# Chapter 1: Introduction

## Welcome

Congratulations on your purchase of the P6SE-ML mainboard. This mainboard features a Slot1 processor slot that supports the most powerful processors from Intel, including the SEPP Celeron, the Pentium-II and the Pentium-III. The P6SE-ML is a micro-ATX board that measures 224mm by 190mm.

The mainboard features a very high degree on integration. It includes a sound system, a graphics system, built-in networking and a built-in fax/modem. With the addition of a processor and a memory module, the system is ready for use as a multimedia workstation with built-in communications.

This chapter contains the following information:

- **About the Manual** explains how the information in this manual is organized
- **Checklist** comprises a list of the standard and optional components that are shipped with this mainboard,
- **Features** highlights the functions and components that make this one of the best value mainboards on the market

## About the Manual

The manual consists of the following chapters:

***Introduction***

Use the **Introduction** Chapter to learn about the features of the mainboard, and the checklist of items that are shipped with the package.

***Installation***

Use the **Installation** Chapter to learn how to install the mainboard and get your system up and running.

***Setup***

Use the **Setup** Chapter to configure the mainboard for optimum performance.

***Software***

Use the **Software** Chapter to learn how to use the software drivers and support programs that are provided with this mainboard.

# Checklist

Compare the contents of your mainboard package with the standard checklist below. If any item is missing or appears damaged, please contact the vendor of your mainboard package.

## *Standard Items*

- ✓ 1 x P6SE-ML Mainboard
- ✓ 1 x Cable/Bracket Pack
  - Diskette drive ribbon cable
  - IDE drive ribbon cable
- ✓ Fax/modem extension bracket
- ✓ Network adapter extension bracket
- ✓ This User's Manual
- ✓ Software Support CD-ROM Disc

# Features

The key feature of this mainboard is the high degree of integrated components. The board includes a PCI 3D sound system, an AGP graphics adapter, a V.90 fax /modem, and a 10BaseT/100BaseTX network adapter. To create a full multimedia PC that is ready for dial-up and LAN networking, you need only add a processor and a memory module.

***Support for Pentium-III/Pentium-II Cartridges or SEPP Celeron***

This is a micro-ATX mainboard with a SLOT1 processor slot. Currently the slot-1 can be installed with three different kinds of processors; Pentium-III cartridges, Pentium-II cartridges and SEPP Celerons. Pentium-III cartridges feature 512K of level-2 cache memory with improved instructions to handle 3D audio and video, speech recognition, MPEG2 motion picture encoding/decoding, and TCP/IP internet connections. The Pentium-III runs over a 100 MHz system bus and operates at clock speeds from 450 MHz up to 500 MHz or more.

The Pentium-II cartridges are very powerful processors which include 32K of internal level-1 cache memory and 512K of external level-2 cache memory. The first generation of Pentium-II cartridges ran over a 66 MHz system bus, but current Pentium-II cartridges run over a 100 MHz system bus and operate at clock speeds from 350 MHz up to 450 MHz or more. The slot1 processor can also be used by the SEPP Celeron processors which can operate over a 66/100 MHz system bus and operate at clock speeds up to 466 MHz.

System assemblers can install either a Pentium-III or Pentium-II cartridge or the SEPP Celeron in the slot1 processor slot. System assemblers can choose the processor they need to meet performance or price targets. You can configure the system for any of the supported processor clock speeds using the BIOS setup utility. It is not necessary to set switches or jumpers.

***Choice of Memory Options***

The board has three DIMM slots for the installation of 168-pin, 3.3V standard or registered SDRAM (Synchronous Dynamic Random Access Memory) memory modules. The system supports memory that has built-in error correction (EC), error correction code (ECC), or has no error correction.

If you are using a Pentium-III/PentiumII processor cartridge that operates over a 100 MHz system bus, you must install PC-100 compliant memory modules (memory that operates at 100 MHz). If you install the SEPP Celeron processor or an older Pentium-II that runs at 66 MHz, you can install memory that operates at 66 MHz (you can install PC-100 memory if you wish, but the system will run the memory at 66 MHz).

You can install one, two or three modules. Each memory module can hold a maximum capacity of 256 MB of standard SDRAM chips so maximum memory capacity is 768 MB.

***Highly Integrated Design***

This mainboard uses the Xcel2000 chip as a north bridge and the SiS5595 as a south bridge. The combination includes an integrated AGP accelerated graphics adapter and support for a 100 MHz or a 66 MHz system bus. The chipset also provides a memory controller, a PCI interface and ACPI power management.

***Built-in 3D Graphics System***

The Xcel200 chip includes a 64-bit accelerated graphics adapter. The graphics system uses 8 MB of shared system memory as a frame buffer to provide extended VGA resolutions of up to 1600 x 1200 pixels with 24-bit True Color color depth.

***Built-in PCI 3D Sound***

The Elite PCI Audio CMI 8338 is a single chip solution for PCI-bus 3D audio. The chip provides Sound Blaster 16-bit-compatible audio, plus support for Microsoft's DirectSound 3D specification and Aureal A3D interface. The sound ports include jacks for speakers, microphone and stereo in, and a game/MIDI port. The audio system supports full duplex operation and drivers are available for WIN 95/98 and WIN NT 4.0. The audio system can output sound to 4 loudspeakers and also supports SPDIF 24-bit digital sound input and output.

***Built-in Networking***

The mainboard has an integrated LAN adapter. The board ships with a network extension bracket which connects the RJ45 network socket to the board. The RJ45 socket plugs directly into a twisted-pair cable networking architecture using either 10BaseT or 100BaseTX transmission technology.

***Built-in Communications***

The mainboard has an integrated fax/modem. The board ships with a fax/modem extension bracket which connects the line and telephone RJII sockets to the board. The fax/modem supports the V.90 protocol

that allows transmissions at up to 56Kbps and is fully compatible with earlier transmission and error correction standards. It supports automatic fall back and caller ID.

***Expansion Options***

Because this mainboard has a full set of built-in features, it is supplied with just two expansion slots. One ISA slot provides support for legacy 8/16-bit ISA cards. On PCI slot can be used by 32-bit PCI cards.

***Integrated I/O***

The board has a comprehensive set of integrated I/O ports. The I/O port array features PS/2 keyboard and mouse ports, a parallel port, two USB ports, one serial port, a monitor port, a game/MIDI port, and three audio jacks. Optionally, you can use the built-in mainboard header to add in an infrared port. The mainboard has two PCI-IDE channels and a floppy disk drive interface.

***Hardware Monitoring***

The mainboard is installed with an integrated hardware monitoring system. Using this system and the monitoring software supplied with the board, users and system administrators can monitor critical parameters such as the CPU temperature, the fan speeds and so on. Hardware monitoring helps maintain the system and reduce maintenance costs and downtime.

***Keyboard Power On Feature***

Using the system BIOS setup program, you can configure the system to turn on using a keyboard-typed password. A green keyboard is not required.

***Programmable Firmware***

The mainboard includes Award BIOS that allows BIOS setting of CPU parameters. The fully programmable firmware enhances the system features and allows users to set power management, CPU and memory timing, LAN and modem wake-up alarms, and so on. The firmware can also be used to set parameters for different processor clock speeds so that you don’t need to change mainboard jumpers and switches.

# Chapter 2: Installation

## Before You Begin

Before you begin to install your P6SE-ML mainboard, take some precautions to ensure that you avoid the possibility of damage to the product from static electricity. Ensure too that you are installing the mainboard into a suitable case.

### *Static Electricity*

In adverse conditions, static electricity can accumulate and discharge through the integrated circuits and silicon chips on this product. These circuits and chips are sensitive and can be permanently damaged by static discharge.

- If possible wear a grounding wrist strap clipped to a safely grounded device during the installation.
- If you don't have a wrist strap, discharge any static by touching the metal case of a safely grounded device before beginning the installation.
- Leave all components inside their static-proof bags until they are required for the installation procedure.
- Handle all circuit boards and electronic components carefully. Hold boards by the edges only. Do not flex or stress circuit boards.

### *Choosing a Case*

The mainboard complies with the specifications for the micro-ATX system case, although it can also be installed in most full-size ATX case designs. The micro-ATX specifications include a maximum size of 9.6" x 9.6" (244mm x 244mm), a reduced number of expansion slots, and support for a smaller power supply unit.

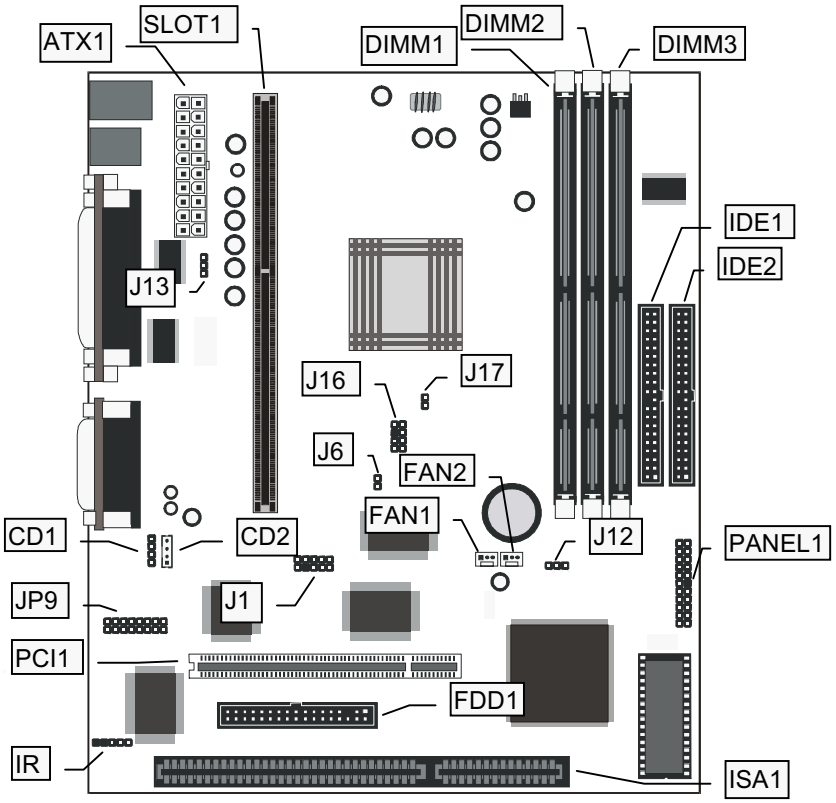
Some features on the mainboard are implemented by cabling connectors on the mainboard to indicators and switches on the system case. Ensure that your case supports all the features required. The P6SE-ML mainboard can support one or two floppy diskette drives and four

enhanced IDE drives. Ensure that your case has sufficient power and space for all the drives that you intend to install.

The mainboard has a set of I/O ports on the rear edge. Ensure that your case has an I/O template that supports the I/O ports and expansion slots.

## Mainboard Guide

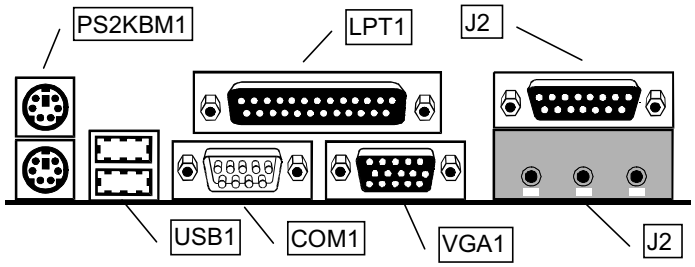
Use the following illustration and key to identify the components on your mainboard.



### *Key to Mainboard Components*

| Component | Description |
|---|---|
| ISA1 | 8/16-bit ISA expansion slot |
| PCI 1 | 32-bit PCI expansion slot |
| SLOT1 | Slot for Pentium-II/III processor or SEPP Celeron processor |
| DIMM1,2,3 | Slots for 168-pin memory modules |
| FDD1 | Connector for floppy disk drives |
| IDE1, IDE2 | Primary and secondary IDE channels |
| ATX1 | Connector for ATX power supply |
| IR | Connector for optional IR port |
| PANEL1 | Panel connector for switches and indicators |
| FAN1 | Power connector for CPU cooling fan |
| FAN2 | Power connector for case cooling fan |
| CD1 | Audio connector for optional CD-ROM drive |
| CD2 | Auxiliary audio connector for optional CD-ROM drive |
| JP9 | Connector for fax/modem extension bracket |
| J1 | Connector for network adapter extension bracket |
| J6 | Set SPDIF output signal level |
| J12 | Clear CMOS memory jumper |
| J13 | Keyboard power on jumper |
| J16 | SPDIF In/out connector (24-bit digital audio interface) |
| J17 | Connector for SPDIF input |

## I/O Ports Side View




### *Key to I/O Ports*

| Component | Description |
|---|---|
| PS2KBM1 | PS/2 port for pointing device (upper port)<br>PS/2 port for keyboard (lower port) |
| LPT1 | External parallel port |
| J2 (Upper) | External game/MIDI port |
| J2 (Lower) | Audio jacks for (left to right) line out, line in, microphone |
| VGA1 | External monitor port |
| COM1 | External serial port 1/3 |
| USB1 | Two stacked Universal Serial Bus ports |

# Preparing the Mainboard

Prepare the main board by carrying out the following steps;

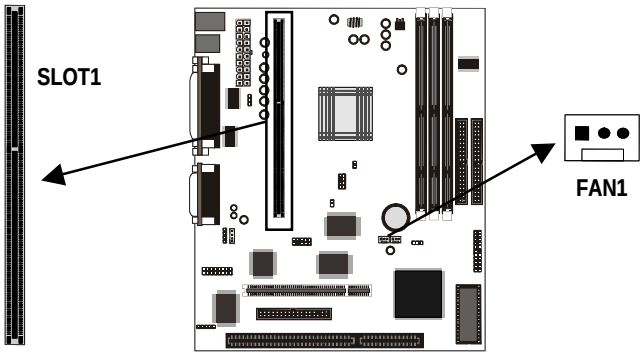
- Install the processor
- Install the memory module(s)
- Check the jumper settings

## *Install the Processor*

This board has a SLOT1 processor cartridge slot. The slot must be installed with a retention mechanism that supports the processor cartridge. The retention mechanism may already be installed on your mainboard, or it may ship as a separate component. Use the following illustrations to locate the slot and prepare the retention mechanism.

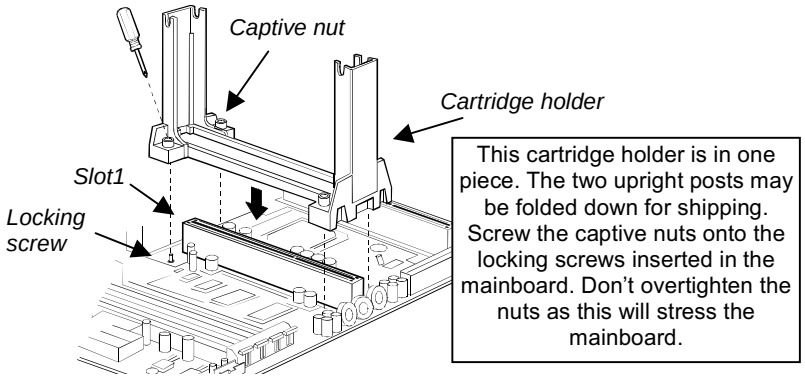
You can install this mainboard with a Pentium-III cartridge, a Pentium-II cartridge, or a SEPP (Single Edge Processor Package) Celeron cartridge. If the processor has a cooling fan assembly, you can connect the cable from the cooling fan to the CPU fan power supply connector FAN1.

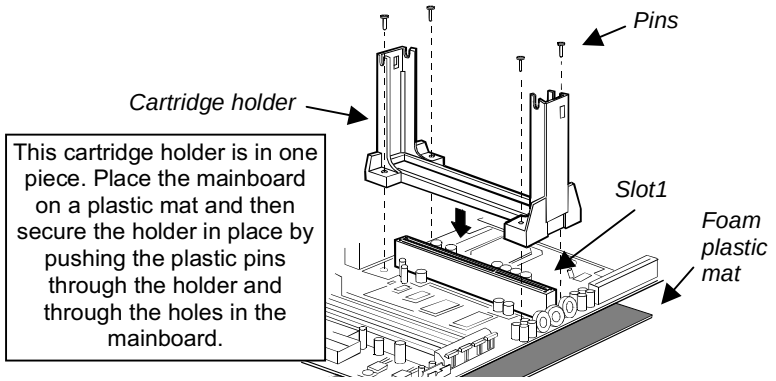
***Locate SLOT1 and FAN1***

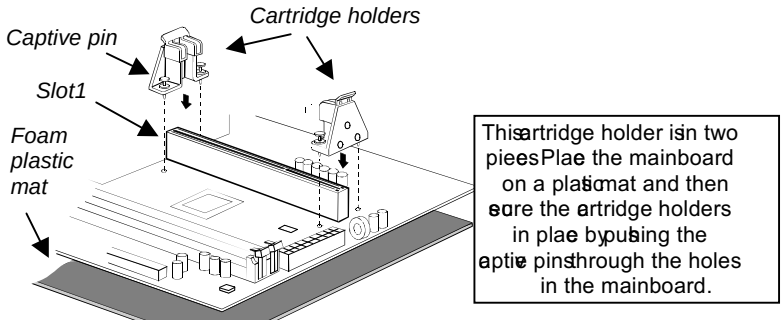


## *Installing a SLOT1 Cartridge Holder and Cartridge*

The SLOT1 on the mainboard must be installed with a retention mechanism to support the cartridge. The illustrations below show how to install several different kinds of Slot1 cartridge holders.



Some cartridge holders also include a support bar for the processor heat sink. This bar installs to the side of the cartridge holder. Some processor cartridges have support struts for the heat sink which lock into the support bar. The documentation supplied with the processor shows hot to do this.

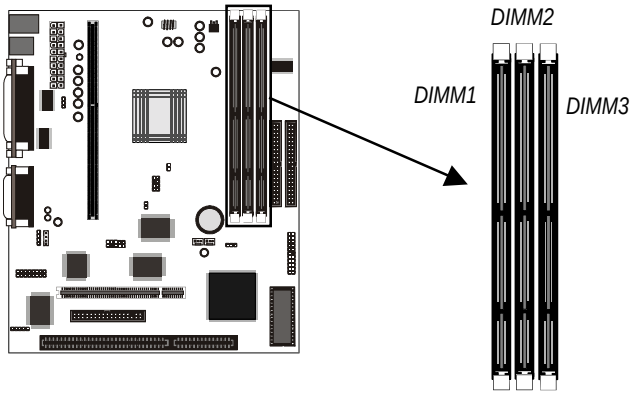
After you have installed the cartridge holder, follow the instructions supplied with the processor cartridge to insert the cartridge into the holder. If the processor has a cooling fan, connect the power cable of the fan to the power supply connector on the mainboard FAN1.

## *Install the Memory Modules*

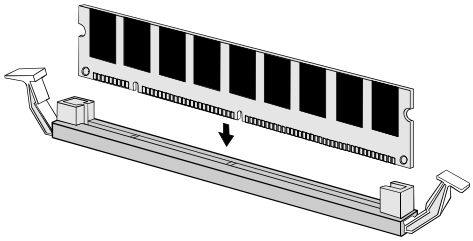
For this mainboard, you must use 168-pin 3.3V non-buffered Dual In-line Memory Modules (DIMMs). The memory chips must be standard or registered SDRAM (Synchronous Dynamic Random Access Memory). The memory bus can run at 66 MHz or 100 MHz. If your processor operates over a 100 MHz system bus, you must install PC-100 memory that also operates over a 100 MHz bus. If you install a processor that operates over a 66 MHz bus, you can install memory chips that operate at 66 MHz.

You must install at least one memory module and the first memory module should be installed in slot DIMM1 where some memory can be shared with the built-in graphics system. Any extra memory modules can be installed in either DIMM2 or DIMM3. Each module may be installed with up to 256 MB of memory so the maximum capacity is 768 MB. The mainboard supports memory chips that have EC (Error Correction) or ECC (Error Correction Code).

1. Locate the DIMM slots on the mainboard.



2. The DIMM slots are keyed with notches and the DIMMs are keyed with cut-outs so that they can only be installed correctly. Check that the cut-outs on the DIMM module edge connector match the notches in the DIMM slot.
3. Push the latches on each side of the DIMM slot down.
4. Install the DIMM module into the slot and press it carefully but firmly down so that it seats correctly. The latches at either side of the slot will be levered upwards and latch on to the edges of the DIMM when it is installed correctly.

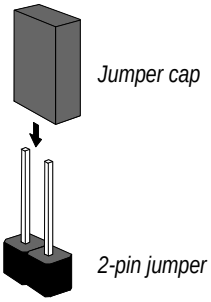


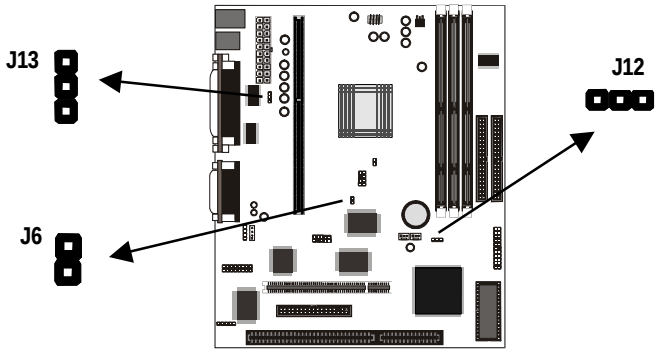
## *Check all the Jumper Settings*

Check all the mainboard jumpers to ensure that the board is configured correctly.

### *A Note on Jumpers*

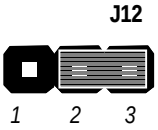
A jumper consists of two or more pins mounted on the mainboard. Some jumpers might be arranged in a series with each pair of pins numbered differently. Jumpers are used to change the electronic circuits on the mainboard. When a jumper cap is placed on two jumper pins, the pins are SHORT. If the jumper cap is removed (or placed on just a single pin) the pins are OPEN.






### *J12: Clear CMOS Memory Jumper*

This jumper lets you erase the system setup settings that are stored in CMOS memory. You might need to erase this data if incorrect settings are preventing your system from operating. To clear the CMOS memory, turn off the system, disconnect the power cable from the mainboard, and short the appropriate pins for a few seconds.

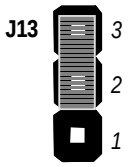



| Function | Jumper Cap |
|---|---|
| Normal Operation | Short pins 1-2 |
| Clear CMOS | Short pins 2-3 |

### *J13: Keyboard Power On Jumper*

This jumper lets you use a typed-in password as a power switch to turn your system on. If you enable this property, you need to define the password or the hot keys using the setup utility. See Chapter 3 for more information.

| Function | Jumper Cap |
|---|---|
| Disable keyboard power on | Short pins 1-2 |
| Enable keyboard power on | Short pins 2-3 |



***J6: Set SPDIF Output Signal Level Jumper***

If you use the SPDIF Input/Output connector (SPDIF), you can use this jumper to set the level of the output signal to either 5 volts or 0.5 volts.


| Function | Jumper Cap |
|---|---|
| 5 volts output | Short pins 1-2 |
| 0.5 volts output | Open pins 2-3 |

# Install the Mainboard in the System Case

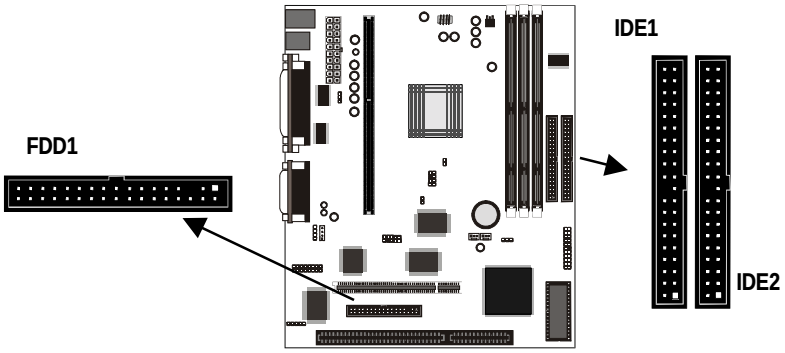
Use the screws and mounting brackets supplied with your system case to install the mainboard. Follow the instructions provided by the case manufacturer.

## *Connect Devices, Switches and Indicators*

***Note:*** *You might not need to carry out every step in the following procedure. It depends on the options you are installing, and the features that are supported by your system case.*

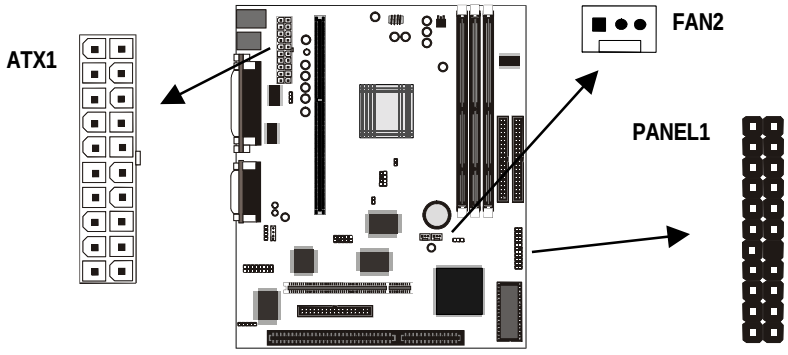
***Note:*** *Ribbon cable connectors are usually keyed so that they can only be installed correctly on the device connector. If the connector is not keyed make sure that you match the pin-1 side of the cable connector with the pin-1 side of the device connector. Each connector has the pin-1 side clearly marked. The pin-1 side of each ribbon cable is always marked with a red stripe on the cable.*

***IDE & FDD Drives***

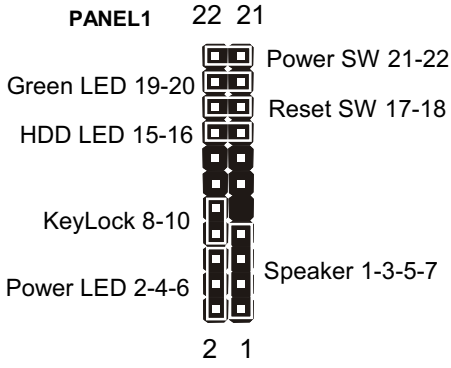



1. Locate the floppy diskette drive connector FDD1. Use the ribbon cable to connect one or two floppy diskettes to the mainboard.
2. Locate the Enhanced IDE connectors IDE1 (primary) and IDE2 (secondary). A single IDE cable is provided with the mainboard. Connect the cable to IDE1. The cable has two connectors for IDE devices. If you connect two devices, you must configure one device as Master, and one device as Slave. See the documentation provided with the devices for information on this. To install more drives, use another IDE cable and connect one or two devices to IDE2.

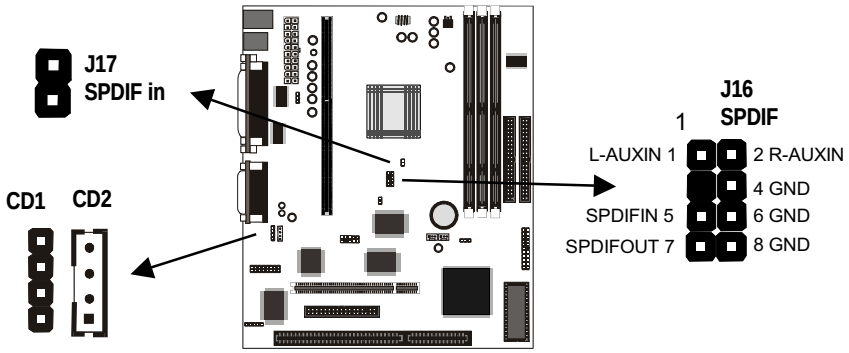
***Power Connector, Panel Connector & Case Fan***



1. Locate the power connector ATX1. Connect the power cable from the power supply unit to ATX1. The connector is keyed so that it can only be installed correctly.
2. If your system case has a built-in cooling fan, you can supply power to the fan from the case fan power connector FAN2. Connect the power cable from the fan to FAN2.
3. Locate the bank of switch and indicator connectors PANEL1. These connectors provide control functions to your system case. Use the illustration below to make the connections.




***Audio Connectors***

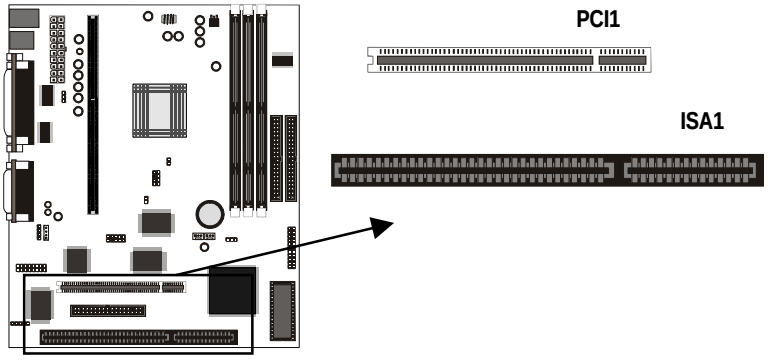



The mainboard has four audio connectors. CD1 is a 4-pin audio connector which can be used to input the audio from a CD-ROM or DVD drive. CD2 is exactly the same, except that it supports an alternative kind of connector. Use either CD1 or CD2 to connect your CD/DVD drive

audio output. If you have installed a device which supports 24-bit SPDIF digital audio, you can connect the device to the SPDIF input/output connector J16. If you have installed a device which outputs 24-bit digital audio, you can input this signal to the sound system through the 2-pin SPDIF input connector J17. If you have already used the SPDIF in/out connector J16, you cannot use the J17 SPDIF input connector.

***Expansion Slots***

You can use the two expansion slots to install expansion boards that add new features to your system.



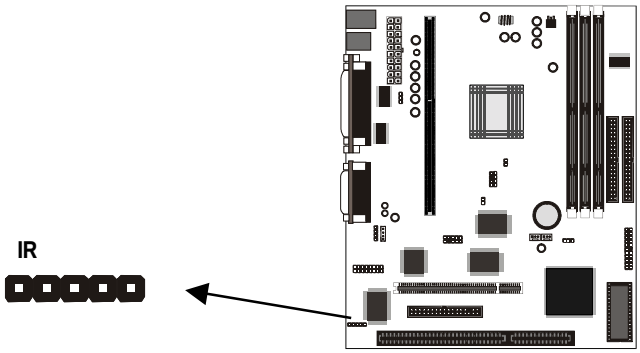

1. If you have a 32-bit PCI expansion card, install in the PCI slot PCI1. If you have an 8/16-bit legacy ISA card, you can install it in the ISA slot ISA1.

2. When you install an expansion card, remove the blanking plate from the case expansion card opening that corresponds to the expansion slot on the mainboard. Fit the bracket of the expansion card into the expansion card opening and secure it in place with a screw.

# Install Options and Extension Brackets

On this mainboard you can install an optional infrared port. In order to use the built-in fax modem you must install the fax/modem extension bracket. In order to use the built-in network adapter you must install the network adapter extension bracket.

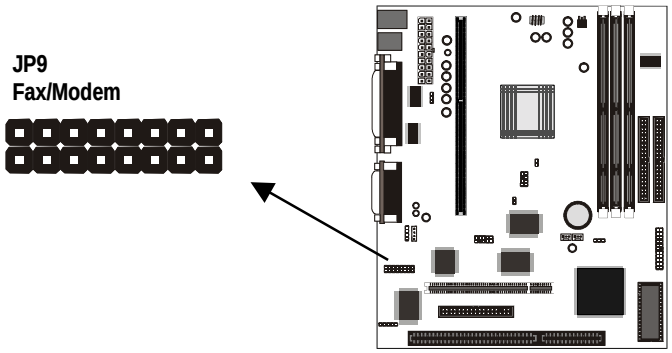
***Infrared Port Options***




1. If you want to install an optional serial infrared port, connect the cable from the optional IR port to the IR connector on the mainboard.
2. After you have connected the cable, secure the option to the appropriate place on your system case.

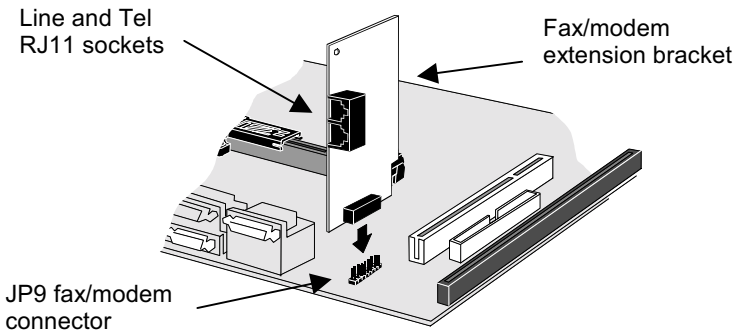
***Note:*** *An infrared port uses some of the same resources as the built-in fax/modem. If you have installed the infrared port, you might have to use your system's device manager to reallocate resources between the infrared port and the fax/modem. You might not be able to run both devices at the same time.*

***Fax/modem Extension Bracket***

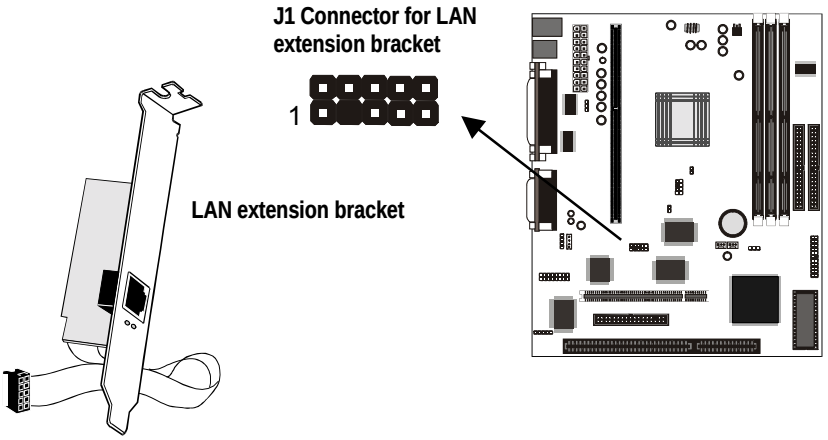



The fax/modem extension bracket is supplied with this mainboard.

1. Locate the JP9 fax/modem connector on the mainboard.
2. Remove the expansion slot blanking plate from the system chassis that is adjacent to the fax/modem connector.
3. Install the fax/modem extension bracket on to the JP9 connector as shown below. The RJ11 Line and Telephone sockets on the bracket are positioned in the expansion slot with the removed blanking plate.



***Network Adapter (LAN) Extension Bracket***

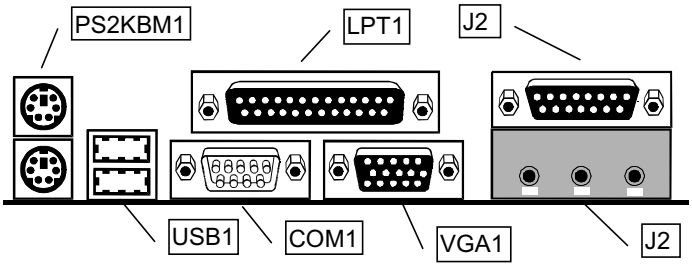



The network adapter extension bracket is supplied with this mainboard.

1. Locate the J1 LAN extension bracket connector on the mainboard.
2. Remove a suitable expansion slot blanking plate from the system chassis.
3. Install the cable from the LAN extension bracket on to the J1 connector on the mainboard. Note the position of pin1 on the connector, and the pin-1 side of the cable is marked with a red stripe.
4. Install the extension bracket into the expansion slot with the removed blanking plate and secure it in place. The RJ45 network socket is positioned on the bracket.

## Make the External Connections

After you have installed the mainboard, make the connections to the external ports.




1. PS2KBM1 is a stack of two PS/2 mini-DIN ports. The upper port can be used by a PS/2 mouse or pointing device. The lower port can be used by a PS/2 keyboard.
2. LPT1 is a parallel port that can be used by printers or other parallel communications devices. The system identifies the parallel port as LPT1.
3. The upper 15-pin port J2 is a game/MIDI port. You can use this port to connect a joystick or a MIDI device to your system
4. The lower part of J2 is three audio jacks. The left side jack is for a stereo line out signal. The middle jack is for a stereo line in signal. The right side jack is for a microphone.
5. VGA1 is the port for an external monitor. Use this port to connect to monitor that supports the extended VGA resolutions of this system.
6. COM1 is a serial port that can be used by serial devices such as a mouse, a fax/modem and so on. This serial port is identified by the system as COM1/3.
7. USB1 is a stack of two Universal Serial Bus ports. Use these ports to connect to USB devices.

# Chapter 3: Setup

## About the Setup Utility

This chapter explains how to use and modify the BIOS setup utility that is stored on the mainboard. The setup utility stores data about the mainboard components and the configuration of devices that are connected to it. This information is used to test and initialize components at start-up time and to make sure everything runs properly when the system is operating.

The setup utility is installed with a set of default values. You will probably have to make changes to the setup utility whenever you add new components to your system such as new disk drives. You may be able to generate increased performance by changing some of the timing values in the setup, but this can be limited by the kind of hardware you are using, for example the rating of your memory chips. In certain circumstances, the system may generate an error message that asks you to make changes to the setup utility. This happens when the system finds an error during the POST (Power On Self Test) that it carries out at start up.

### *Starting the Setup Utility*

You can only start the setup utility shortly after the computer has been turned on. A prompt appears on the computer display which says *"Press DEL to run Setup"*. When you see this prompt, press the **Delete** key, and the system will start the setup utility and display the main menu of the utility.

#### *Using the Setup Utility*

When you start setup, the main menu appears. The main menu of the setup utility shows a list of the options that are available. A highlight shows which option is currently selected. You can use the cursor arrow keys to move the highlight to other options. When an option is highlighted, you can execute the option by pressing the **Enter** key.

Some options lead to dialog boxes which ask you verify that that you wish to execute that option. You usually answer these dialogs by typing **Y** for yes and **N** for no. Some options lead to dialog boxes which ask for more information. Setting passwords have this kind of dialog box.

Some options lead to tables of items that usually have a value on the right side. The value of the first item is highlighted, and you can use the cursor arrow keys to select any of the other values in the table of items. When an item is highlighted, you can change the value by pressing the **PageUp** or **PageDown** keys, or the **Plus** or **Minus** keys. The **PageUp** and **Plus** keys cycle forward through the available values, the **PageDown** and **Minus** keys cycle backwards through the values.

When you are in the main menu, you can exit the utility by pressing the **Escape** key. You can save the current selections and exit the utility by pressing the **F10** key. You can change the color scheme of the utility by pressing the **F2** key while holding down the **Shift** key. When you are in one of the options that displays a dialog box, you can return to the main menu by pressing the **Escape** key.

When you are in an option that displays a table of items, you can return to the main menu by pressing the **Escape** key. For some items, you can display a help message by pressing the **F1** key. You can change the color scheme of the utility by pressing the **F2** key while holding down the **Shift** key. Press **F5** to discard any changes you have made and return all items to the value that they held when the setup utility was started. Press **F6** to load the displayed items with a standard list of default values. Press **F7** to load the displayed items with a high-performance list of default values.

# Standard CMOS Setup Option

This option displays a table of items which defines basic information about your system.

***Date and Time***

The Date and Time items show the current date and time held by your computer. If you are running a Windows OS, these items are automatically updated whenever you make changes to the Windows Date and Time Properties utility.

***Hard Disks*** ***Defaults: None***

These items show the characteristics of hard disk drives on the two available IDE channels. (Note that SCSI hard disk drives do not appear here.) You can automatically install most hard disks using the IDE HDD Auto Detect Option from the main menu. If you find that a drive cannot be automatically detected, you can use these items to select USER, then manually enter the characteristics of the drive. The documentation provided with your drive provides the data you need to fill in the values for CYLS (cylinders), HEAD (read/write heads), and so on.

The drive documentation drive may not tell you what value to use under the MODE heading. If the drive is smaller than 528 MB, set MODE to Normal. If the drive is larger than 528 MB and it supports Logical Block Addressing, set MODE to LBA. Very few high-capacity drives do not support Logical Block Addressing. If you have such a drive, you might be able to configure it by setting the MODE to Large. If you're not sure which MODE setting is required by your drive, set MODE to Auto and let the setup utility try to determine the mode automatically.

***Drive A and Drive B*** ***Default: 1.44M, 3.5 in., None***

These items define the characteristics of any diskette drive attached to the system. You can connect one or two diskette drives.

***Floppy 3 Mode Support*** ***Default: Disabled***

Floppy 3 mode refers to a 3.5” diskette with a capacity of 1.2 MB. Floppy 3 mode is sometimes used in Japan.

***Video*** ***Default: EGA/VGA***

This item defines the video mode of the system. This mainboard has a built-in VGA graphics system so you must leave this item at the default value.

***Halt On*** ***Default: All Errors***

This item defines the operation of the system POST (Power On Self Test) routine. You can use this item to select which kind of errors in the POST are sufficient to halt the system.

# BIOS & CPU Features Setup Option

This option displays a table of items which defines more advanced information about your system. You can make modifications to most of these items without introducing fatal errors to your system.

***CPU Internal Core Speed*** ***Default: 350 MHz***

Use this item to automatically set up the mainboard for the kind of processor that you have installed. Set this item to the rated internal clock speed of the installed processor. If you set this to Manual, two new items appear: *CPU Host Bus Frequency* and *CPU Frequency*.

***CPU Host Bus Frequency***
***CPU Core: Bus Freq. Multiple***

These items appear if you have set the *CPU Internal Core Speed* to Manual. Use the *CPU Host Bus Frequency* to set the system bus frequency for the installed processor (usually 100 MHz or 66 MHz). Then use *CPU Frequency* to set a multiple. The multiple times the system bus must equal the core speed of the installed processor e.g. **3.5 (multiple) x 100 MHz (system bus) = 350 MHz (installed processor clock speed)**.

***Anti-Virus Protection*** ***Default: Enabled***

When this item is enabled it provides some protection against viruses which try to write to the boot sector and partition table of your hard disk drive. This item is Enabled as a default. You might need to disable it so that you can install an operating system. We recommend that you enable Anti-Virus Protection as soon as you have installed your disk with an OS.

***CPU Internal Cache*** ***Default: Enabled***

All the processors that can be installed in this mainboard use internal (level 1) cache memory to improve performance. Leave this item at the default value Enabled for better performance.

***External Cache*** ***Default: Enabled***

Most processors that can be installed in this system use external (L2) cache memory to improve performance. The exceptions are older SEPP Celeron CPUs running at 266 or 300 MHz. Enable this item for all but these two processors.

***Quick Power On Self Test*** ***Default: Enabled***

You can enable this item to shorten the power on testing and have your system start up a little faster. You might like to enable this item after you are confident that your system hardware is operating smoothly.

***Boot From LAN First*** ***Default: Disabled***

Enable this item if you want your computer to remote boot an operating system from a network server.

***Boot Sequence*** ***Default: A,C,SCSI***

This item defines where the system will look for an operating system, and the order of priority. You can boot an OS from many locations including a SCSI or ZIP drive, a floppy diskette drive or an LS-120 high-capacity diskette drive.

***Swap Floppy Drive*** ***Default: Disabled***

If you have two floppy diskette drives in your system, this item allows you to swap around the assigned drive letters so that drive A becomes drive B, and drive B becomes drive A.

***Boot Up Floppy Seek*** ***Default: Enabled***

If you enable this item, the system checks the tracks on the floppy drives at start up. If you are not using an old 5.25” diskette drive with 360K capacity, you can disable this item.

***Boot Up NumLock Status*** ***Default: On***

This item defines if the keyboard Num Lock key is active when your system is started.

***Typematic Rate Setting*** ***Default: Disabled***

If this item is enabled, you can use the following two items to set the typematic rate and the typematic delay settings for your keyboard.

***Typematic Rate (Chars/Sec)*** ***Default: 6***

If the item Typematic Rate Setting is enabled, you can use this item to define how many characters per second are generated by a held-down key.

***Typematic Delay (Msec)*** ***Default: 250***

If the item Typematic Rate Setting is enabled, you can use this item to define how many milliseconds must elapse before a held-down key begins generating repeat characters.

***Security Option*** ***Default: Setup***

If you have installed password protection, this item defines if the password is required at system start up, or if it is only required when a user tries to enter the setup utility.

***PCI/VGA Palette Snoop*** ***Default: Disabled***

This item is designed to overcome some problems that can be caused by some non-standard VGA cards. This board includes a built-in VGA system that does not require palette snooping so you must leave this item disabled.

***OS Select For DRAM > 64 MB*** ***Default: Non-OS2***

This item is only required if you have installed more than 64 MB of memory and you are running the OS/2 operating system. Otherwise, leave this item at the default Non-OS2.

***Report No FDD for WIN 95*** ***Default: Yes***

If you are running a system with no floppy drive and using the Windows 95 OS, select Yes for this item to ensure compatibility with the Windows 95 logo certification.

***Video BIOS Shadow*** ***Default: Enabled***

This item allows the video BIOS to be copied to system memory for faster performance.

***XXXXX-XXXXX Shadow*** ***Default: Disabled***

These items allow the BIOS of other devices to be copied to system memory for faster performance.

# Chipset Features Option

This option displays a table of items that define critical timing parameters of the mainboard components including the CPU, the memory, and the system logic. Generally, you should leave the items on this page at their default values unless you are very familiar with the technical specifications of your system hardware. If you change the values incorrectly you may introduce fatal errors or recurring instability into your system.

***Auto Configuration*** ***Default: Enabled***

If this field is enabled, the system will automatically configure the system based on the hardware detected.

***ISA Bus Clock Frequency*** ***Default: PCICLK/4***

This item sets the speed of the ISA bus by dividing the speed of the PCI bus.

***Starting Point of Paging*** ***Default: 8T***

This item controls the start timing of memory paging operations.

***SDRAM CAS Latency*** ***Default: 3T***
***SDRAM WR Retire Rate*** ***Default: X-2-2-2***

These items install timing parameters for the installed SDRAM memory. We recommend that you leave these items at the default values.

***RAMW# Assertion Timing*** ***Default: 3T***

This item determines the timing for local memory writes. We recommend that you leave this item at the default value.

***CPU to PCI Post Write*** ***Default: Enabled***

If this item is enabled, writes to PCI IDE devices are buffered for better performance.

***CPU to PCI Burst Mem. WR*** ***Default: Disabled***

If this item is enabled, the system can assemble long writes for burst mode writes from the data held in buffers.

***System BIOS Cacheable*** ***Default: Enabled***
***Video BIOS Cacheable*** ***Default: Enabled***

These items allow the video and/or system to be cached in memory for faster execution. Wee recommend that you leave these items at the default value.

***Memory Hole at 15M-16M*** ***Default: Disabled***

This item can be used to reserve memory space for some ISA expansion cards that require it.

***AGP Aperture Size*** ***Default: 64MB***

This item defines an aperture size for an AGP graphics adapter. It defines the section of the PCI memory address space reserved for graphics.

***Concurrent Function (Mem)*** ***Default: Enabled***

This item allows concurrent operation for the system memory. We recommend that you leave this item at the default value.

***Concurrent Function (PCI)*** ***Default: Enabled***

This item allows concurrent operation for the system PCI bus. We recommend that you leave this item at the default value.

***CPU Pipeline Control*** ***Default: Enabled***

This item allows CPU pipelining. We recommend that you leave this item at the default value.

***PCI Peer Concurrency*** ***Default: Enabled***

When this item is enabled, more than one device on the PCI bus can be active at the same time.

***PCI Delay Transaction*** ***Default: Enabled***

This item can be enabled if the system has an embedded 32-bit write buffer to support delay transaction cycles. Leave this item at the default value.

***VGA DRAM 1T R/W Control*** ***Default: Disabled***

This item controls the timing for the video memory.. We recommend that you leave this item at the default value.

***SDRCLK*** ***Default: 0.0 ns***
***SDWCLK*** ***Default: 0.0 ns***

These items control system timing. We recommend that you leave these items at the default values.

***Refresh Queue Depth*** ***Default: 12***

This item controls system timing. We recommend that you leave this item at the default value.

***Host2PCI Cycle Time*** ***Default: Delay 1***
***Host2Mem Cycle Time*** ***Default: 9T***

These items control system timing. We recommend that you leave these items at the default values.

# Power Management Setup Option

This option displays items which let you control the system power management. Modern operating systems take care of much of the power management. This mainboard supports ACPI (advanced configuration and power interface). This system supports three power-saving modes; doze mode, standby mode, and suspend mode. Standby mode uses less power than doze mode and suspend mode uses the least power.

### *Power Management Timeouts*

The power-saving modes can be controlled by timeouts. If the system is inactive for a time, the timeouts begin counting. If the inactivity continues so that the timeout period elapses, the system enters a power-saving mode. If any item in the list of *PM Events* is Enabled, then any activity on that item will restart the timeout counters.

### *Wake Up Calls*

If the system is suspended, or has been powered down by software, it can be resumed by a wake up call that is generated by incoming traffic to a modem or LAN card, or a fixed alarm on the system realtime clock.

***Power Management*** ***Default: User Define***

This item acts like a master switch for the power-saving modes and hard disk timeouts. If this item is set to Max Saving, doze, standby, and suspend mode, will occur after a timeout of 10 seconds. If this item is set to Min Saving, doze, standby, and suspend mode will occur after a timeout of 4 hours. If the item is set to User Define, you can insert your own timeouts for the power-saving modes.

***PM Control by APM*** ***Default: Yes***

Windows 95 and 98 have built-in power management capabilities called APM (Advanced Power Management). When you enable this item, you allow the APM routines in Windows to operate on your system.

***Video Off Option*** ***Default: Susp,Stby -> Off***

This option defines which level of power-saving mode is required in order to power down the video display. As a default, the video powers down both in suspend mode and standby mode.

***Video Off Method*** ***Default: DPMS Supported***

This item defines how the video is powered down to save power. As a default, this is set to DPMS (display power management software).

***Switch Function*** ***Default: Break/Wake***

If this item is enabled, it permits the use of a suspend switch (connected to PANEL1 – See Chapter 2). If the item is set to Break, the suspend switch puts the system in suspend mode. If the item is set to Break/Wake, you can press the suspend switch a second time to wake up the system. If the item is set to Disabled, the suspend switch does not function.

***Doze Speed (div by)*** ***Default: 2/8***

This item determines the processor clock speed when the system is in the power-saving doze mode. It is expressed as a fraction (2/8) of normal full speed.

***Standby Speed (div by)*** ***Default: 1/8***

This item determines the processor clock speed when the system is in the power-saving standby mode. It is expressed as a fraction (1/8) of normal full speed.

***Modem Use IRQ*** ***Default: 3***

If you would like an incoming call on a fax/modem to automatically resume the system from suspend mode, use this item to specify the interrupt request line (IRQ) that is used by the modem.

***Ctrl-Alt-Backspace*** ***Default: Power Off***

This item defines the operation of the keyboard hot keys (CTRL+ALT+BACKSPACE). You can disable the hot keys, make the hot keys cause a suspend mode, or make the hot keys cause a power off.

***HDD Off After*** ***Default: Disabled***

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 1 to 15 minutes. The hard disk drive will power down if the selected timeout passes without any activity on the hard disk.

***Doze Mode*** ***Default: Disabled***

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 10 seconds to 4 hours. The system will go into the power-saving doze mode if the selected timeout passes without any system activity.

***Standby Mode*** ***Default: Disabled***

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 10 seconds to 4 hours. The system will go into the power-saving standby mode if the selected timeout passes without any system activity.

***Suspend Mode*** ***Default: Disabled***

If you have selected User Define for the Power Management item, you can set this item to a selection of timeouts from 10 seconds to 4 hours. The system will go into the power-saving suspend mode if the selected timeout passes without any system activity.

***HDD Ports Activity*** ***Default: Enabled***

When this item is Enabled, any activity on the hard disk drive will automatically reset the timeout counters for the power-saving modes, or resume the system from a power-saving mode.

***COM Ports Activity*** ***Default: Enabled***

When this item is Enabled, any activity through the serial ports (COM1/3, COM2/4, or an Infrared Port) will automatically reset the timeout counters for the power-saving modes, or resume the system from a power-saving mode.

***LPT Ports Activity*** ***Default: Enabled***

When this item is Enabled, any activity through the parallel port (LPT1) will automatically reset the timeout counters for the power-saving modes, or resume the system from a power-saving mode.

***VGA Activity*** ***Default: Enabled***

When this item is Enabled, any activity on the graphics sub-system will automatically reset the timeout counters for the power-saving modes, or resume the system from a power-saving mode.

***IRQ[3-7, 9-15],NMI*** ***Default: Enabled***

When this item is Enabled, if any activity is detected on the system interrupts (IRQs) and the non-masked interrupt (NMI), the system will automatically reset the timeout counters for the power-saving modes, or resume the system from a power-saving mode.

***IRQ 8 Break Suspend*** ***Default: Disabled***

When this item is enabled, any activity through the system interrupt request line 8 can reset power-saving mode timeouts to zero, or resume the system from a power saving mode. IRQ 8 is normally used by the system realtime clock.

***Power Button Over Ride*** ***Default: Susp/Resume***

This item lets you define if the system power button causes a power off or a power saving suspend mode.

***Ring/LAN Power Up*** ***Default: Disabled***

If this item is enabled, it allows the system to resume from a software powerdown whenever there is incoming traffic to an installed network adapter or a fax/modem.

***Resume from LAN Control*** ***Default: Disabled***

If this item is enabled, the system can be resumed through network control.

***KB Power ON Function*** ***Default: Power Key***

This item lets you select hot keys or a password as the method of using the keyboard power on feature.

***Power Up By Alarm*** ***Default: Disabled***

If you enable this item, you can use the alarm items which appear to install your system with a time and date for an alarm that resumes the system from a power-saving mode.

# PNP/PCI Configuration Option

This option displays a table of items that configures how PNP (Plug and Play) and PCI expansion cards operate in your system.

***PNP OS Installed*** ***Default: Yes***

If you install a Plug and Play operating system such as Windows 95 or 98, you can set this item to Yes. When set to Yes you can use the Device Manager utility in the OS to make changes to the configuration of expansion cards.

***Resources Controlled By*** ***Default: Auto***

You should leave this item at the default Auto. If you cannot get an expansion card to work properly, you might be able to solve the problem by changing this item to Manual, and defining the characteristics of the card in the new items which appear. If you change this item to Manual, the display will list a series of items that allow you to define the assignments of the system interrupt lines (IRQs) and Direct Memory Access (DMA) channels. As a default, these items are set to PCI/ISA PnP. If you install an ISA-bus card that does not support PNP, and it requires a special IRQ and DMA, you can modify the list of assignments. Change the values of the IRQ and DMA that are required to Legacy ISA.

***Reset Configuration Data*** ***Default: Disabled***

If you enable this item and restart the system, any PNP configuration data stored in the BIOS setup is cleared from memory. New updated data is created.

***Onboard Audio Use IRQ No*** ***Default: 10***

Use this item to assign an IRQ to the onboard audio system

***Onboard PCI Audio*** ***Default: Enabled***

Use this item to enable or disable the onboard PCI audio system.

***Onboard PCI LAN*** ***Default: Enabled***

Use this item to enable or disable the onboard PCI LAN system.

***Onboard PCI Modem*** ***Default: Enabled***

Use this item to enable or disable the optional onboard PCI modem system.

***Assign IRQ for VGA*** ***Default: Enabled***

If this item is enabled, an IRQ will be assigned to the PCI VGA graphics system.

## Load BIOS Defaults Option

This option opens dialog box that lets you install BIOS defaults for all appropriate items in the whole setup utility. Press the **Y** key and then **Enter** to install the defaults. Press the **N** key and then **Enter** to not install the defaults. The BIOS defaults place no great demands on the system and are generally stable. If your system is not functioning correctly, try installing the BIOS defaults as a first step in getting your system working properly again. If you only want to install BIOS defaults for a specific option, select and display that option, and then press the **F6** key.

## Load Setup Defaults Option

This option opens dialog box that lets you install optimum defaults for all appropriate items in the whole setup utility. Press the **Y** key and then **Enter** to install the defaults. Press the **N** key and then **Enter** to not install the defaults. The setup defaults place demands on the system that may

be greater than the performance level of the components, such as the CPU and the memory. You can cause fatal errors or instability if you install the setup defaults when your hardware does not support them. If you only want to install setup defaults for a specific option, select and display that option, and then press the **F7** key.

## Integrated Peripherals Option

This option displays a list of items which defines the operation of some peripheral items on the system's input/output ports.

***Internal PCI/IDE*** ***Default: Both***

This item lets you enable or disable the two PCI IDE channels (primary and secondary) that are integrated on this motherboard. As a default, both channels are enabled.

***IDE Primary Master PIO*** ***Default: Auto***
***IDE Primary Slave PIO*** ***Default: Auto***
***IDE Secondary Master PIO*** ***Default: Auto***
***IDE Secondary Slave PIO*** ***Default: Auto***

Each IDE channel supports a master device and a slave device. These four items let you assign which kind of PIO (Programmed Input/Output) is used by IDE devices. You can choose Auto, to let the system auto detect which PIO mode is best, or you can install a PIO mode from 0-4.

***IDE Primary Master UltraDMA*** ***Default: Auto***
***IDE Primary Slave UltraDMA*** ***Default: Auto***
***IDE Secondary Master UltraDMA*** ***Default: Auto***
***IDE Secondary Slave UltraDMA*** ***Default: Auto***

Each IDE channel supports a master device and a slave device. This motherboard supports UltraDMA. UltraDMA technology provides faster access to IDE devices. If you install a device which supports UltraDMA, change the appropriate item on this list to Auto. You may have to install the UltraDMA driver supplied with this motherboard in order to use an UltraDMA device.

***IDE Burst Mode*** ***Default: Enabled***

Burst mode transfers can improve the access to IDE devices. Enable this item if your IDE devices support burst mode transfers.

***IDE HDD Block Mode*** ***Default: Enabled***

Block mode transfers can improve the access to IDE devices. Enable this item if your IDE devices support block mode transfers.

***Onboard FDC Controller*** ***Default: Enabled***

Use this item to turn on or off the floppy disk controller that is built into this mainboard.

***Onboard Serial Port 1*** ***Default: 3F8/IRQ4***

This item lets you disable the built-in serial port 1, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ).

***IR Address Select*** ***Default: Disabled***

Use this item to assign an address to the IR port if you have installed this optional item.

***Onboard Parallel Port 1*** ***Default: 378/IRQ7***

This item lets you disable the built-in parallel port, or enable it by assigning an I/O address and an Interrupt Request Line (IRQ).

***Parallel Port Mode*** ***Default: ECP+EPP***

This item defines the operation of the parallel port. It can be set to SPP (standard parallel port). If you are connected to a parallel device that supports the higher-performance EPP (enhanced parallel port) or the ECP (extended capabilities port) make the appropriate changes to this item.

***ECP Mode Use DMA*** ***Default: 3***

If you are using the parallel port as an ECP (extended capabilities port), use this item to assign a DMA channel to the port.

***PS/2 mouse function*** ***Default: Enabled***

Use this item to enable or disable the built-in PS/2 mouse port. If you are using a serial port mouse, you can conserve system resources by disabling the PS/2 mouse port.

***USB Controller*** ***Default: Enabled***

Use this item to enable or disable the built-in Universal Serial Bus ports. If you are not using any USB devices, you can conserve system resources by disabling the USB ports.

***USB Keyboard Support*** ***Default: Disabled***

Enable this item if you plan on using a keyboard which operates through the USB poart.

***Init Display First*** ***Default: PCI Slot***

Use this item to define if your graphics adapter is installed in one of the PCI slots.

***VGA Shared Memory Size*** ***Default: 8 MB***

Use this item to set the amount of memory that can be used by the onboard VGA system. We recommend that you leave this at the default value 8 MB.

***Current CPU Temp., Current System Temp., etc.***

If you are using the hardware monitoring features of this system, you can use these items to set thermal and electrical parameters for the system.

## Password Settings

This item can be used to install a password. To install a password, follow these steps:

1. Highlight the item Password Settings on the main menu and press **Enter**.
2. The password dialog box appears.
3. If you are installing a new password, carefully type in the password. You cannot use more than 8 characters or numbers. The password will differentiate between upper case and lower characters. Press **Enter** after you have typed in the password. If you are deleting a password that is already installed just press **Enter** when the password dialog box appears.
4. The system will ask you to confirm the new password by asking you to type it in a second time. Carefully type the password again and press **Enter**, or just press **Enter** if you are deleting a password that is already installed.
5. If you typed the password correctly, the password will be installed.

## IDE HDD Auto Detection Option

This item automatically detects and installs any hard disk drives installed on the primary and secondary IDE channel. Most modern drives can be

detected. If you are using a very old drive that can't be detected, you can install it manually using the Standard CMOS Setup option.

Setup will check for two devices on the primary IDE channel and then two devices on the secondary IDE channel. At each device, the system will flash an N in the dialog box. Press **Enter** to skip the device and proceed to the next device. Press **Y**, then **Enter** to tell the system to auto-detect the device.

## Save And Exit Setup Option

Highlight this item and press **Enter** to save the changes that you have made in the setup utility and exit the setup program. When the Save and Exit dialog box appears, press **Y** to save and exit, or press **N** to return to the setup main menu.

## Exit Without Saving Option

Highlight this item and press **Enter** to discard any changes that you have made in the setup utility and exit the setup program. When the Exit Without Saving dialog box appears, press **Y** to discard changes and exit, or press **N** to return to the setup main menu.

# Chapter 4: Software

## About the Software

The software for this mainboard is supplied on a CD-ROM. The disk has a **UTILITY** folder, and individual folders for all the different kinds of mainboards that are supported with this disk. You can install the software stored in the **UTILITY** folder and the software stored in the **P6SE-ML** folder. The folder **CMI8338** has audio drivers and software for boards that use the Elite PCI Audio-CMI8338 audio chip, as this mainboard does.

***Utility Folder***

The utility folder has the following sub-folders:

- **AWDFLASH**: Software to erase and install new revisions of the system BIOS
- **DIRECTX5:** Software display drivers for Microsoft's DirectX Rev. 5 specification
- **PC-CILLIN:** Anti-virus software

***P6SE-ML Folder***

The P6SE-ML folder has the following sub-folders:

- **AUDIO:** This folder is empty. Please use the audio software stored in the folder CMI8338 on the CD-ROM.
- **VGA:** Drivers and software for the built-in video system.
- **LAN:** Drivers for the built-in network adapter.
- **MODEM:** Drivers and software for the built-in fax/modem
- **MONITOR:** Software for monitoring the system hardware.
- **SiS IRQ:** Miniport drivers for this mainboard.

## Utility Folder Installation Guide

1. Place the disk in your CD-ROM drive. If you are running Windows with Autoplay enabled, the opening screen of the CD appears automatically. Click on READ ME to read the latest instructions.
2. Click on the item BROWSE THE CD TITLE. This uses Windows Explorer to show the contents of the support CD.
3. Double click the Utility folder, and then click on the sub-folder which contains the software that you want to install.

4. Before installing the software, look for a file named README.TXT, or something similar. This file may contain important information to help you install the software correctly.
5. Some software is installed in separate folders for different operating systems, such as DOS, WIN NT, WIN95/98, and so on. Always log on to the correct folder for the kind of OS you are using.

## Utility Installation Notes

### *Award Flash Memory Utility*

This utility lets you erase the system BIOS stored on a Flash Memory chip on the mainboard, and lets you copy an updated BIOS to the chip. Take care how you use this program. If you erase the current BIOS and fail to write a new BIOS, or write a new BIOS that is incorrect, your system will malfunction.

The flash memory utility is called AWDFLASH.EXE. To use the utility, you must be in real-mode DOS (not the DOS box that is available in Windows 95/98/NT). If you are using WINDOWS 95/98, shut down your computer and select the option Restart in DOS in the shut-down dialog box. If you are running Windows NT, shut down your computer and boot from a DOS diskette temporarily in order to run the flash memory utility.

### *DirectX5 Drivers*

The DirectX drivers are for installation only in Windows 95/98. The directX drivers need to be installed before you install an AGP driver. You may be able to get more up-to-date directX drivers from the Microsoft web site. Start the installation by clicking on the file DX5CORE.EXE..

### *PC-Cillin Anti-Virus Utility*

Anti-virus software is provided for DOS, for WIN95, and WIN 98. Log on to the appropriate directory for your operating system. For DOS, copy all the files in the DOS folder to your hard disk drive. For Windows 95, log on to the Disk 1 folder and run SETUP. For Windows 98, run SETUP.

### *System Monitoring Utility*

This folder contains software for hardware monitoring for system's that have installed the SiS 5591/5600/530/620 chipset. Start the installation by locating and running the file SETUP.

# Mainboard Folder Installation Guide

1. Place the support disk in your CD-ROM drive. If you are running Windows with Autoplay enabled, the opening screen of the support CD should appear automatically. Click on the item READ ME and read the latest instructions.
2. Click on the item BROWSE THE CD TITLE. This uses Windows Explorer to show the contents of the support CD.
3. Double click the folder that is named after the kind of mainboard that you are using, and then click on the sub-folder which contains the software that you want to install.
4. Before installing the software, look for a file named README.TXT, or something similar. This file may contain important information to help you install the software correctly.
5. Some software may be installed in separate folders for different operating systems, such as DOS, WIN NT, WIN95/98, and so on. Always log on to the correct folder for the kind of operating system you are using.

# Mainboard Installation Notes

### *Audio Software*

This folder is empty. See the instructions below for installing the audio software from the CMI8338 folder.

### *VGA Drivers and Software*

To install the video drivers and video software, log on to the appropriate directory and look for the SETUP file.

### *LAN Driver*

To install the network driver look in the folder LAN

### *Modem Driver and Software*

To install the fax/modem driver look in the folder MODEM\DRV. To install the Supervoice communications utilities software, look in the folder MODEM\SUPERVOICE.

### *SIS IRQ Software*

This software contains Miniport drivers for use by systems which are running the Windows 95 operating system only. Miniport drivers provide information to the operating system on how to run certain devices (usually SCSI or Network adapters). If you are running Windows 95 and you are using this kind of adapter, you can usually improve the performance by installing the miniport drivers.

## CMI8338 Audio Folder Installation Guide

This folder has software and drivers for mainboards that use the Elite PCI Audio-CMI8338 audio chip. Drivers are provided for Windows 95/98, Windows NT, and DOS. An MS-WORD format manual is stored in the MANUAL folder.

#### *DOS Installation*

Log on to the DOSDRV folder and run the program INSTALL.EXE

#### *Windows 95/98 Installation*

Please specify the path to the CD-ROM\CMMI8338\W95-98\DRV when your system detects the installed audio system. To install the audio applications, log on to the W95-98 folder, and then log on to the APPS folder. Run the SETUP program.

#### *Windows NT 4.0 Installation*

1. Press the *"Start"* button.
2. Move the highlight to *"Settings"* and select *"Control Panel".*
3. Double click on the *"Multimedia"* icon.
4. Select the *"Devices"* tab.
5. Press the *"Add..."* button.
6. Select item *"Unlisted or Updated Driver"* in the *"List of Drivers"* list box.
7. Specify the path to the PCI audio NT drivers.
8. Select *"C-Media CM8338 PCI Device"* and press the *"OK"* button.
9. Choose proper I/O or the *"OK"* button for the default setting.
10. Restart the Windows NT system.

To install the audio applications, log on to the NT4 folder, and then log on to the APPS folder. Run the SETUP program.

# Contents

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Version 1.0

# Safety Compliance

## *Federal Communications Commission (FCC)*

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ❑ Reorient or relocate the receiving antenna.
- ❑ Increase the separation between the equipment and the receiver.
- ❑ Connect the equipment onto an outlet on a circuit different from that to which the receiver is connected.
- ❑ Consult the dealer or an experienced radio/TV technician for help.

Shielded interconnect cables and shielded AC power cable must be employed with this equipment to insure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

### *Declaration of Conformity*

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:

- ❑ This device may not cause harmful interference, and
- ❑ This device must accept any interference received, including interference that may cause undesired operation.

## *Canadian Department of Communications*

This class B digital apparatus meets all requirements of the Canadian Interference-causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilieur du Canada.