

# SD11

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## MAINBOARD MANUAL

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## Handling Precautions

**Warning:**

1. Static electricity may cause damage to the integrated circuits on the motherboard. Before handling any motherboard outside of its protective packaging, ensure that there is no static electric charge in your body.
2. There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or an equivalent type recommended by the manufacturer.
3. Discard used batteries according to the manufacturer's instructions.

Observe the following basic precautions when handling the motherboard or other computer components:

- Wear a static wrist strap which fits around your wrist and is connected to a natural earth ground.
- Touch a grounded or anti-static surface or a metal fixture such as a water pipe.
- Avoid contacting the components on add-on cards, motherboards, and modules with the *golden fingers* connectors plugged into the expansion slot. It is best to handle system components by their mounting brackets.

The above methods prevent static build-up and cause it to be discharged properly.

## Trademark

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## Handling Precautions

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## Overview

The 1stMainboard SD11 supports the next generation AMD Athlon processor at impressive speeds of 500/550/600/650 MHz, and eventually further. Equipped with the AMD Athlon system bus that speeds effectively reach a staggering 200 MHz. The ATX sized 1stMainboard SD11 utilizes AMD's enhanced 3DNow!™ technology, bringing unprecedented levels of power and performance to 3D graphics applications. Furthermore, the AMD Athlon processor offers high-performance cache technology, including 128KB of on-chip level one (L1) cache and a programmable, high-performance backside L2 cache interface.

Based around the advanced architecture of a chipset comprising of the AMD-751™ system controller for the North Bridge, and the VIA Super South (686A) for the South Bridge, the 1stMainboard SD11 benefits from superb levels of stability. With support for UDMA 66 and its high-speed interface, data transfer speeds and data integrity are significantly enhanced. This is especially the case for long sequential transfers that are typically associated with audio/visual applications.

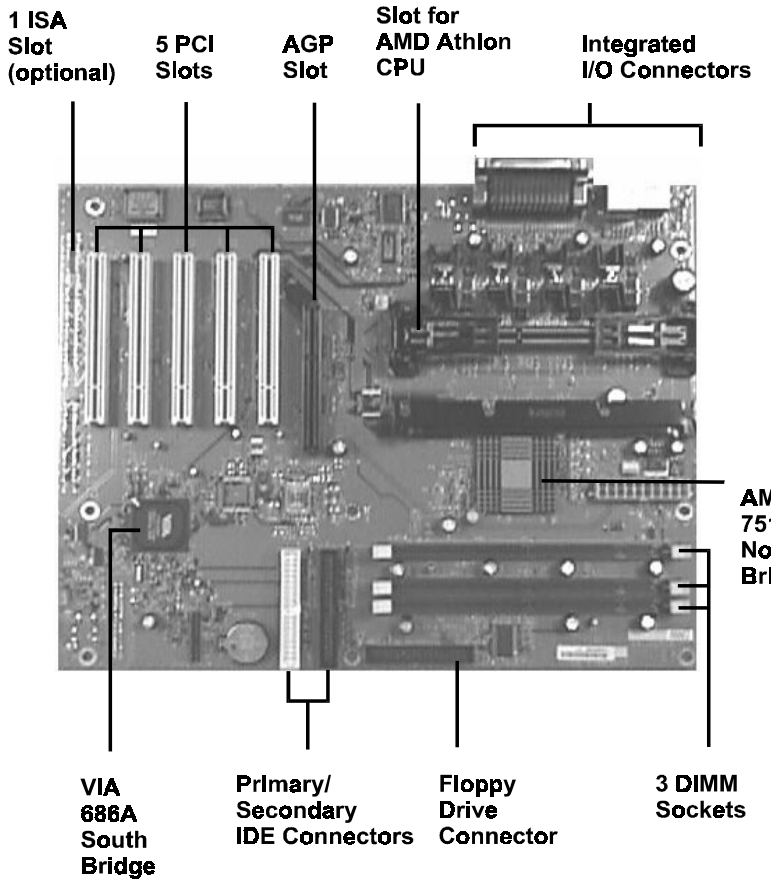
The 1stMainboard SD11 has three DIMMs, for up to 768 MB SDRAM, use PC100 SDRAM technology and are equipped with ECC memory support. With one AGP, five PCI and one ISA slot (optional) there is plenty of room for expansion. In addition, the 1stMainboard SD11 is equipped with two dual channeled enhanced PCI bus master IDE connectors. Standard I/O connections include a serial port, parallel port, PS/2 mouse and keyboard connector and two USB connectors.

## Package Checklist

If you discover any item below was damaged or lost, please contact your vendor.

- The mainboard
- This user manual
- One floppy disk drive cable
- One HDD cable
- One I/O Shading
- Software utilities

## The SD11 Mainboard



## Main Features

### ■ Easy Installation

BIOS with support for Plug and Play, auto detection of IDE hard drives, LS-120 drives, IDE ZIP drives, Windows 95, Windows 98/98 SE, Windows NT, and OS/2.

### ■ Leading Edge Chipset

AMD-751™ chip includes a CPU interface controller, integrated memory controller, concurrent PCI (PCI v.2.0, 2.1, 2.2), 3D video. VIA 686A™ chip includes integrated power management unit, IDE and ISA bus controller.

### ■ Flexible Processor Support

Onboard CPU Slot supports leading-edge AMD Athlon processors: 500/550/600/650 MHz.

### ■ Various External Bus and CPU/Bus Frequency Ratio Support

The board comes with AMI BIOS that automatically detects Bus and CPU/Bus Frequency Ratio you use.

### ■ Versatile Main Memory Support

Accepts up to 768MB RAM using three DIMMs of 8, 16, 32, 64, 128, 256MB with support for lightning-fast SDRAM (100MHz).

### ■ ISA and PCI Expansion Slots

Five 32-bit PCI Bus expansion slots and one optional 16-bit ISA Bus and provide the room to install a full range of add-on cards.

### ■ Enhanced PCI Bus Master IDE Controller with Ultra DMA/33 and Ultra DMA/66 Support

Integrated Enhanced PCI Bus Master IDE controller features two dual-channel connectors that accept up to four Enhanced IDE devices, including CD-ROM and Tape Backup Drives, as well as Hard Disk Drives supporting the new Ultra DMA/66 protocol. Standard PIO Mode 3, PIO Mode 4, DMA Mode 2, DMA Mode 4 devices are also supported.



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**■ Convenient Rear Panel USB Connection Support**

Two USB ports integrated in the rear I/O panel allow convenient and high-speed Plug and Play connections to the growing number of USB compliant peripheral devices on the market.

**■ Super Multi Input/Output (I/O) Support**

Integrated Plug and Play multi-I/O chipset features one high-speed UART 16550 compatible serial ports, one EPP/ECP capable parallel port, and one FDD connector.

**■ Optimized AMD Athlon® Processor Performance**

The mainboard utilizes the advanced features of the AMD-751™ system controller for the North Bridge and the VIA Super South (686A) for the South Bridge to optimize the unrivaled performance of the AMD Athlon® processor with 3D/NOW® technology allow you to enjoy a richer video, audio, digital imaging and communications experience from the latest generation of multimedia software.

**■ Onboard Accelerated Graphics Port (AGP)**

The motherboard is installed one 32-bit AGP bus with a dedicated 66MHz/133MHz path from the graphics card to the system memory (in 2x mode) offering much greater bandwidth than the 32-bit PCI bus does. The board is fully compliant with the AGP 1.0 specification. AGP enabled 3D graphics cards can directly access main memory across this fast path instead of using local memory. To make use of the improved AGP performance, the motherboard should be installed with SDRAM type memory and the VGA card and drivers should also be fully AGP compliant. Using Microsoft's Windows 98 and Windows 2000 which implement DirectDraw will allow the system to take full use of AGP's benefits without the need to install additional drivers.

## ACPI Ready

This mainboard fully implements the new ACPI (Advanced Configuration and Power Interface) 1.0 Hardware and BIOS requirement. If you install ACPI aware operating system, such as Windows 98, you fully utilized the power saving under ACPI.

It is compatible with all other none ACPI operating systems. If you want to setup ACPI feature under Windows 98, please follow the description below: Run Windows 98 setup by using **setup/p j** on the command line for installing Windows 98 with the ACPI control feature.

If you type **setup** without the parameter **/p j**, Windows 98 will be installed as APM, PnP mode, no ACPI will be used.

For more detail information, please visit the web site of Microsoft. Its address is: [www.microsoft.com/hwtest/](http://www.microsoft.com/hwtest/).

## CD-Pro Software Utilities

This mainboard came with software utilities for fully supporting your system performance. The software tools are suitable for Windows 95/98/98 SE/NT. These tools are necessary for your operating system to recognize some new chipset that equipped on this mainboard.

To install this software utilities are very easy. Right after your operating system is installed, start to run the CD-Pro immediately. It will detect the chipset on your mainboard automatically; then install the patch files contained in the CD-Pro for notifying your operating system about the chipset information. Please also refer to Chapter 4, **Windows 98/98 SE FAQs**, for more details.

# Installation Procedures

The mainboard has several user-adjustable jumpers on the board that allow you to configure your system to suit your requirements. This chapter contains information on the various jumper settings on your mainboard.

To set up your computer, you must complete the following steps:

- Step 1 - Set system jumpers
- Step 2 - Install system RAM modules
- Step 3 - Install the Central Processing Unit (CPU)
- Step 4 - Install expansion cards
- Step 5 - Connect ribbon cables, cabinet wires, and power supply
- Step 6 - Set up BIOS software (see Chapter Three)
- Step 7 - Set up supporting software tools



**WARNING:** Excessive torque may damage the mainboard. When using an electric screwdriver on the mainboard, make sure that the torque is set to the allowable range of 5.0 ~ 8.0kg/cm.

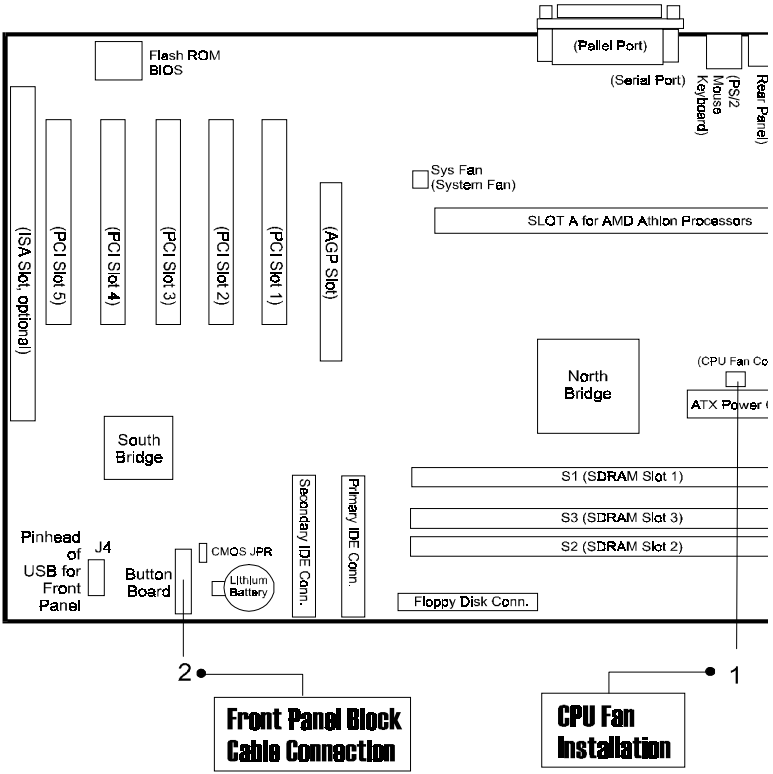
Mainboard components contain very delicate Integrated Circuit (IC) chips. To prevent static electricity from harming any of the mainboard's sensitive components, you should follow some precautions whenever working on the computer:

1. Unplug the computer when working on the inside.
2. Hold components by the edges and try not to touch the IC chips, leads, or circuitry.
3. Wear an anti-static wrist strap which fits around the wrist.
4. Place components on a grounded anti-static pad or on the bag that came with the component whenever the components are separated from the system.

SD11

## **QUICK REFERENCE**

*This Chapter is intended to aid quick and easy installation.  
In the event that more detailed information is required, please  
consult the Installation Procedures Chapter.*

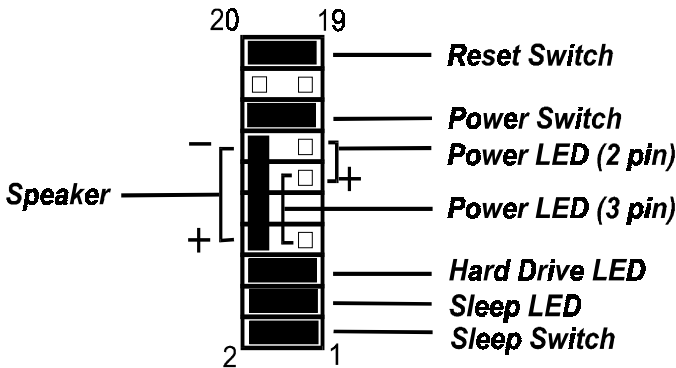


## 1). CPU Fan Installation

This connector is linked to the CPU fan. When the system is in suspend mode, the CPU fan will turn off; when it reverts back to full on mode, the fan will turn back on. Without sufficient air circulation, the CPU may overheat and cause damage to both the CPU and the mainboard.

*Damage may occur to the mainboard and/or the CPU fan if these pins are incorrectly used. These are not jumpers, do not place jumper caps over these pins.*

## 2). Front Panel Block Cable Connection



## 3). Load BIOS Setup Default

### Load Fail-Safe Defaults

BIOS defaults contain the most appropriate values of the system parameters that allow minimum system performance. The OEM manufacturer may change the defaults through MODBIN before the binary image burns into the ROM.

### Load Optimized Defaults

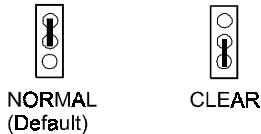
Selecting this field loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

## 5). System Jumper

The CMOS RAM is powered by the onboard button cell battery. To clear the RTC data:

1. Turn off your computer.
2. Move this jumper cap to CLEAR (figure below right).
3. Move the jumper cap to NORMAL after a few seconds (figure below left).
4. Turn on your computer.
5. Hit Delete key during boot.
6. After BIOS Setup menu appears, re-enter user preferences.

### **CMOS JPR (CMOS Clearance Function)**



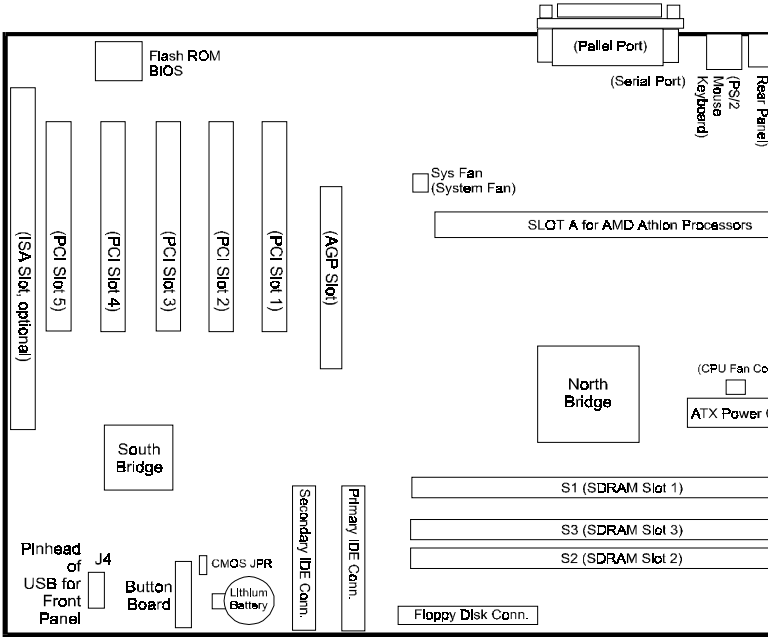
## 6). How to Upgrade BIOS

1. Format a bootable system floppy diskette by typing the command **format a:/s** in command mode.
2. Visit the the web site of the vendor and visit the BIOS Update page in the related Technical Support section.
3. Select the BIOS file you need and download it to your bootable floppy diskette.
4. Insert the bootable diskette containing the BIOS file into the floppy diskette drive.
5. Assuming that the floppy diskette drive is A, reboot the system by using the A: drive. At the A: > prompt, run the BIOS upgraded file by executing the Flash BIOS utility and the BIOS file with its appropriate extension.

***Do not turn off or reset the computer during the flash process or if there is a problem.***

## Mainboard Layout

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## 1). Set System Jumper

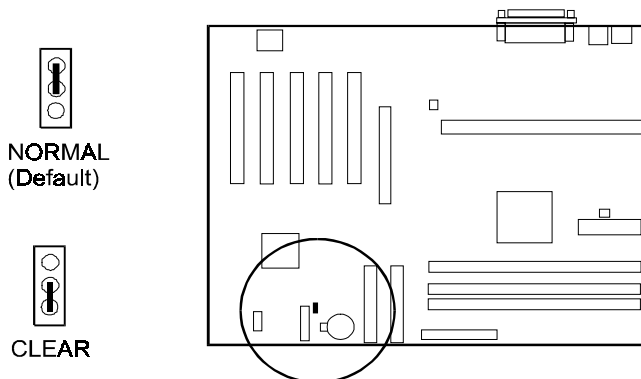
Jumpers are used to select the operation modes for your system. Some jumpers on the board have three metal pins with each pin representing a different function. To **set** a jumper, a black cap containing metal contacts is placed over the jumper pin/s according to the required configuration. A jumper is said to be **shorted** when the black cap has been placed on one or two of its pins. The figure of jumper setting that used in this page is shown below:



Jumper cap like above

### *CMOS Clearance Function: CMOS JPR*

The CMOS RAM is powered by the onboard button cell battery. To clear the RTC data: (1) Turn off your computer, (2) Move this jumper to CLEAR, (3) Move the jumper back to NORMAL, (4) Turn on your computer, (5) Hold down the <Delete> key during bootup and enter BIOS Setup to re-enter user preferences.



## 2). Install RAM Modules

### RAM Module Configuration

The mainboard provides three onboard DIMM sockets allowing 3.3V (unbuffered) SDRAM DIMM modules. Either 8, 16, 32, 64, 128, or 256MB DIMM can be installed on these three sockets. The maximum total memory supported is up to 768MB.

<i>Socket</i>	<i>Acceptable Memory Module</i>		<i>Total</i>
1	8, 16, 32, 64, 128, 256MB 168-pin 3.3V SDRAM	x 1	
2	8, 16, 32, 64, 128, 256MB 168-pin 3.3V SDRAM	x 1	
3	8, 16, 32, 64, 128, 256MB 168-pin 3.3V SDRAM	x 1	
	<i>Total System Memory Allowed Up to 768MB</i>	=	



**NOTE:** This mainboard supports DIMMs with access speeds of 12ns, 10ns, or faster.

### Install and Remove DIMMs

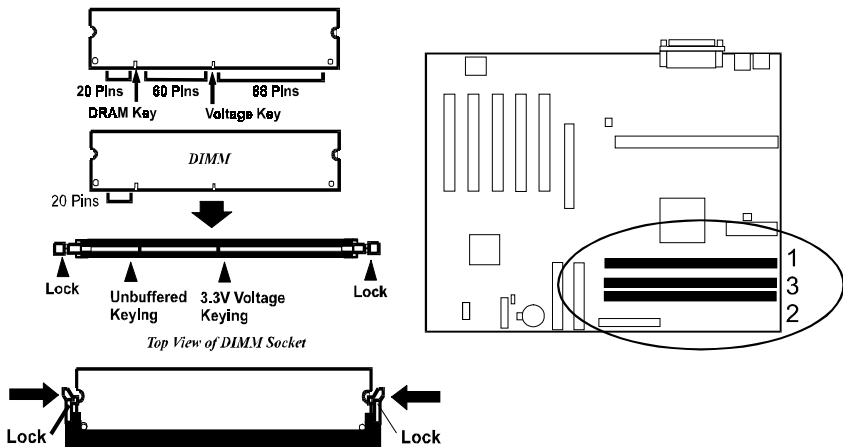
SDRAM DIMM modules have different pin contact on each side and therefore have a higher pin density. Complete the following procedures when installing DIMMs:



**NOTE:** Do not use memory modules with more than 18 chips per module. Modules with more than 18 chips exceed the design specifications of the memory subsystem and will be unstable. The notch on the DIMM module will shift between left, center, or right to identify the type and also to prevent the wrong type from being inserted into the DIMM slot on the mainboard. Ask your retailer for the specifications before purchasing.

1. Locate the DIMM slots on the mainboard.
2. Install the DIMM straight down into the DIMM slot with both hands.
3. The clip on both ends of the DIMM slot will close up to hold the DIMM in place when the DIMM touches the slot's bottom.

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Press the clips with both hands to remove the DIMM.

### 3). Install the CPU

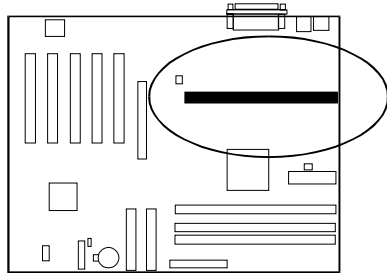
The AMD Athlon CPU module resides in the SLOT A socket on the motherboard. The Retention Mechanism Assembly that is foldable for saving space when shipping and packing had been installed on the board by the manufacturer. Please following the steps introduced below to complete the CPU installation.



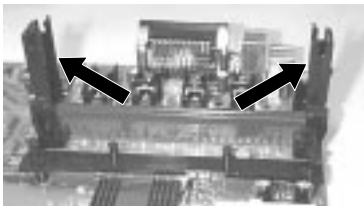
**CAUTION:**

1. Always turn the system power off before installing or removing any device.
2. Always observe static electricity precautions. See “Handling Precautions” at the start of this manual.
3. Inserting the chip incorrectly may damage the chip.

1. Locate SLOT A on the mainboard.



2. Pull out two columns of the Retention Mechanism Assembly upward to the right position.



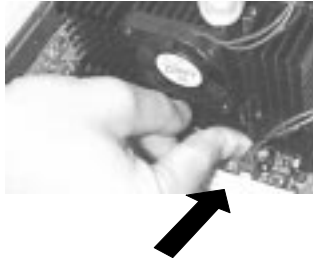
3. Place the CPU module downward along with the columns of the Retention Mechanism Assembly until it is inserted the SLOT A firmly.



4. Pull the buttons outwards until click to the right positions.

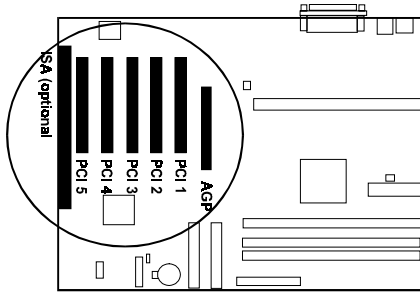


5. Hook the Heatsink Top Support to the Heatsink Support Base to affix the CPU module.



## 4). Install Expansion Cards

This section describes how to connect an expansion card to one of your system's expansion slots. Expansion cards are printed circuit boards that, when connected to the mainboard, increase the capabilities of your system. For example, expansion cards can provide video and sound capabilities. The mainboard features **five PCI bus, one ISA bus and, and** one optional ISA bus expansion slots.



**CAUTION:** Make sure to unplug the power supply when adding or removing expansion cards or other system components. Failure to do so may cause severe damage to both the mainboard and expansioncards.

Always observe static electricity precautions.

Please read “Handling Precautions” at the start of this manual.

To install an expansion card, follow the steps below:

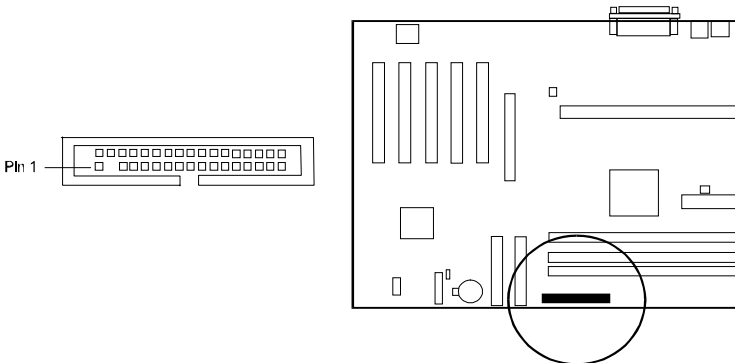
1. Remove the computer chassis cover and select an empty expansion slot.
2. Remove the corresponding slot cover from the computer chassis. Unscrew the mounting screw that secures the slot cover and pull the slot cover out from the computer chassis. Keep the slot cover mounting screw nearby.
3. Holding the edge of the peripheral card, carefully align the edge connector with the expansion slot.
4. Push the card firmly into the slot. Push down on one end of the expansion card, then the other. Use this “rocking” motion until the add-on card is firmly seated inside the expansion slot.

5. Secure the board with the mounting screw removed in Step 2. Make sure that the card has been placed evenly and completely into the expansion slot.
6. Replace the computer system's cover.
7. Setup the BIOS if necessary.
8. Install the necessary software drivers for the expansion card.

## 5). Connect Devices

### *Floppy Diskette Drive Connector: Floppy Disk*

This connector provides the connection with your floppy disk drive. The red stripe of the ribbon cable must be the same side with the Pin 1.



### *IDE HDD Device Connectors: Primary IDE, Secondary IDE*

These two connectors are used for your IDE hard disk drives, CD drives, LS-120 drives, or IDE ZIP drives. The red stripe of the ribbon cable must be the same side with the Pin 1.



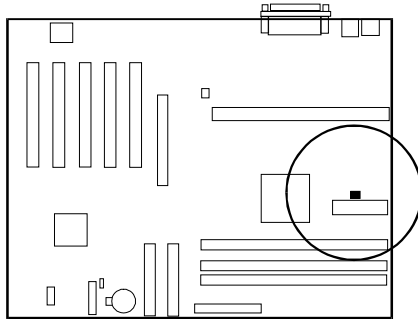
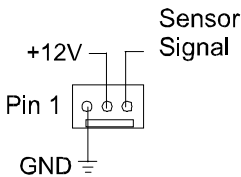


Turbo-Cool 300ATX  
American Media CWT-300ATX  
Emacs AP2-5300F-RV2  
Astec SA302-3515-980  
Enlight HPC-250G2, A0-01

Sparkle FSP250-61GN  
Enhance ATX-1125B  
FSF Group Inc FSP 250-61GN  
DELTA ELECT INC 200PB-103A  
POWERMAN FSP300-60GT

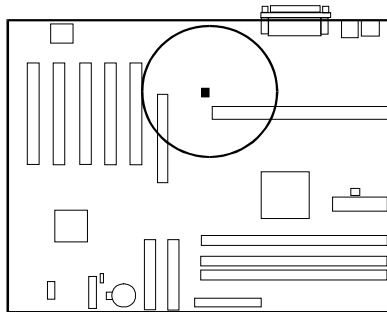
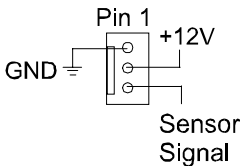
### ***CPU Fan Connector: J9***

This connector is linked to the CPU fan. When the system is in sleep mode, the CPU fan will turn off; when it reverts back to full-on mode, the fan will turn back on.



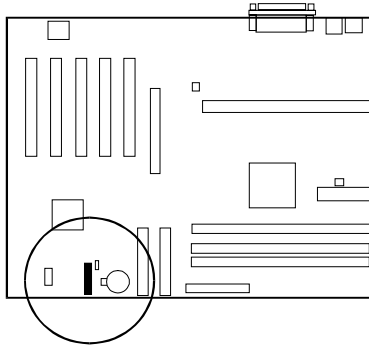
### ***System Case Fan Connector: Sys Fan***

This connector is linked with the cooling fan on your system case to lower the system temperature.

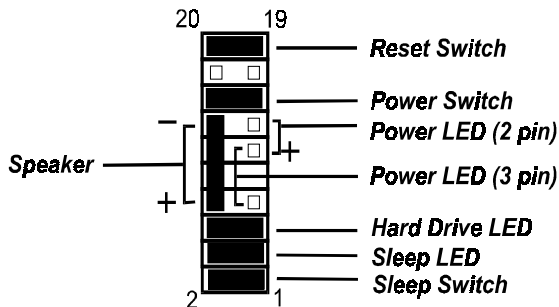


***Front Panel Block Connector: Button Board***

This block connector concludes the connectors for linking with hard drive LED, power LED, power switch, speaker, sleep LED, and sleep switch on the front panel of the system case. Please identify polarities of plug wires for the LEDs. Please ask vendor about this information when you buy them and install the system by yourself. The polarities of plug wire about these buttons will not affect the function.



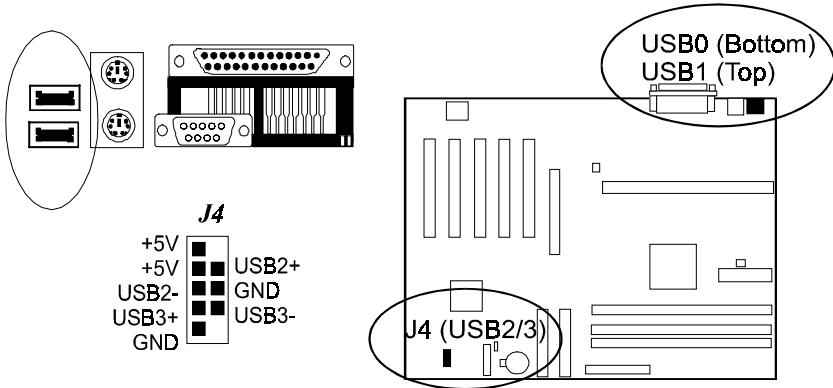
The pin connections of this button board block connector are shown in the diagram below:



### Universal Serial Bus Connectors: USB0, USB1, J4

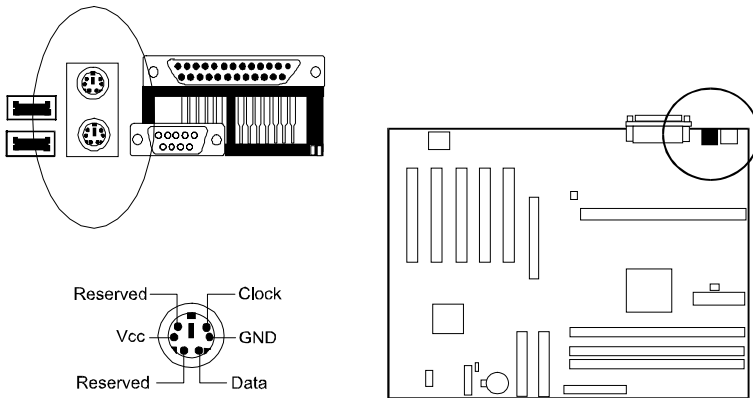
These two connectors, USB0 (bottom)/USB1 (top), that integrated on the edge of the board are used for linking with USB peripheral devices; moreover, a pinhead, J4, was equipped for you to connect USB devices on the front panel. Your operating system must support USB features, such as MS Windows 98, MS Windows 95 OSR2.5 with USB Supplement.

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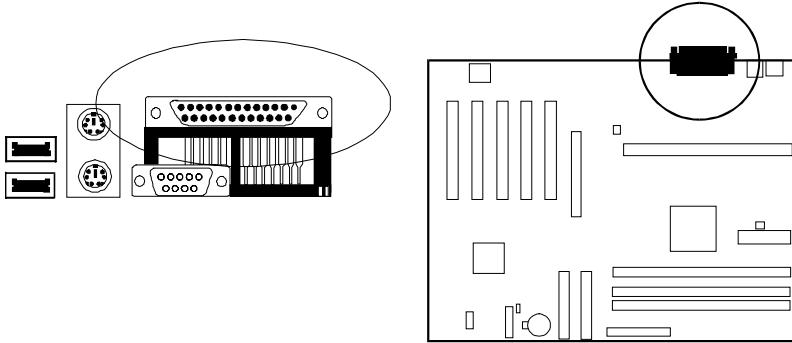
### PS/2 Keyboard and Mouse Connector:KB, MS

These two 6-pin female connectors are used for your PS/2 keyboard and PS/2 mouse.



***Printer Connector: Parallel Port***

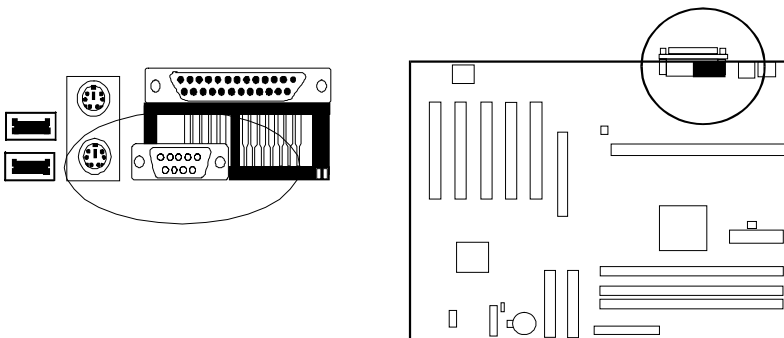
This 25-pin D-Sub female connector is attached to your printer.



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***Serial Port Connector: Serial Port***

The 9-pin D-sub male connector allows you to connect with your devices that use serial ports, such as a serial mouse or a modem.



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## BIOS Setup

The mainboard comes with an AMI BIOS chip that contains the ROM Setup information of your system. This chip serves as an interface between the processor and the rest of the mainboard's components. This chapter explains the information contained in the Setup program and tells you how to modify the settings according to your system configuration.

### Main Setup

The Main Setup screen is displayed above. Each item may have one or more option settings. It allows you to change the system Date and Time, IDE hard disk, floppy disk drive types for drive A: and B:.

#### Auto-Detect Hard Disks

Allows the system BIOS to detect all hard disk parameters automatically.



### Boot Sector Virus Protection

When Enabled, a warning will be given when any program or virus sends a Disk Format command or tries to write to the boot sector of a hard disk drive.

## Advanced Setup



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Advanced Setup options are displayed by choosing item from the AMI BIOS Setup main menu. All Advanced Setup options are described in their corresponding operating menus by brief Setup Helps.



## Security Setup



**Set Supervisor and User Passwords:** You can set either a Supervisor password or a User password. If you do not use a password, just press **Enter** when the password prompt appears. The password check option is enabled in Advanced Setup by choosing either Always (the password prompt appears every time the system is powered on) or Setup (the password prompt appears only when AMI BIOS is run). You can enter a password by typing the password on the keyboard. When you select Supervisor or User, AMI BIOS prompts for a password. You must set the Supervisor password before you can set the User password. Enter a 1 to 6 character password. The password does not appear when typed.

**Change a Password:** Enter the password and press **Enter**. After the new password is entered, retype the new password as prompted and press **Enter**. If the password confirmation is incorrect, an error message appears. If the new password is entered without error, press to return to the AMI BIOS Main Menu.

## Exit Setup



**Exit Saving Changes** allows you to write the current settings to CMOS and exit.

**Exit Discarding Changes** allows you to exit without writing the current settings to CMOS.

**Load Optimal Settings** is selected for settings which provide the best system performance.

**Load Fail Safe Settings** is for settings that provide a more efficient computer. If the computer will not boot, select this option and try to diagnose the problem after the computer boots. These settings do not give optimal performance.

**Load Original Values** recalls your last set of previous settings. This option is convenient if you change settings and decide you wish to return to the previous settings.

## FAQs

## General FAQs

### How do I know my BIOS version?

Spot it on the boot screen, click [Pause/Break] button to write it down.

### How to install a PS/2 mouse?

Enable PS/2 in Advanced Setup (AMI BIOS). There is a label on the board which points to pin number one when connecting the PS/2 mouse adapter on the board. The Pin number two is not connected because the female connector (on PS/2 Mouse adapter) doesn't have wire on number two slot. The PS/2 mouse port is a 5 pins pin header which is located beside keyboard socket.

### Can I use ECC memory?

Yes, provided your chipset supports it. Check your manual (Overview section) or consult the chipset manufacturer's Web site (Intel or VIA).

### How do I know which FLASH chip I have?

Partially remove the sticker from the chip and see the name of the manufacturer. Usually the jumper setting is set correctly in the factory.

### How can I get the USB drivers?

Download Microsoft USB Supplement and a set of generic USB Drivers from Drivers and Utilities Page. You must have Windows 950B (Service Release II, "Windows97") to install these. These drivers resolve the yellow exclamation mark problem (Unknown Devices, USB) in Device Manager. It is recommended to install Windows 98/98 SE; because that it provides built-in USB drivers.

### What the DMI utility is used for?

DMI Configuration Utility can be used to maintain the Management information Format database (MIFD). DMI is also able to auto-detect and record information pertinent to a computers system such as the CPU type, CPU speed and internal/external frequencies and memory size. The onboard BIOS detects as much system information as possible and stores it in a 4KB Block in the motherboards Flash EPROM and allows the DMI to retrieve data from this database. The DMI utility also allows the system integrator or end user to add additional information into the MIFD such as serial numbers, housing configuration and vendor information. Those information cannot be detected by the motherboards BIOS and has to manually entered through the DMI Configuration utility and updated into the MIFD.

### Where can I get the drivers for PCI set motherboards?

To download drivers you need, visit the chipset vendor's website Drivers and Utilities Page. There you will see links to FAQs and other Web sites that explain in detail how to install the drivers.

### How do I use DMI Utility?

Very carefully, because otherwise your system can become totally unusable after altering and saving some configuration on DMI. DMI Utility should not be run from Windows or DOS version higher than v6.22.

If you accidentally alter some settings using DMI Utility under Windows95 (or MS-DOS that comes with it), flash the system BIOS immediately, do not reboot. In some cases, using Win95 as operating system (for applying DMI Utility) shows insufficient error message while trying to load the Flash utility, that's why we recommend to use DOS 6.22. In that case, the other option is to use the Boot Block feature on the BIOS. Use an ISA VGA card for the system to allow them to boot at least on drive "A" (using DOS 6.22 of course) so you will be able to flash the BIOS at least. If you use DMI from Windows95 DOS prompt or Restart in MS-DOS mode, you will not be able to restart the PC.

### Why not update BIOS?

In 90% of cases, a BIOS update is released to address a problem with a particular piece of hardware or software. Therefore, the new BIOS gives the system some new (different) parameters to work with. Newer BIOS'es contain all fixes from previous versions. If the fix list of a new BIOS does NOT address any of problems that you may have, it is unreasonable to update BIOS only for sake of it, because you may be using a combination of hardware/software that is incompatible and yet-untested with the BIOS version you're upgrading to.

It is recommended to refrain from updating BIOS without a good reason. If you don't see your problem listed in the fix list, do not update BIOS - better go to a shareware Web site ([winfiles.com](http://winfiles.com), [shareware.com](http://shareware.com), [tucows.com](http://tucows.com)) and update your software or do something less dangerous.

And finally, some 10% of BIOS updates contain new CPU ID strings and code enhancements (ACPI, etc.). For those an update is recommended only when it is necessary (i.e. the processor ID does not display properly, the system must have ACPI, etc.).

A typical situation occurs when a user wants to update BIOS because the new version supports a CPU he/she "plans" to buy sometime in the future. With some bad luck, the user ends up with a wrong BIOS (wrong PCB, or chipset, or I/O or all of them) and a fried BIOS.

## BIOS FAQs

### How do I flash a new BIOS?

The mainboard package provides BIOS flash software tool in the software utility CD-ROM. This software feature is provided for upgrading BIOS use. Play the CD-ROM, click on *Browse CD*, select *Flash*, then choose the BIOS vendor that provided the BIOS this board came with. Please print the relating README file and read it first. For more information about, please visit FIC Online at [www.fic.com.tw](http://www.fic.com.tw).

#### *Downloading BIOS File*

Format a bootable system diskette, visit the FIC website at [www.fic.com.tw](http://www.fic.com.tw). Click *BIOS/Drivers Update* item under **BIOS** group, then select the BIOS file you need. Download it to your bootable diskette.

#### *Upgrading BIOS File*

Place the bootable diskette containing the BIOS file in the diskette drive (Assume the diskette drive is A.), and reboot the system by A drive. At the A: > prompt, execute the BIOS upgrading procedure by entering the Flash BIOS utility and the BIOS file with its extension.

Command: {flash tool file} {space} {downloaded BIOS file} <Enter>

The other parameters are listed in the relating README file, please read it if need.

After press *Enter* key, type Y to the message **Press “Y” to Continue, “N” to Reboot**. Press *Enter* key. When the message **Press Any Key to Reboot**, the procedure is completed. Press any key to reboot.

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### What is "Hardware-based intelligent virus protection"?

This is a new BIOS feature based on anti-virus (AV) software that protects the system from boot-time viruses. It is intelligent in the sense that it uses rules modeled after viruses' behavior. For example, it can tell the difference between normal writing to HDD boot sector and virus-attempted writing. It unloads after boot-up so it does not provide total protection and is not intended to serve as replacement for regular anti-virus software.

This utility includes only Scan function and not Virus Delete function. It is not necessary to "update" virus definition files because there are none.

### When I try to flash BIOS I get an error message saying about a wrong part number. Why?

Flash EPROM ("BIOS") chips used on FIC motherboards vary (Intel, AMD, Fujitsu, etc.). As far as this problem is concerned, there are two possible reasons:

- a) you may have used a wrong BIOS or flash utility. Verify that both the BIOS file and the flash utility are the right versions.
- b) the flash utility you used did not recognize the type of flash EPROM installed on your motherboard. Verify that you have the right files and if you're sure in that, ignore the warning.

### I updated my BIOS and am not very much pleased with the result (slower performance, new bugs, etc.). What now?

Restore the old BIOS or wait until a newer BIOS is available. You should use the flash utility supplied with the old BIOS and NOT the flash utility you got with the new BIOS. If you do not know what flash utility it was, consult the Web support pages or contact technical support.

## Windows 98/98 SE FAQs

### What's the proper install procedure for VIA-based motherboards?

There are four steps:

- 1) Go to BIOS Setup and enable USB
- 2) Install Win98/98 SE on your system
- 3) Install the patch files and other drivers that contained in the CD-Pro
- 4) Install your add-on card drivers



**NOTE:** If your visual performance became unstable after the above installation completed (especially a VGA card driver was installed in Step 4). Please execute Step 3 once again. It should solve the problem. This can be done because, most probably, that the driver version of the add-on card is earlier than that of the patch files and drivers contained in the CD-Pro.



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## Windows 95 FAQs

### What is the proper install order of graphics-related VIA drivers?

1) Install Windows, 2) If your motherboard has an AGP port, load Vxd driver v. 2.9. 4) Load display card driver.

### Why does my VIA chipset-based system crash when the system attempts to access UDMA HDD?

This problem appears under Windows 95 OSR2 and OSR 2.1. Microsoft made two updated versions of drivers that cause the problem. Please download them at

<http://support.microsoft.com/support/kb/articles/q171/3/53.asp>

### How can I know if a software (example: WindowsNT) is compatible with FIC motherboards?

Each FIC motherboard is tested with a variety of operating systems and applications. Compatibility reports are published every time new model or updated model of a motherboard is released. Compatibility reports can be downloaded from individual motherboard support pages or from the FIC FTP Server (opens in a new window).

### Windows95 shows an exclamation mark next to USB device on my motherboard. Is there any driver that can help me?

The only reason why you can see that Exclamation mark on USB serial Bus & PCI Bridge is that Windows95 didn't support it. You will need to install its drivers to fix it.

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