Federal Communications Commission (FCC) Statement

RADIO FREQUENCY INTERFERENCE STATEMENT

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 the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into 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.

Any special accessories needed for compliance must be specified in the instruction manual.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.

Use only shielded cables to connect I/O devices to this equipment.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Manual Rev: 1.0
Release Date: March 1998

C E

FCC-B Radio Frequency Interference Statement

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
when the equipment is operated in a commercial environment. This
equipment generates, uses and can radiate radio frequency energy and, if
not installed and used in accordance with the instruction manual, may cause
harmful interference to radio communications. Operation of this equipment
in a residential area is likely to cause harmful interference, in which case
the user will be required to correct the interference at his own expense.

Notice 1
The changes or modifications not expressly approved by the party
responsible for compliance could void the user's authority to operate the
equipment.

Notice 2
Shielded interface cables and A.C. power cord, if any, must be used in
order to comply with the emission limits.

**VOIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER
AU RESEAU.**

Edition

March 1998

Copyright Notice

Trademarks

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CHAPTER 1   **INTRODUCTION**

Chapter 1

INTRODUCTION

The ATX BX1 mainboard is a high-performance personal computer
mainboard based on the Pentium® II processor. The Pentium® II processor
supports MMX™ (Multimedia Extension) technology.

The mainboard uses the highly integrated Intel® 82443BX AGP chipset to
support the PCI/ISA and Green standards, and to provide the Host/AGP
bridge. The Intel® 82371EB chipset integrates all system control functions
such as ACPI (Advanced Configuration and Power Interface). The ACPI
provides more Energy Saving Features for the OSPM(OS Direct Power
Management) function. The Intel® 82371EB chipset also improves the IDE
transfer rate by supporting Ultra DMA/33 IDE that transfers data at the rate
of 33MB/s.

The mainboard also supports the System Hardware Monitor Controller as an
optional function. The Hardware Monitor function includes: CPU /power
supply/chassis fan revolution detect, CPU/system voltage monitor, system
temperature monitor, and chassis intrusion detect(optional).

CHAPTER 1   **INTRODUCTION**

1.1 Mainboard Features

CPU
- Slot 1 for Pentium® II processor.
- Supports 233MHz, 266MHz, 300MHz, 333MHz, 400MHz, and faster.
- Core/Bus ratios are x2, x2.5, x3, x3.5, x4, x4.5, x5, x5.5, x6 and higher.

Switching Voltage Regulator
- On-board switching mode DC-DC Step Down Regulator.
- Conforms to Intel® VRM ver 8.2 specifications.
- Over-Voltage and Over-Current protection.

Chipset
- Intel® 82440BX AGP chipset.

Clock Generator
- 66.6MHz and 100MHz clocks are supported.
- 75MHz and 83MHz clocks (reserved)

Main Memory
- Supports eight memory banks using four 168-pin unbuffered DIMM sockets.
- Supports a maximum memory size of 512MB (8M x 8) or 1GB (16M x 4) registered DIMM only.
- Supports ECC(1-bit Error Code Correct) function.
- Supports only 3.3v SDRAM DIMM.

Slots
- One AGP(Accelerated Graphics Port) slot.
  - AGP specification compliant
  - AGP 66/133MHz 3.3v device support
- Four 32-bit Master PCI Bus slots and three 16-bit ISA bus slots wherein one shared slot that can be used as ISA or PCI.
- Supports 3.3v/5v PCI bus Interface.

On-Board IDE

- An IDE controller on the Intel® 82371EB PCI chipset provides IDE HDD/ CD-ROM with PIO, Bus Master and Ultra DMA/33 operation modes.
- Can connect up to four IDE devices.

On-Board Peripherals

- On-Board Peripherals include:
    - 1 floppy port supports 2 FDD with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
    - 2 serial ports (COMA + COMB)
    - 1 parallel port supports SPP/EPP/ECP mode
    - 2 USB ports
    - 1 IrDA connector for Fast IrDA. (reserved)

BIOS

- The mainboard BIOS provides "Plug & Play" BIOS which detects the peripheral devices and expansion cards of the board automatically.
- The mainboard provides a Desktop Management Interface(DMI) function which records your mainboard specifications.
- The mainboard provides "CPU Plug & Play" function. **CPU Plug & Play** - the user don't need jumper/DIP switch to set the CPU speed setting. The BIOS is used to set the speed.

System Hardware Monitor (optional)

- CPU/Power Supply/Chassis Fan Revolution Detect
- CPU Fan Control (the fan will automatically stop when the system enters suspend mode)
- System Voltage Detect
- CPU Overheat Warning (reserved)
- Chassis Intrusion Detect (reserved)
- Display Actual Current Voltage

RTC

- PIIX4(82371EB) built-in RTC.

CHAPTER 1   **INTRODUCTION**

1.2 Mainboard Layout
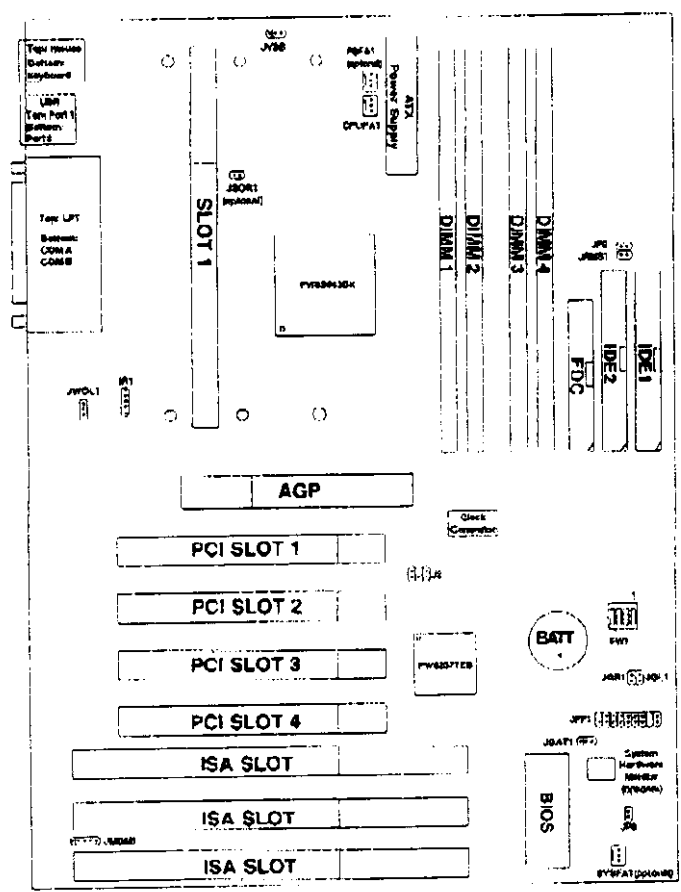
CHAPTER 2   **HARDWARE INSTALLATION**

Chapter 2

HARDWARE INSTALLATION

2.1 Central Processing Unit: CPU

The mainboard operates with Intel* Pentium* II processor. The mainboard
used a CPU Slot called Slot 1 for easy CPU installation. To set the proper
speed for the CPU, you should first check your mainboard. There are two
kinds of mainboard: CPU Plug & Play mainboard & Standard mainboard.
CPU Plug & Play mainboard speed setting is set on the BIOS setting.
Standard mainboard speed setting is set by DIP switch. The CPU should
always have a Heat Sink and a cooling fan attached to prevent overheating.

CHAPTER 2   **HARDWARE INSTALLATION**

2.1-1 CPU Installation Procedures

Different kinds of Pentium® II processor that is currently used: the OEM
version, the Boxed version, and Celeron™. OEM Pentium® II Processor has
no Heat Sink, Fan and Heat Sink Support, the Boxed Pentium® II Processor
is provided with Heat Sink w/ fan and Heat Sink Support, while the
Celeron™ processor is a plane processor card without cover or heatsink..

A. OEM Pentium® II Processor Installation Procedures

Processor ———————— ┌──────────────┐ ██ Heat Sink
Lock   W/Fan

Pentium® II   ─Notch Hole
Processor

                                     ⌐Retention
Heat Sink   Mechanism
Support
Top Bar

Heat Sink
Support Base
                    Heat Sink
                    Support Pin
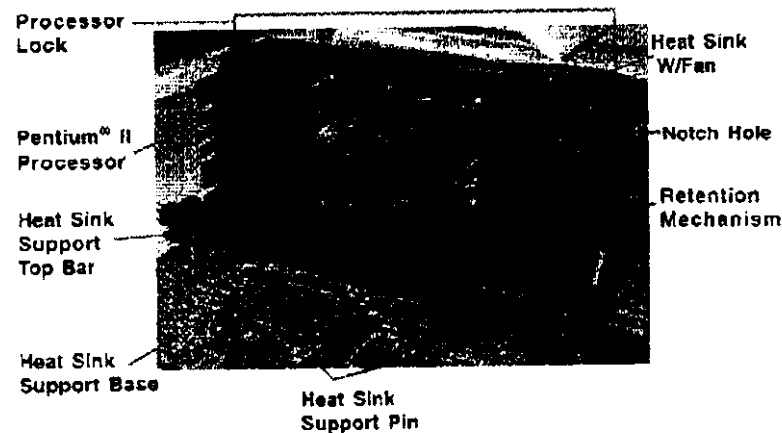
Required Things:

Pentium® II processor - Processor.

*Retention Mechanism(RM) - Plastic Guide that holds the S.E.C. Catridge
                        in the Slot 1 connector.

*Retention Mechanism Attach Mount(RMAM) - Bolt/Bridge assemblies
                        inserted up through the bottom of the
                        motherboard. RM secures to RMAM (2
                        RMAM required per RM).

*Heat Sink Support Base (HSSBASE) - Plastic support bar mounted to
                        the mainboard under the ATX heatsink.
                        (One leg is always bigger than the other one)

CHAPTER 2   **HARDWARE INSTALLATION**

*Heat Sink Support Pin (HSSPIN) - Plastic pins inserted through the
                          HSSBASE to secure it to the mainboard (2
                          required per Assembly).
*Heat Sink Support Top Bar (HSSTOP) - Plastic bar that clips onto the
                          HSSBASE through the fins on the ATX
                          heatsink.
Heat Sink w/ fan - Heat Sink that can be attached to the **Pentium[*] II
                          processor with metal clip.
Note: * Provided by MSI mainboard.
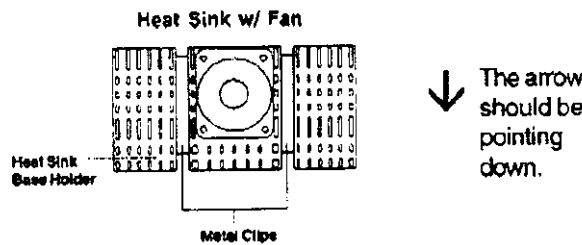   ** Provided by Special request.

                                        HSSBASE

          RM

                                        HSSPIN

          RMAM   **HSSTOP**

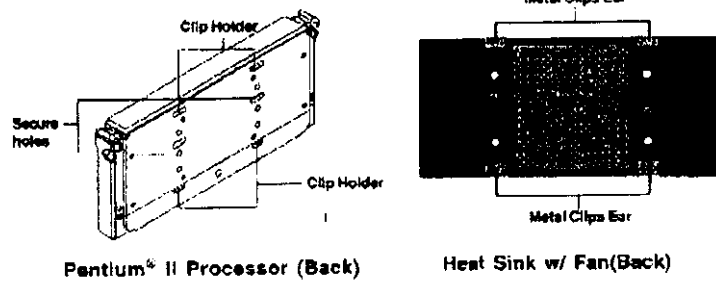**CHAPTER 2**   **HARDWARE INSTALLATION**

Step 5: Install the Heat Sink with Fan to the Processor.

Push down the metal clips, so that they are in line with the back of
the Heat Sink. Be careful, so as not detach the metal clips from the
Heat Sink.

Heat Sink w/ Fan

The arrow
should be
pointing
down.

Heat Sink
Base Holder

Metal Clips

In case the metal clips are detached from the Heat Sink, re-attach
them. Look for the arrow on the metal clip. This arrow should be
pointing down and aligned with the Heat Sink Support Base Holder.

Attach the Heat Sink to the processor.

Clip Holder

Metal Clips Ear

Secure
holes

Clip Holder

Metal Clips Ear

**Pentium* II Processor (Back)**   **Heat Sink w/ Fan(Back)**

- Look at the back of the Heat Sink and take note of the 2 secure
  posts. Insert these 2 Secure posts to the 2 secure holes on the
  back of the processor.

- Align the ears of the metal clips with the clip holders on the back of
  the processor. Use a screw driver to push the metal clips onto the
  clip holders. Check for a perfect fit.

CHAPTER 2   HARDWARE INSTALLATION
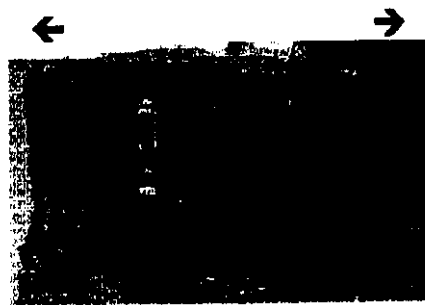
Step 6: Install the Processor.

Unlock the Processor by pushing in the Processor Locks.
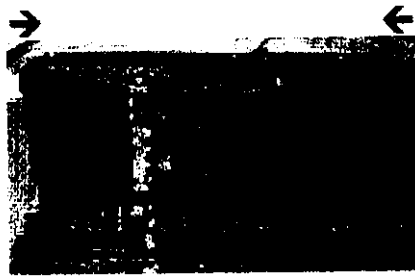
Insert the Processor like inserting a PCI or an ISA card.

Step 7: Lock the Processor Locks.

Secure the CPU by pulling the Processor Locks out.
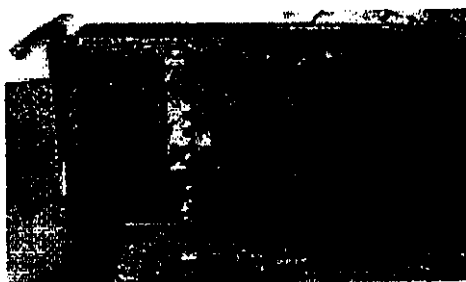
CHAPTER 2   HARDWARE INSTALLATION

Step 8: Install the Heat Sink Support Top Bar.

Push the Heat Sink Support Top Bar to the Heat Sink Support Base,
Until you hear a "click" sound. Check for a perfect fit.

Heatsink
Support Top
Bar

The installation is now complete.

CHAPTER 2   HARDWARE INSTALLATION

Step 3: Install the Heat Sink to the Processor.

Push down the plastic clips, so that they are in line with the hole on the processor. check for perfect fit.

Step 4: Insert the Processor in

Insert the Processor like inserting a PCI or an ISA card.

Step 5: Lock the Procesoor

Lock the processor by putting the Retention Cap provided.

CHAPTER 2   **HARDWARE INSTALLATION**

2.1-2 CPU Core Speed Derivation Procedure

1. The DIP Switch SW1 (1, 2, 3, and 4) is used to set the Core/Bus (Fraction) ratio of the CPU. The actual core speed of the CPU is the Host Clock Frequency multiplied by the Core/Bus ratio. For example:

If	CPU Clock	=	66MHz
	Core/Bus ratio	=	3.5
then	CPU core speed	=	Host Clock x Core/Bus ratio
		=	66MHz x 3.5
		=	233MHz.

1	2	3	4	Core/Bus Ratio
ON	OFF	ON	ON	2.5
ON	ON	OFF	ON	3
ON	OFF	OFF	ON	3.5
ON	ON	ON	OFF	4
ON	OFF	ON	OFF	4.5
ON	ON	OFF	OFF	5
ON	OFF	OFF	OFF	5.5
OFF	ON	ON	ON	6
OFF	OFF	ON	ON	6.5
OFF	ON	OFF	ON	7
OFF	OFF	OFF	ON	7.5
OFF	ON	ON	OFF	8

Note: a. The CPU Bus Frequency is set at 66MHz or 100MHz by CPU default.
b. If the mainboard support CPU Plug & Play, disregard this table and go directly to BIOS Special Features Setup to set the CPU speed.

2. The PCI Bus Clock is fixed at 33MHz.

CHAPTER 2   **HARDWARE INSTALLATION**

2.1-3 CPU Speed Setting

To adjust the speed of the CPU, you must know the specification of your
CPU (*always ask the vendor for CPU specification*).

a. 66MHz CPU Bus Frequency

200MHz		
233MHz		
266MHz		
300MHz		
333MHz		

Table 2.1 200 - 333MHz Intel® Pentium® II processor

b. 100MHz CPU Bus Frequency

350MHz		
400MHz		
450MHz		

Table 2.2 350 - 450MHz Intel® Pentium® II processor

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CHAPTER 2   **HARDWARE INSTALLATION**

2.1-4 Fan Power Connectors: CPUFAN1/PSFAN1/SYSFAN1

These connectors support system cooling fan with +12V. It supports three pin head connector. When connecting the wire to the connector, always take note that the red wire is the positive and should be connected to the +12V, the black wire is Ground and should be connected to GND. If your mainboard got Hardware Monitor chipset on-board, you must use a specially designed fan with speed sensor to take advantage of that.
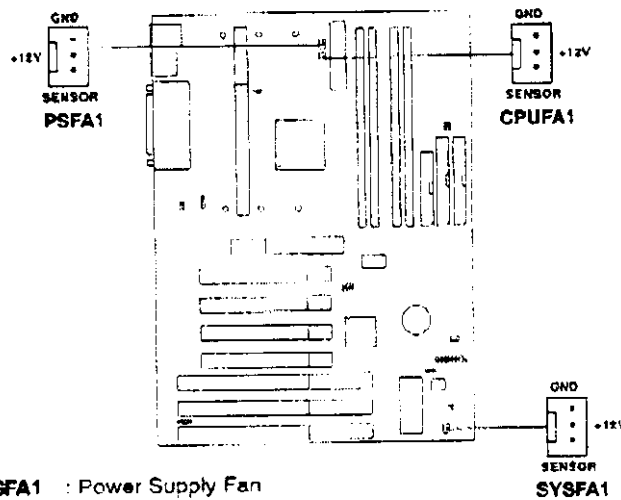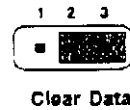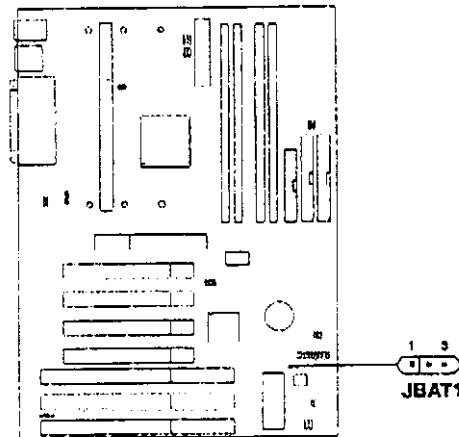

PSFA1   : Power Supply Fan
CPUFA1 : CPU Fan
SYSFA1 : System(Chassis) Fan

For fans with fan speed sensor, every rotation of the fan will send out 2 pulses. System Hardware Monitor will count and report the fan rotation speed.

Note: 1. CPUFA1/SYSFA1/PSFA1 are the CPU, Power and Chassis Cooling Fan Speed Connector (reserved for System Hardware Monitor Option.)
2. Always consult vendor for proper CPU cooling fan.

CHAPTER 2   **HARDWARE INSTALLATION**

## 2.2 Clear CMOS Jumper: JBAT1

A battery must be used to retain the mainboard configuration in CMOS
RAM. If you use the on-board battery, you must short 1-2 pins of JBAT1
to keep the CMOS data.


```
        1  3
       ┌──┬──┐
       │■│··│
       └──┴──┘
        JBAT1
```

```
   1  2  3              1  2  3
  ┌─────────┐          ┌─────────┐
  │▓▓▓▓▓ ■ │          │ ■ ▓▓▓▓▓ │
  └─────────┘          └─────────┘

  Keep Data              Clear Data
```

Note: You can clear CMOS by shorting 2-3 pin, while the system is off.
          Then, return to 1-2 pin position. Avoid clearing the CMOS while
          the system is on; it will damage the mainboard.

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CHAPTER 2   **HARDWARE INSTALLATION**

2.3-2 Memory Installation Procedures

A. How to install a DIMM Module
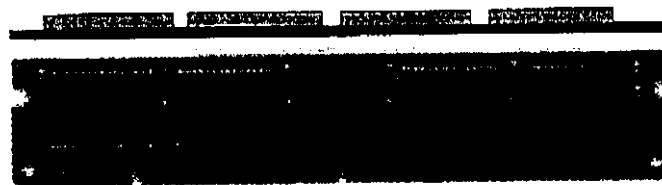
Single Sided DIMM
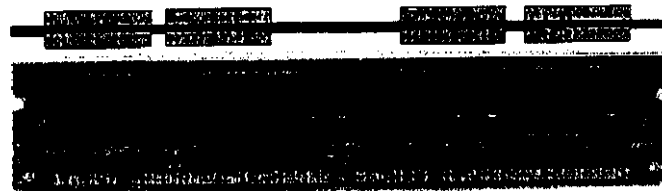
Double Sided DIMM

1. The DIMM slot has a two Notch Key "VOLT and DRAM", so the DIMM memory module can only fit in one direction.

2. Insert the DIMM memory module vertically into the DIMM slot. Then push it in.
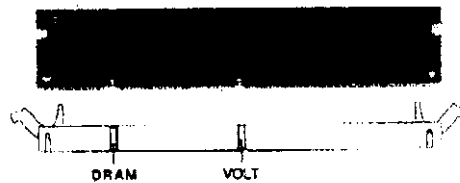

3. The plastic clip at the side of the DIMM slot will automatically close.

Note: You can only use a 3.3 volt DIMM module (SDRAM).

CHAPTER 2   **HARDWARE INSTALLATION**

2.3 Memory Installation

2.3-1 Memory Bank Configuration

The mainboard supports a maximum of 512MB (8M x 8) or 1GB (16M x 4)
registered DIMM only. It provides four 168-pin DIMMs (Double In-Line
Memory Module) sockets. It supports 8 MB to 256 Mbytes DIMM memory
module.
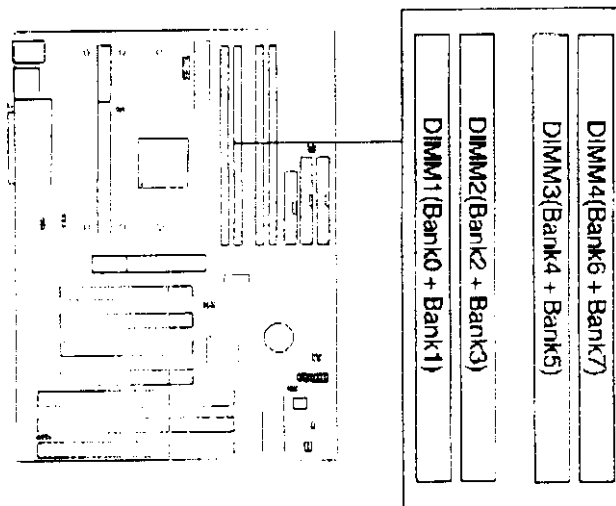
> ⚠️ **WARNING!** There are two kinds of DIMM specification supported
> by this mainboard: PC100 and PC66. If you use
> 66MHz CPU Bus Frequency, these two DIMM Specs. is
> supported. If you use 100 MHz CPU Bus Frequency,
> only PC100 DIMM Specs. is supported.

CHAPTER 2   **HARDWARE INSTALLATION**

### 2.3-3 Memory Population Rules

1. Supports SDRAM DIMM.

2. To operate properly, at least one 168-pin DIMM module must be installed.

3. This mainboard supports Table Free memory, so memory can be installed on DIMM1, DIMM2, DIMM3, or DIMM 4 in any order.

4. Supports 3.3 volt DIMM.

5. The DRAM addressing and the size supported by the mainboard is shown below:

Table 2.3-1 SDRAM Memory Addressing

DRAM Tech.	DRAM Density & Width	DRAM Addressing	Address Size		MB/DIMM	
			Row	Column	Single no. Side(S) pcs.	Double no. Side(D) pcs.
16M	1Mx16	ASYM	11	8	8MBx4	16MBx8
	2Mx8	ASYM	11	9	16MBx8	32MBx16
	4Mx4	ASYM	11	10	32MB	64MB
64M	2Mx32	ASYM	11	9	32MBx2	64MBx4
	2Mx32	ASYM	12	8	16MBx2	32MBx4
	4Mx16	ASYM	11	10	32MB	64MB
	4Mx16	ASYM	13	8	32MB	64MB
	8Mx8	ASYM	13	9	64MB	128MB
	16Mx4	ASYM	13	10	128MB	256MB
64M	2Mx32	ASYM	12	8	16MB	32MB
	4Mx16	ASYM	13	8	32MB	64MB
	8Mx8	ASYM	13	9	64MB	128MB
	16Mx4	ASYM	13	10	128MB	256MB

CHAPTER 2   **HARDWARE INSTALLATION**

2.4 Case Connector: JFP1

The Power Switch, Reset Switch, Key Lock, Power LED, Speaker and HDD
LED are all connected to the JFP1 connector block.

JFP1
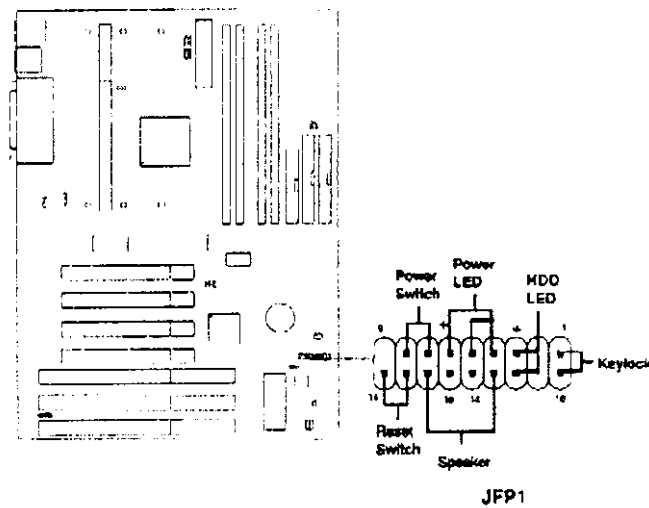
CHAPTER 2   **HARDWARE INSTALLATION**

2.4-1 Power Switch

Connect to a 2-pin push button switch. This switch had the same feature with JRMS1.

2.4-2 Reset Switch

Reset switch is used to reboot the system rather than turning the power ON/OFF. Avoid rebooting while the HDD LED is lit. You can connect the Reset switch from the system case to this pin.

2.4-3 Keylock

Keylock allows you to disable the keyboard for security purposes. You can connect the keylock to this pin.

2.4-4 Power LED

The Power LED is always lit while the system power is on. You can connect the Power LED from the system case to this pin.

2.4-5 Speaker

Speaker from the system case is connected to this pin.
If on-board speaker is available:
Short pin 14-15:   On-board speaker Enabled.
Open pin 14-15:   On-board speaker Disabled.

2.4-6 HDD LED

HDD LED shows the activity of a hard disk drive. Avoid turning the power off while the HDD led is lit. You can connect the HDD LED from the system case to this pin.

CHAPTER 2   **HARDWARE INSTALLATION**

2.5 Floppy Disk Connector: FDD

The mainboard also provides a standard floppy disk connector FDC that
supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This
connector support the provided floppy drive ribbon cables.
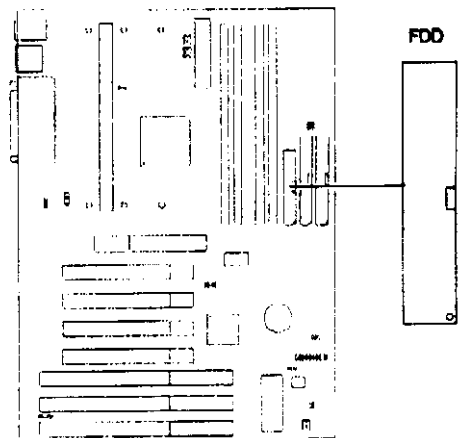
CHAPTER 2   **HARDWARE INSTALLATION**

2.6 Hard Disk Connectors: IDE1 & IDE2

The mainboard has a 32-bit Enhanced PCI IDE Controller that provides PIO
mode 0~4, Bus Master, and Ultra DMA/33 function. It has two HDD
connectors IDE1 (primary) and IDE2 (secondary). You can connect up to
four hard disk drives, CD-ROM, 120MB Floppy (reserved for future BIOS)
and other devices to IDE1 and IDE2. These connectors support the
provided IDE hard disk cable.
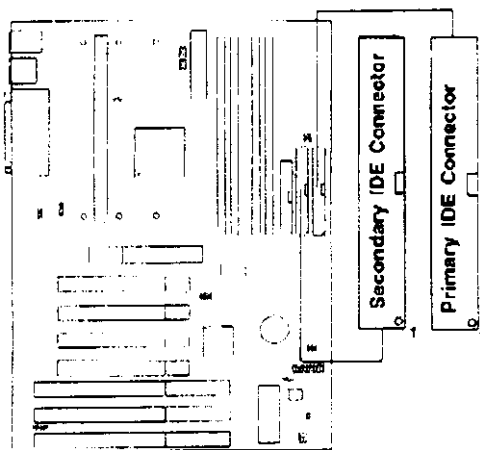
IDE1(Primary IDE Connector)

The first hard drive should always be connected to IDE1. IDE1 can
connect a Master and a Slave drive. You must configure second hard
drive to Slave mode by setting the jumper accordingly.

IDE2(Secondary IDE Connector)

IDE2 can also connect a Master and a Slave drive.

CHAPTER 2   **HARDWARE INSTALLATION**

2.7 Power Supply

2.7-1 ATX 20-pin Power Connector: JPW1

This connector supports the power button on-board. Using the ATX power
supply, functions such as Modem Ring Wake-Up and Soft Power Off are
supported by this mainboard. This power connector supports instant power
on function which means that system will boot up instantly when the power
connector is inserted on the board.

**ATX
Power Connector**
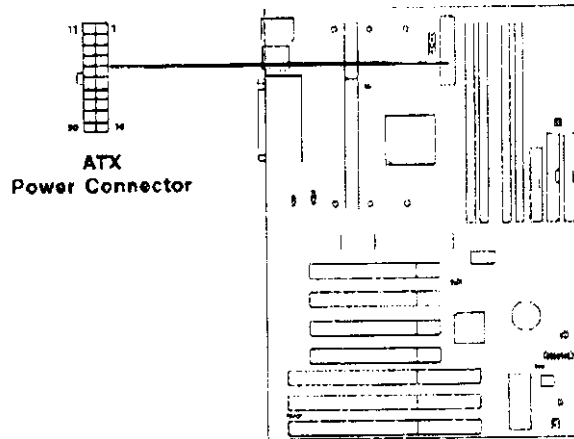
PIN DEFINITION

PIN	SIGNAL	PIN	SIGNAL
1	3.3V	11	3.3V
2	3.3V	12	-12V
3	GND	13	GND
4	5V	14	PS_ON
5	GND	15	GND
6	5V	16	GND
7	GND	17	GND
8	PW_OK	18	-5V
9	5V_SB	19	5V
10	12V	20	5V

Warning: Since the mainboard has the instant power on function, make
sure that all components are installed properly before inserting the power
connector to ensure that no damage will be done.

CHAPTER 2   **HARDWARE INSTALLATION**

2.7-2 Remote Power On/Off Switch: JRMS1

Connect to a 2-pin push button switch. During OFF state, press once and
the system turns on. **During ON stage, push once and the system goes to
sleep mode: pushing it more than 4 seconds will change its status from ON
to OFF.** If you want to change the setup, you could go to the BIOS Power
Management Setup.
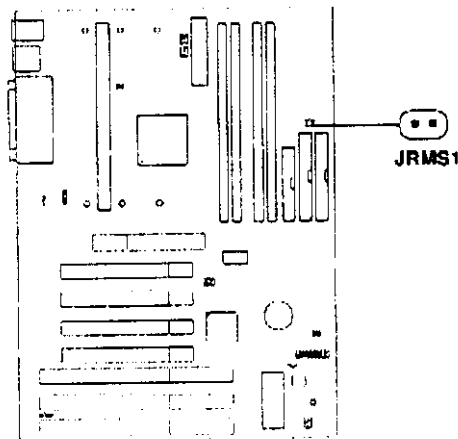
CHAPTER 2   **HARDWARE INSTALLATION**

2.8 IrDA Infrared Module Connector: IR1

The mainboard provides one 5-pin infrared (IR1) connector for IR modules.
This connector is for optional wireless transmitting and receiving infrared
module. You must configure the setting through the BIOS setup to use the
IR function. FIR and Consumer IR are reserved functions.
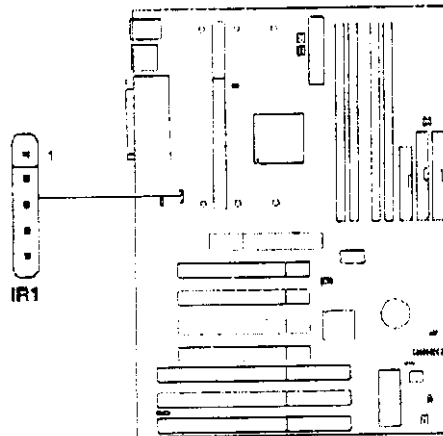
Pin	Description
1	VCC
2	NC
3	IRRX
4	GND
5	IRTX

CHAPTER 2   **HARDWARE INSTALLATION**

2.9 Serial Port Connectors: COM A & COM B

The mainboard has two 9-pin male DIN connectors for serial ports COM A
and COM B. These two ports are 16550A high speed communication ports
that send/receive 16 bytes FIFOs. You can attach a mouse or a modem cable
directly into these connectors.

COM A   COM B
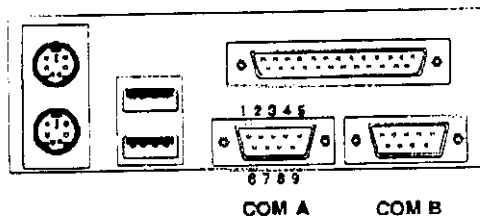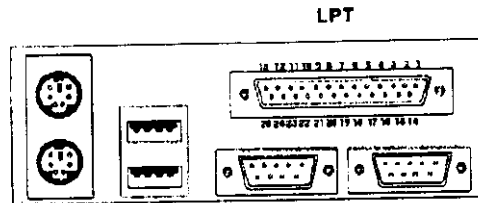
PIN DEFINITION

PIN	SIGNAL
1	DCD(Data Carry Detect)
2	SIN(Serial In or Receive Data)
3	SOUT(Serial Out or Transmit Data)
4	DTR(Data Terminal Ready)
5	GND
6	DSR(Data Set Ready)
7	RTS(Request To Send)
8	CTS(Clear To Send)
9	RI(Ring Indicate)

CHAPTER 2   **HARDWARE INSTALLATION**

2.10 Parallel Port Connector: LPT

The mainboard provides a 25 pin female centronic connector for LPT. A
parallel port is a standard printer port that also supports Enhanced Parallel
Port(EPP) and Extended capabilities Parallel Port(ECP). See connector and
pin definition below:

LPT

PIN DEFINITION

PIN	SIGNAL	PIN	SIGNAL
1	STROBE	14	AUTO FEED#
2	DATA0	15	ERR#
3	DATA1	16	INIT#
4	DATA2	17	SLIN#
5	DATA3	18	GND
6	DATA4	19	GND
7	DATA5	20	GND
8	DATA6	21	GND
9	DATA7	22	GND
10	ACK#	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SELECT		

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2.11 Mouse Connector: JKBMS1

The mainboard provides a standard PS/2® mouse mini DIN connector for
attaching a PS/2® mouse. You can plug a PS/2® mouse directly into this
connector. The connector location and pin definition are shown below:
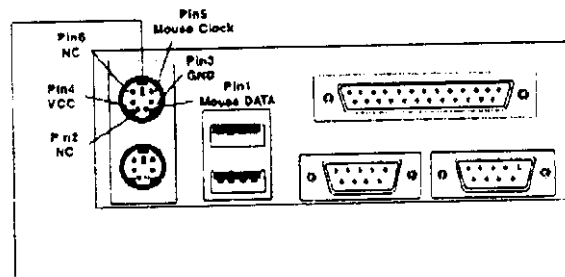
PS/2 Mouse (6-pin Female)

2.12 Keyboard Connector: JKBMS1

The mainboard provides a standard PS/2® keyboard mini DIN connector for
attaching a keyboard You can plug a keyboard cable directly to this
connector.
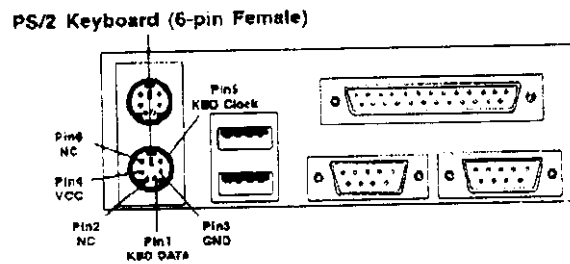
CHAPTER 2   **HARDWARE INSTALLATION**

2.13 USB Connector: USB

The mainboard provides a UHCI(Universal Host Controller Interface)
Universal Serial Bus root for attaching USB devices like: keyboard, mouse
and other USB devices. You can plug the USB device directly to this
connector.
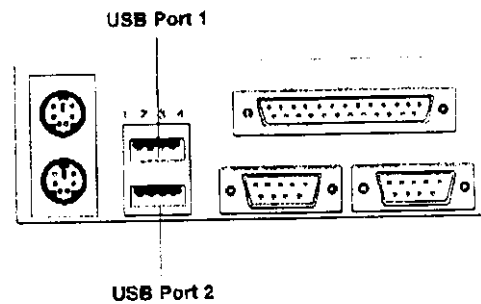
PIN	SIGNAL
1	VCC
2	-Data0
3	GND
4	+Data0

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2.14 Power Saving Switch Connector: JGS1

Attach a power saving switch to **JGS1**. When the switch is pressed, the
system immediately goes into suspend mode. Press any key and the system
wakes up.

JGS1
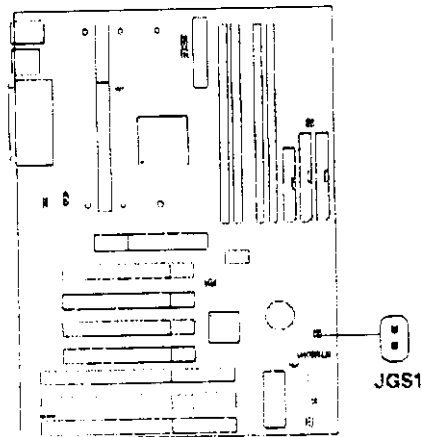
CHAPTER 2   **HARDWARE INSTALLATION**

2.15 Power Saving LED Connector: JGL1

JGL1 can be connected with LED. This will lit while the system is in suspend
mode.
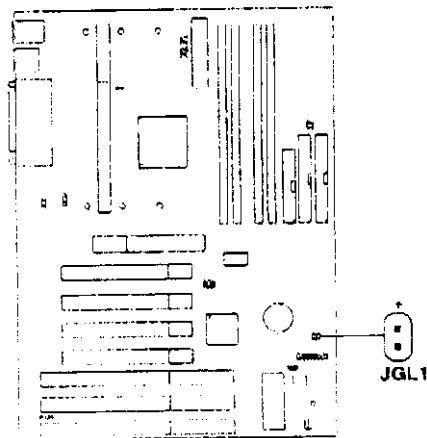
CHAPTER 2   **HARDWARE INSTALLATION**

2.16 Power On Mode Jumper: JP2

The mainboard supports two kinds of system boot up: the Boot-Up by
switch and the Immediate Boot-Up. With the Boot-Up by Switch, the system
will boot up only when the power on switch is pressed. For Immediate Boot-
Up, the system will boot up instantly when the power connector is
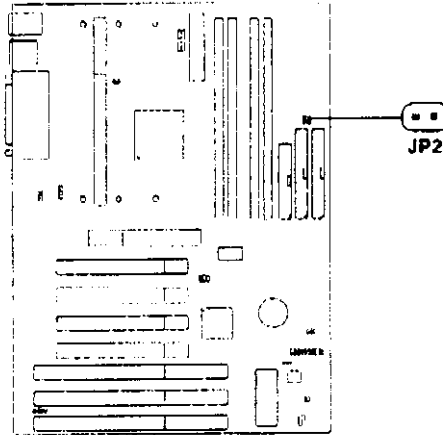connected into the system.

Table 2.16: Power On Mode Feature

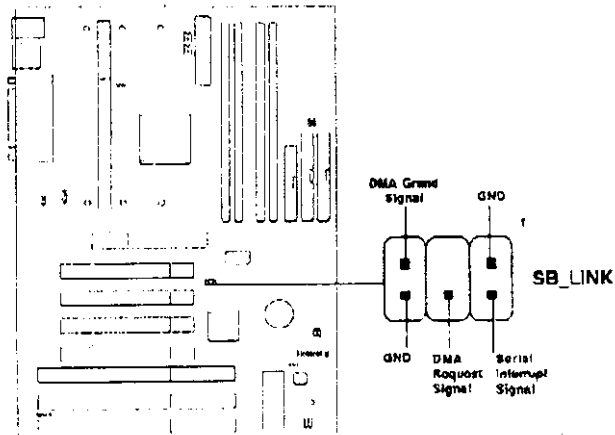| JP2	Feature
	Select Boot-Up by Swtich
	Select Immediate Boot-Up

Note: Short JP2, when using Boot-Up by Switch feature. Open JP2, to enable
Immediate Boot-Up.

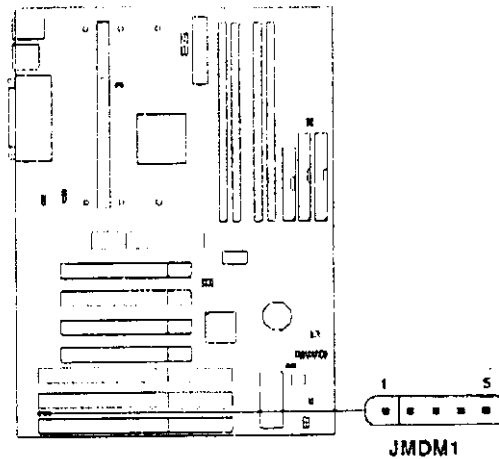**CHAPTER 2**   **HARDWARE INSTALLATION**

2.17 SB_Link™ Card Sound Connector: SB_LINK

The mainboard provides a distributed DMA connector for PCI sound card
with this feature, such as Creative® PCI 3D sound card.

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2.18 Modem Wake Up Connector: JMDM1

The JMDM1 connector is for used with Modem add-on card that supports
the Modem Wake Up function.

JMDM1

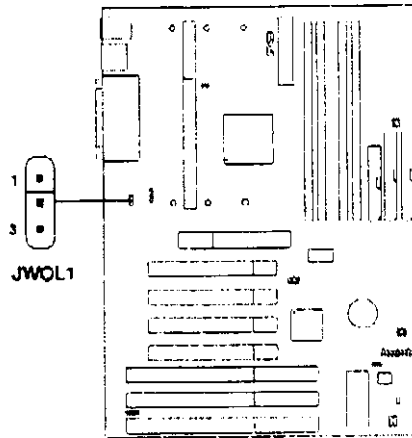| PIN	SIGNAL
1	NC
2	GND
3	MDM_WAKEUP
4	NC
5	5VSB

Note: Modem wake-up signal is active "low".

Note: To be able to use this function, you need a power supply that
provide enough power for this feature.
(750 ma power supply with 5V Stand-by)

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2.19 Wake-Up on LAN Connector: JWOL1

The JWOL1 connector is for use with LAN add-on cards that supports
Wake Up on LAN function.

PIN	SIGNAL
1	5VSB
2	GND
3	MP_WAKEUP

Note: LAN wake-up signal is active "high".

Note: To be able to use this function, you need a power supply that
provide enough power for this feature.
(750 ma power supply with 5V Stand-by)

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2.20 CPU Temperature Sensor: JSOR1

This is used to check the CPU temperature. The JSOR1 is a sensor that is
placed near the processor heatsink. This will monitor the CPU temperature.

JSOR1
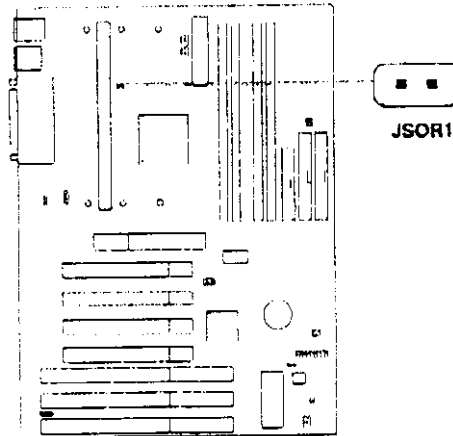
CHAPTER 2   **HARDWARE INSTALLATION**

2.21 Chassis Intrusion Connector: JP3

This connector is connected to 2-pin connector chassis switch. If the
Chassis is open, the switch will be short. The system will record this status.
To clear the warning, you must enter the BIOS settting and clear the status.

JP3
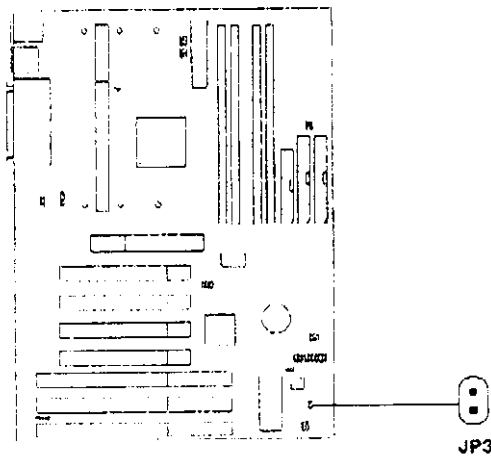
CHAPTER 2   **HARDWARE INSTALLATION**

2.22 Keyboard Power-On Enabled: JVSB (reserved)

This is used to enable the keyboard power on feature. This mainboard
supports keyboard power-on feature. The keyboard needs to have a power
supply which can provide sufficient 5V standby power for both the
keyboard and the mainboard.
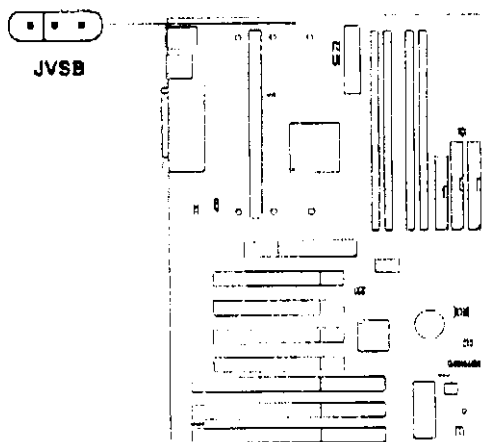
JVSB	Feature
	Enabled Keyboard Wake-up System Power Feature
	Disabled Keyboard Wake-up System Power Feature

Note: a. To be able to use this function, you need a power supply that
provide enough power for the keyboard power on feature.
(750 ma power supply with 5V Stand-by)