(184-pin)



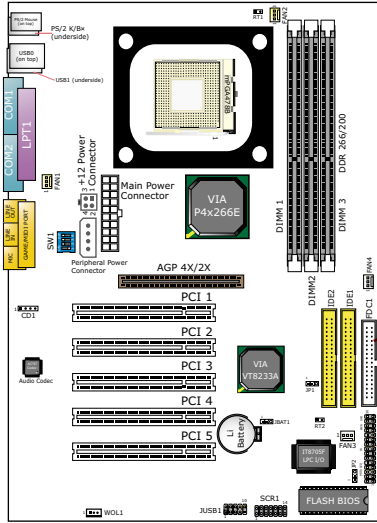
2-5 IDE Connector Installation

To install IDE Connector, you may connect the blue connector of IDE cable to the primary (IDE1) or secondary(IDE2) connector on board, and then connect the gray connector to your slave device and the black connector to your master device. If you install two hard disks, you must configure the second drive to Slave mode by setting its jumpers correctly. Please refer to your hard disk documentation for the jumper settings.



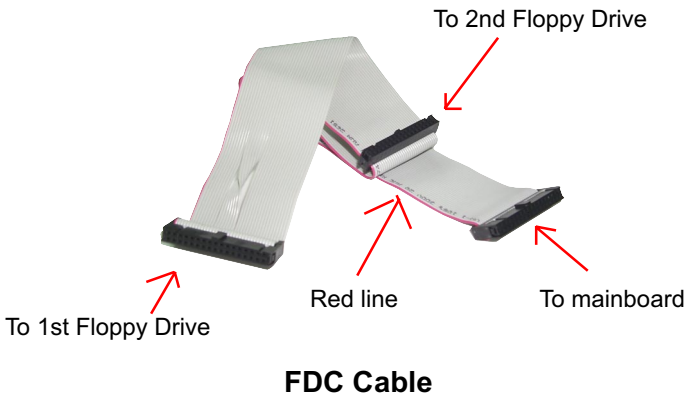
2-6 Floppy Drive Connector (FDC) Installation

To install FDC (Floppy Drive Connector), you should connect the end of FDC cable with single connector to the board , and connect the other end with two connectors to the floppy drives.

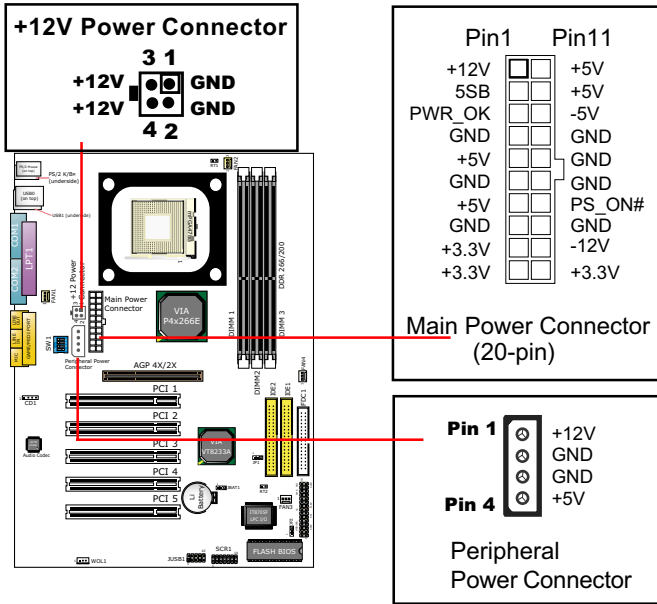


Floppy Drive Connector:
FDC
Orient the red line of the
Floppy Flat Cable to Pin1.

Pin 1 (to Red Line)



2-7 ATX V2.03 Power Supply Installation



ATX V2.03 power supply is strongly recommended for mainboard running with 2GMHz or higher CPU.

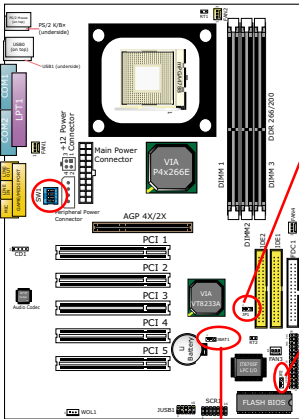
To set up Power Supply on this mainboard:

1. Connect the on-board Main Power Connector (20-pin) to the Main Power Connector (20-pin) of an ATX Power Supply which can be either of the latest version 2.03 or of earlier ATX model.
2. If you use an ATX Power Supply Version 2.03 or the later ones, you can now connect the onboard square-shaped +12V Connector to the square-shaped +12V Connector of your ATX Power Supply. In this case, it is not necessary for you to connect the onboard 4-pin Peripheral Power Connector to your Power Supply.
3. If you use an ATX power Supply of an older version than V2.03, there will be no square-shaped +12V connector. So please connect the onboard 4-pin Peripheral Power Connector to the 4-pin Peripheral Power Connector of your Power Supply.

2-8 Jumper and Switch Settings

The following diagrams show the locations and settings of Switch and jumper blocks on the mainboard.

SW1	Overclock Select					
	1 2 3 4	On	Off	On	On	On
		Off	On	On	On	On
		(Default)				
CPU clock (MHz)	S1	S2	S3	S4		
100 (default)	off	on	on	on		
103	off	on	off	on		
107	on	off	off	on		
110	off	off	off	on		
133	on	off	on	on		



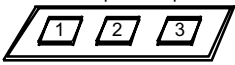
Jp1: CPU Clock Select	→	SW1 Overclock setting to Boot System
1	→	100/103/107/111SW1 setting for 100MHz CPU to boot system; 133MHz SW1 setting for 133MHz CPU to boot system;
1-2 closed (default) CPU Auto-detect of 100 / 133MHz	→	
1	→	100/103/107/111 to boot system
Jumper open 100MHz selected	→	
1	→	133MHz SW1 setting to boot system
1-2 closed 133MHz selected	→	

Jp2 Flash ROM Write Protection	
1	1-2 closed (default) Enabled
1	2-3 closed Disabled

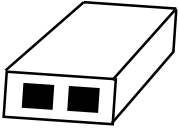
JBAT1: Clear CMOS	
1	1-2 closed (default) To hold data
1	2-3 closed To clear CMOS

How to tackle the Jumpers:

A 3-pin Jumper



If a pin-header (of 2 or more pins) is designed in such a way that its pins can be closed or linked together to set up a specific function, this header is called a jumper in this manual.



A 2-pin Jumper cap to link two header-pins together.

- A Jumper is usually but not necessarily given a “JpX” legend.
- In the Jumper setting diagram, the jumper pins covered with black marks stand for closed pins with jumper cap.







- Do not remove any jumper cap when power is on.

2-8.1 Jp1 and SW1: CPU Clock/Overclock Select

Jp1 and SW1 are designed for CPU clock select and 100MHz CPU overclocking. With Jp1, user can choose the way for a 100MHz CPU to run an overclock on board. SW1 is designed to match and meet the setting of Jp1.

1. If Jp1 is set to 1-2 closed, the auto-detect mode will recognize the CPU clock automatically and send the signal to system chips. Yet users themselves should be aware of the default CPU clock before the CPU is inserted to CPU socket. If a 100MHz CPU is used, SW1 should be set to default or 103/107/111 mode. If a 133MHz CPU is used, SW1 should be set to 133MHz mode to boot system.
2. If Jp1 is set to 1-2-3 all open, CPU is set at 100MHz, indicating that 133MHz overclock is not desired. Set SW1 to 100/103/107/111 mode to boot system.
3. If Jp1 is set to 2-3 closed, CPU is set at 133MHz, indicating that 133MHz overclock is desired. Set SW1 to 133MHz mode to boot system. If booting fails, it means overclocking fails. Reset Jp1 and SW1 to default mode for booting system.

Jp1: CPU Clock Select	SW1 Overclock setting to Boot System
 1-2 closed (default) CPU Auto-detect of 100 / 133MHz	100/103/107/111SW1 setting for 100MHz CPU to boot system; 133MHz SW1 setting for 133MHz CPU to boot system;
 Jumper open 100MHz selected	100/103/107/111 to boot system
 2-3 closed 133MHz selected	133MHz SW1 setting to boot system



CPU clock (MHz)	S1	S2	S3	S4
100 (default)	off	on	on	on
103	off	on	off	on
107	on	off	off	on
110	off	off	off	on
133	on	off	on	on

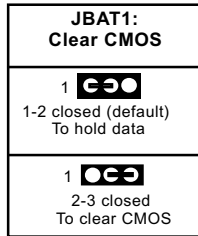
Further Notes on CPU Overclocking:

1. If you have successfully booted system, with or without CPU overclock, you still can try another CPU overclock in BIOS Setup. Please enter BIOS Setup, choose “Frequency/Voltage Control” menu, and take the “Use Linear” option of the “Use CPU Linear Frequency”. Then configure the “CPU Clock” item to raise your CPU clock.
2. CPU overclocking should take all components on board into account. If you fail in BIOS overclocking, you will not be able to restart system. In such case, Power off system and clear CMOS by JBAT1 and then restart your system. And remember to reconfigure whatever should be reconfigured.
3. If your system is already fixed in a cabinet or case, you may not like to take the trouble to clear CMOS. Then power on your system with the power button on the PC case and simultaneously press down the “Insert” key on the keyboard until you see the initial bootup screen appear. And remember you should also enter CMOS BIOS Setup instantly and choose “Load Optimized Defaults” to restore default BIOS .

2-8.2 JBAT1: Clear CMOS

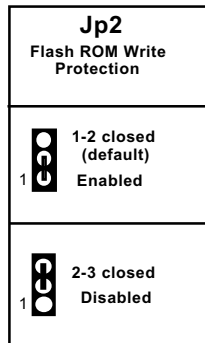
When you have problem with rebooting your system, you can clear CMOS data and restore it to default value. To clear CMOS with Jumper JBAT1, please follow the steps below:

1. Power off system.
2. Set JBAT1 to Pin 2-3 closed.
3. After 2 or 3 seconds, restore the JBAT1 setting to Pin1-2 closed.
4. CMOS data are restored to default now. Remember never clear CMOS when system power is on.



2-8.3 Jp2: Flash ROM Write Protection

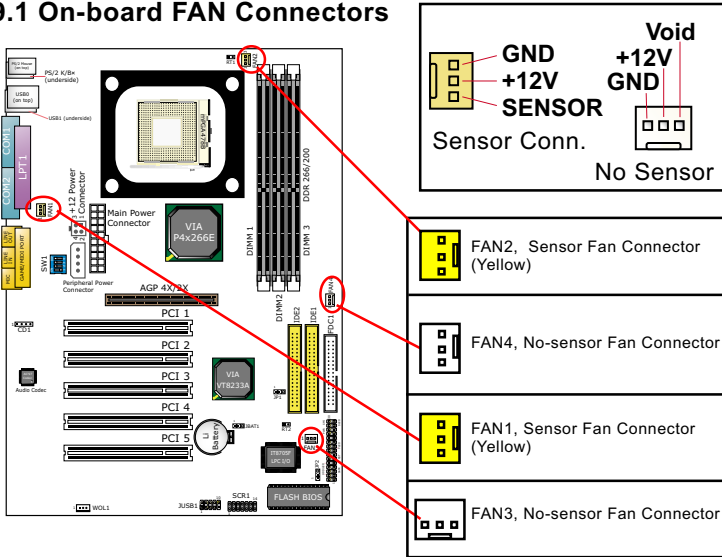
Jp2 is designed to support the “Flash ROM write Protection” function when you boot your system. Setting Jp2 1-2 closed will protect your Flash ROM from virus attack every time you boot your system.



2-9 Other Connectors Configuration

This section lists out all connectors configurations for users' reference.

2-9.1 On-board FAN Connectors

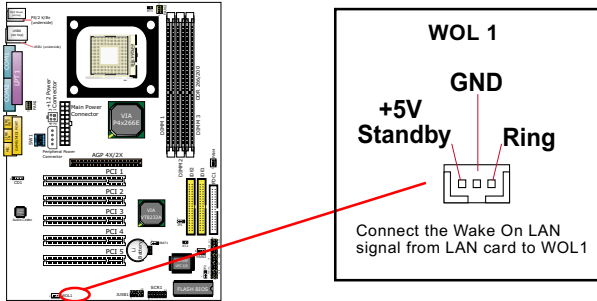


Both Sensor and No-sensor Fan Connectors support CPU/AGP/System/Case cooling fan with +12V mode. When connecting the wire to any Fan Connector, user should make sure that the red wire is for the positive current and should be connected to pin +12V, and the black wire is Ground and should be connected to pin GND. A Hardware Monitor chipset is on board, with which user can install a Hardware Monitor Utility and read the fan speed transmitted from the sensor fan. Otherwise, user can read the fan speed from the “Hardware Monitor Status” in CMOS BIOS.

A running fan will send out 2 electric pulses per rotation of its fan blade. A Sensor Fan Connector will count the electric pulses and send the information to the System Hardware Monitor which in turn will work out the fan rotation speed and display it on screen.

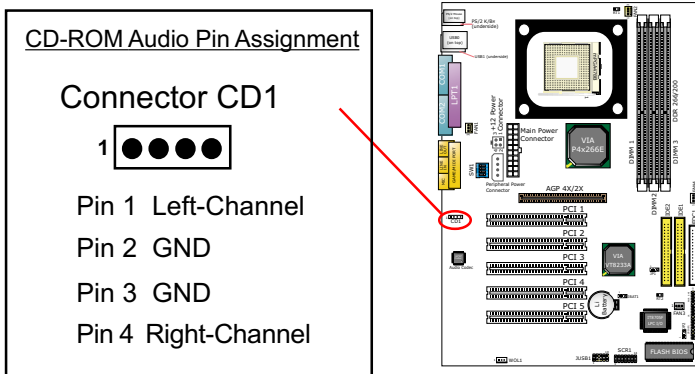
2-9.2 Connector WOL1: Wake On LAN

1. This connector connects to a LAN card with a Ring signal output. The connector powers up the system when it receives a wake-up packet or signal through the LAN card.
2. This feature requires that Resume On Ring feature is enabled in the BIOS setting “Power Management Setup” and that your system must be on ATX power supply with at least 720mA / +5V standby power.

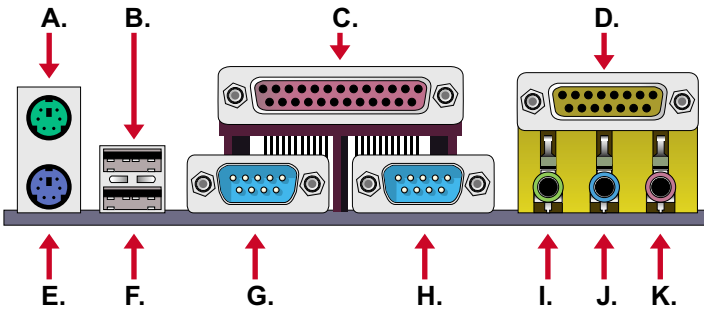


2-9.3 CD-ROM Audio Connector (CD1)

CD-In1 is audio connector connecting CD-ROM audio to mainboard.

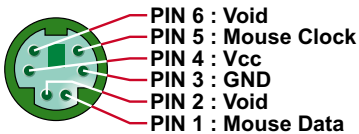


2-9.4 Chassis Panel Connectors

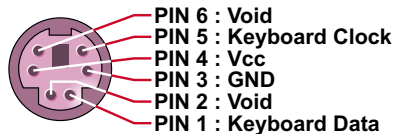


- | | |
|-------------------------|----------------------|
| A : PS/2 MOUSE PORT | G : COM1 Port |
| B : USB 0 (0n top) | H : COM2 PORT |
| C : LPT1 PORT | I : LINE Out |
| D : GAME/MIDI PORT | J : LINE IN |
| E : PS/2 KEYBOARD PORT | K : MICROPHONE INPUT |
| F : USB 1 PORT (Bottom) | |

2-9.5 PS/2 Mouse And PS/2 Keyboard

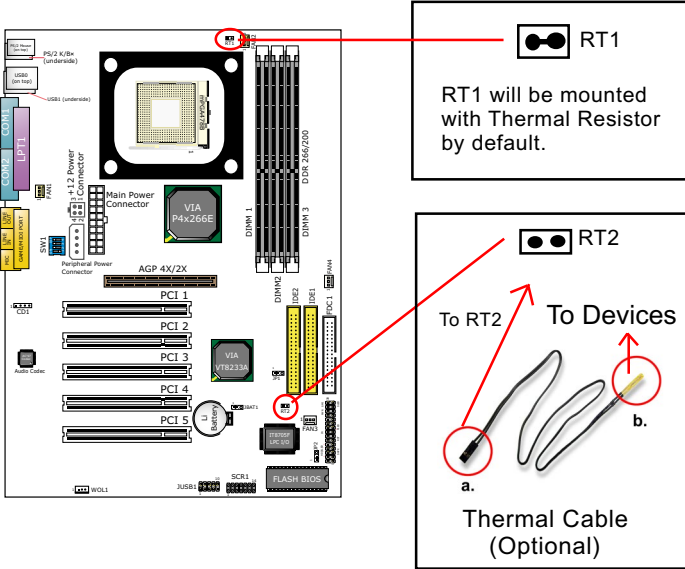


PS/2 MOUSE



PS/2 KEYBOARD

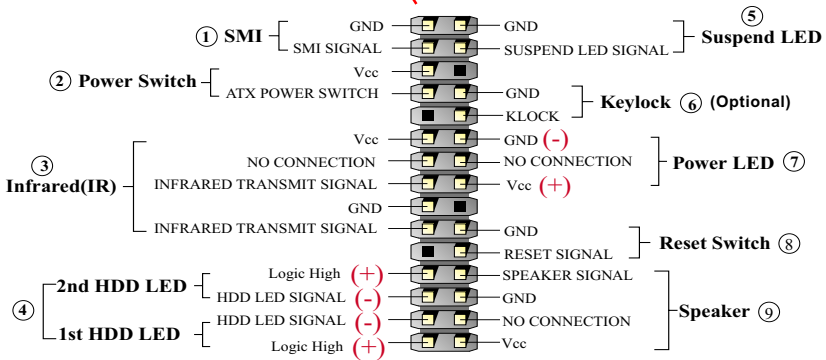
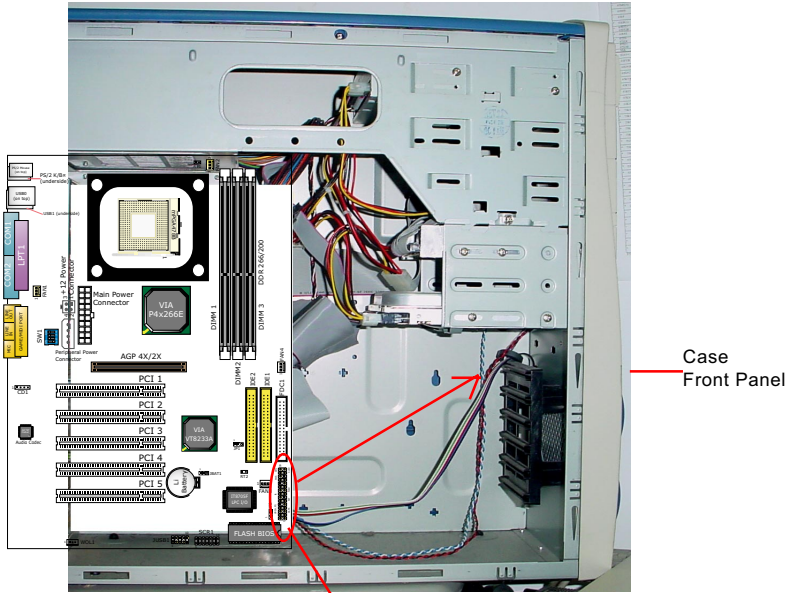
2-9.7 Thermal Sensor Connectors RT1 and RT2



1. Connector RT1: A thermal resistor will be mounted by default to connector RT1 so as to detect the temperature of the CPU. What RT1 does is to transmit the thermal signal to BIOS or Hardware Monitor.
2. Connector RT2: A thermal cable is needed to connect RT2 to on-board devices such as HDD, Graphics card etc., so as to detect the temperature generated therein. Please connect the end (a) of the thermal cable to RT2, and tape another end (b) of thermal cable on to the device which you want to monitor. After you have finished the thermal cable installation, you will **see the detected temperature in BIOS setup or Hardware Monitor utility.**

2-9.8 Complex Pin-header (Front Panel Connector)

This complex Pin-header consists of the following connectors for various supports. When you have fixed the mainboard to the case, join the connectors of this Complex Pin-header to the case Front Panel.



(1) SMI Connector (Optional):

Connection: Connected to the case-mounted Suspend Switch.

Function: Manually selecting system into the Suspend Mode or “Green Mode” by System management interrupt.

(2) Power Switch Connector:

Connection: Connected to a momentary button or switch.

Function: Manually switching the system between “On” and “Soft Off”. Pressing the momentary button for more than 4 seconds will also turn the system off.

(3) IR Connector (Infrared Connector):

Connection: Connected to Connector IR on board.

Function: Supporting wireless transmitting and receiving module on board.

(4) 1st HDD LED Connector/2nd HDD LED Connector:

Connection: Connected to HDD LED.

Function: To supply power to HDD LED.

(5) Suspend LED Connector:

Connection: Connected to Suspend Indicator.

Function: To supply power to “Suspend Indicator”.

(6) Keylock Connector (Optional):

Connection: Connected to keyboard.

Function: To lock keyboard and disable keyboard function.

(7) Power LED Connector:

Connection: Connected to System Power LED.

Function: To supply power to “System Power LED”.

(8) Reset Switch Connector:

Connection: Connected to case-mounted “Reset Switch”.

Function: To supply power to “Reset Switch” and support system reboot function.

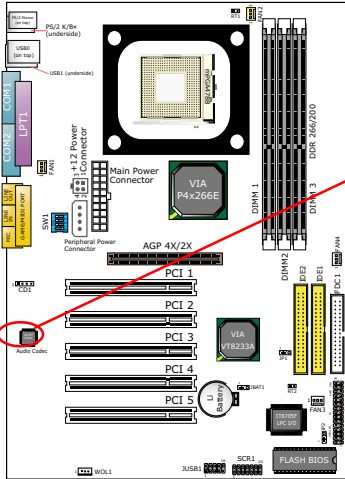
(9) Speaker Connector:

Connection: Connected to the case-mounted Speaker.

Function: To supply power to the case-mounted Speaker.

2-9.9 CD-ROM Audio Connectors (CD 1)

CD 1 is an audio connector connecting CD-ROM audio to mainboard.



CD-ROM Audio Connector

CD 1	Pin 1	Pin 2	Pin 3	Pin 4
1	Left Channel	GND	GND	Right Channel

2-10 IRQ Description

IRQ	Function Description	Priority
IRQ 0	System Timer	1
IRQ 1	Keyboard Controller	2
IRQ 2	Programmable Interrupt	N/A
IRQ 3	Serial Port (COM 2)	11
IRQ 4	Serial Port (COM 1)	12
IRQ 5	Free	13
IRQ 6	Floppy Disk Controller	14
IRQ 7	Parallel Port (LPT1)	15
IRQ 8	Real Time Clock (RTC)	3
IRQ 9	Free	4
IRQ 10	Free	5
IRQ 11	Free	6
IRQ 12	PS/2 Mouse Port	7
IRQ 13	Coprocessor	8
IRQ 14	Primary IDE Channel	9
IRQ 15	Secondary IDE Channel	10

- Both ISA and PCI expansion cards may require IRQs. System IRQs are available to cards installed in the ISA expansion bus first, then any remaining IRQs are available to PCI cards. Currently, there are two types of ISA cards.
- The original ISA expansion card design, now referred to as “Legacy” ISA card, requires you to configure the card’s jumpers manually and then install it in any available slot on the ISA bus. To see a map of your used and free IRQs in Windows 98, the **Control Panel** in **My Computer**, contains a **System** icon, which gives you a **Device Manager** tab. Double-Clicking on a specific hardware device gives you a **Resources** tab which shows the Interrupt number and address. Double-Clicking **Computers** to see all the interrupts and addresses for your system. Make sure that each ISA device should be assigned to one IRQ respectively. If ISA device share IRQ with any other device, your computer will easily get into trouble.

Chapter 3 Software Setup

Drivers, Utilities and Software Installation

Support CD:

This mainboard will be shipped with a Support CD which contains those necessary driver files, Application Softwares and some helpful utilities. It is a user-friendly, auto-run CD which will open itself up in a CD-ROM automatically.

Contents of Support CD:

For this mainboard, user will be able to find in the Support CD the following drivers and utilities:

1. VIA 4-in-1 Drivers;
2. AC'97 Audio Driver;
3. Hardware Monitor Utility;

This chapter is devoted to describing the installations of all these essential drivers and utilities on Windows 9X, Windows ME , Windows 2000 and Windows XP. The installation procedures for all these operating systems are programed into an auto-run mode. What users have to do is read and follow the pop-up instructions. We therefore take the installation on Windows 98 as the general illustration hereby.

The priority of driver installation should also be noted. Users are recommended to take the following installation order:

3-1 Open Support CD and choose your drivers

3-2 4-in-1 Drivers Installation

3-3 AC'97 Audio Drivers Installation

3-4 Hardware Monitor Utility Installation

3-1 Open Up Support CD:

1. Please put the Support CD enclosed in your mainboard package into the CD-ROM drive. In a few seconds, the Main Menu will automatically appear, displaying the contents to be installed for this series:

Install VIA 4-in-1 Driver
Install VIA AC'97 Audio Driver
Install Hardware Monitor Utility
Install Acrobat Reader
Browse CD-ROM
Exit

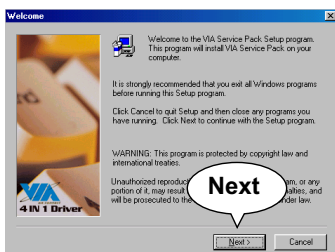
2. In case your system does not open the Support CD automatically, please click to the following path to enter the Main Installation Menu:

D:\Autorun.exe (assuming that your CD-ROM Drive is Drive D)
3. Users are recommended to install all the drivers and utilities at a time, though they can be installed separately. Also, we should take "VIA 4-in-1 Driver" as first installation priority to optimize the VIA system.
From next section, we provide detailed descriptions of all these installations with graphical illustrations.

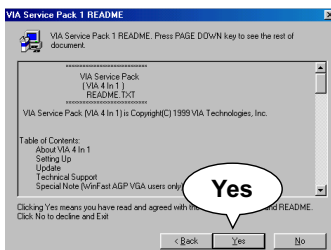
3-2 Proceed to VIA 4-IN-1 Drivers Installation

1. Following the procedures of opening the Support CD, click to “VIA 4-in-1 Drivers” to proceed.

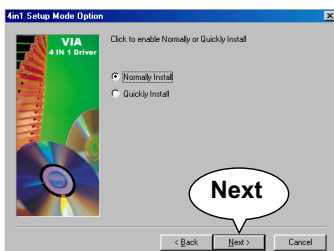
2. The VIA Service Pack InstallShield Wizard will pop up to guide you to the VIA Service pack installation. Click “Next” button to continue.



3. “VIA Service Pack README” screen will appear, please click the “Yes” button to agree with the Licence Agreement and continue.

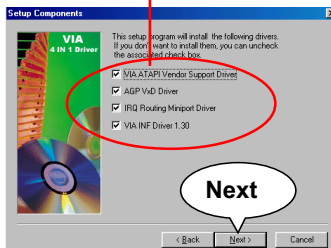


4. On the screen below, check “Normally Install” and click “Next” to continue. (If you check “Quickly Install”, you will skip the detailed procedures of the VIA 4-in-1 Setup.)

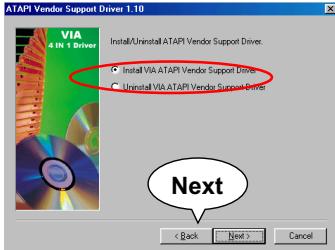


5. Select the checkbox as below and click “Next” to continue:

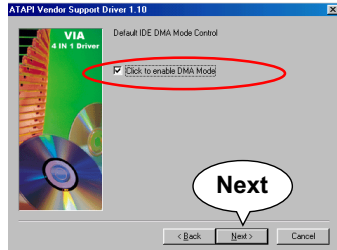
- VIA ATAPI Vendor Support Driver
- AGP VxD Driver
- IRQ Routing Miniport Driver
- VIA Chipset Function's Registry



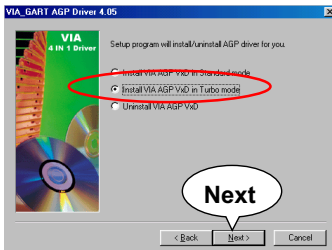
6. Select “Install VIA ATAPI Vendor Support Driver” checkbox, then click the “Next” button to continue.



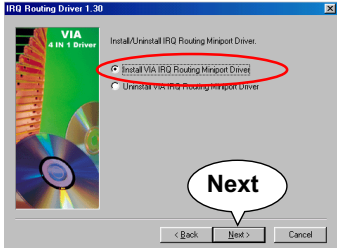
7. Click on “Click to enable DMA Mode” checkbox to enable DMA function, then click the “Next” button to continue.



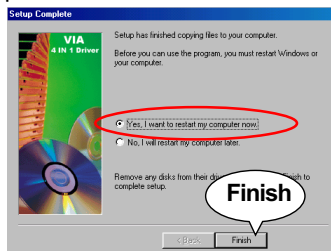
8. Select “Install VIA AGP VxD” in turbo mode and press “Next” button to continue.



9. Select “Install VIA IRQ Routing Miniport Driver” checkbox, then click the “Next” button to continue.



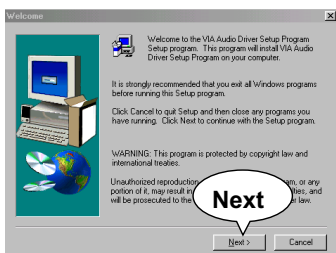
10. After all these setup procedures have finished, you should restart your computer by clicking on “Finish” so as to put VIA 4-in-1 drivers into effect and proceed to second driver installation.



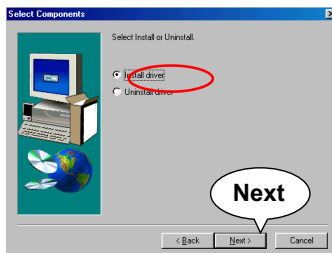
3-3 Proceed to AC'97 AUDIO Driver Installation

1. Following the installation of VIA 4-in-1 drivers, you have to restart system so that your system can be reconfigured with VIA 4-in-1. When restarting procedures finish, please open the Support CD with your CD-ROM to enter the Main Installation Menu. Then click to "Install VIA AC'97 Audio Driver".

2. The VIA Audio Driver Setup InstallShield Wizard will pop up to guide you to the VIA Audio Driver installation. Press "Next" button to continue.



3. When asked to install or remove the audio driver, please select "Install" and press "Next" button to continue.



4. After all these setup procedures have completed, click to "Finish" button to exit the Installation program.



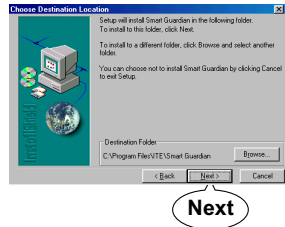
3-4 Proceed to Hardware Monitor Installation

3-4.1 Installation

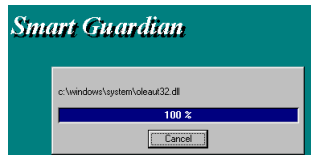
Hardware Monitor is built in chip IT8705F of this series. Its installation is programmed to a fully automated mode on Windows 9X/Me/NT4/2000/XP. User can follow the model installation below for its installation on various Windows System.

1. Following the procedures of opening the Support CD, click to “Hardware Monitor Utility” to proceed.
2. Instantly the “Smart Guardian Setup” screen appears to announce the setup of Hardware Monitor software “Smart Guardian”.

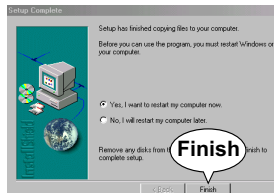
3. Next, the Setup Program will suggest to you the destination directory where the “Smart Guardian” will be installed. Select the Program folder and click “Next” to continue.



4. Instantly, Setup Program starts to copy files and install the software.

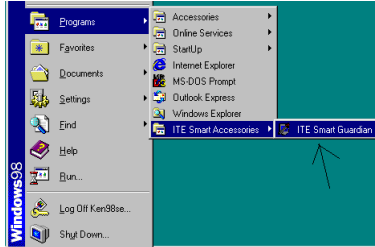


5. In one or two second, the “Setup complete” screen appears. Click “Finish” to restart your computer so that the Utility can be put into effect.



3-4.2 Verification

1. After restarting your computer, click “Start” and choose the path \Programs \ITE Smart Accessories\ITE Smart Guardian to open the main window of the Hardware Doctor.



2. Instantly, the Smartguardian Main Panel appears, telling you the CPU current temperature, CPU current Voltage and Current fan speed.

