⚠ WARNING! Electronic Emission Notices

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 instructions contained in this manual, may cause harmful interference to radio and television 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 INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT OF THE RECEIVER
- CONSULT THE DEALER OR AN EXPERIENCED AUDIO/TELEVISION TECHNICIAN

NOTE: Connecting this device to peripheral devices that do not comply with Class B requirements, or using an unshielded peripheral data cable, could also result in harmful interference to radio or television reception.

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

To ensure that the use of this product does not contribute to interference, it is necessary to use shielded I/O cables.

Copyright

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Table of Contents

HARDWARE CONFIGURATION

The Pentium® motherboard is based on the VIA® Apollo VP3 Chipset. The chipset is a highly integrated solution for a cost-effective and compact motherboard. Features on-board include super-I/O, AGP Version 1.0 compliant, PCI bus master IDE, PCI Ver 2.1 compliance, and support of Pentium CPUs running at 100, 120, 133, 150, 166, 180, 200, 233 and 266MHz, Cyrix / IBM 6x86/6x86L/6x86MX CPUs, AMD K5/K6 processors. DIMM and SIMM sockets are provided onboard, allowing flexible installation of main memory. The onboard pipelined burst cache further boosts the system performance.

Key Features
Processor
- ZIP socket 7
- Fully support for Intel Pentium processors with MMX technology using socket 7.
- Supports 50MHz, 55MHz, 60MHz, 66MHz and 75MHz bus speed including all Pentium processors operating from 75MHz to 266MHz.
- Support Cyrix/IBM 6x86/6x86L/6x86MX processor.
- Support AMD K5/K6 processor
- Support WinChip C6

Cache
- Direct-mapped L2 write-back cache.
- Supports 256KB or 512KB on board synchronous pipelined burst SRAM.

Memory Organiztion
Two 72-pin SIMM socket
- Supports Fast Page Mode (FPM), Extended Data Output(EDO) at 60 or 70ns speed.
- Memory size from 8MB to 256MB.
- Supports single-density SIMMs of 1MB, 2MB, 4MB and 8MB depth(x32 or 36).
- Supports double-density SIMMs of 2MB, 4MB, 8MB and 16MB depth(x32 or 36).
- Banks of different DRAM types depths can be mixed.

Three 168-pin DIMM socket
- Supports 3.3V Extended Data Output(EDO) DRAM at 50 and 60ns speed and Synchronous DRAM as 66MHz or above.
- Memory size up to 384MB.
- Supports single-density DIMMs of 1MB, 2MB, 4MB, 8MB and 16MB depth (x64 or 72).
- Supports double-density DIMMs of 2MB, 4MB, 8MB, 16MB and 32MB depth (x64 or 72).
- Support 3.3V SDRAM or 5V Fast page / EDO DRAM.
- Banks of different DRAM types depths can be mixed.

On-Board I/O

- Two PCI fast IDE ports supporting up to 4 ATA2, Ultra DMA33 IDE drives.
- Supports bus master IDE, PIO mode 4 and Ultra DMA 33 (up to 33M bytes/sec) transfer.
- One ECP/EPP parallel port
- Two 16550-compatiable UART serial port
- One floppy port supporting two FDDs of 360KB, 720KB, 1.2M, 1.44M or 2.88M formated capacity.
- Two USB ports.
- Keyboard port. (factory option for PS/2 type)
- PS/2 mouse port.
- Infrared (IrDA) support (via a header).

System BIOS

- 1MB or 2MB flash BIOS supporting PnP, APM, ATAPI, ACPI and windows® 95.
- Auto detects and supports LBA hard disks with formatted capacities over 8.4GB.
- Easily upgradable by end-user.

Plug-and-Play

- Supports plug-and-play specification 1.1.
- Plug-and-play for DOS, Windows® 3.X as well as Windows® 95.
- Fully steerable PCI interrupts.

Power Management

- Supports SMM, APM and ACPI.
- Break switch for instant suspend/resume on system operation.
- Energy star "Green PC" compliant.
- Supports WAKE-ON-LAN (WOL).

Expansion Slots

- 1 AGP slot (ver. 1.0, 1x/2x mode supported).
- 4 PCI bus master slots (rev. 2.1 compliant, with 1 PCI slot sharing with 1 ISA slot).
- 3 ISA slots (1 ISA slot sharing with 1 PCI slot).

System monitoring (optional)

- LM79/75 hardware compatibles monitoring circuitry is supported, provides voltages, temperature, fan speeds etc. monitoring.

Motherboard Layout (Model Code No. - 35880901)

The following diagram shows the relative positions of the jumpers, connectors, major components and banks on the motherboard.
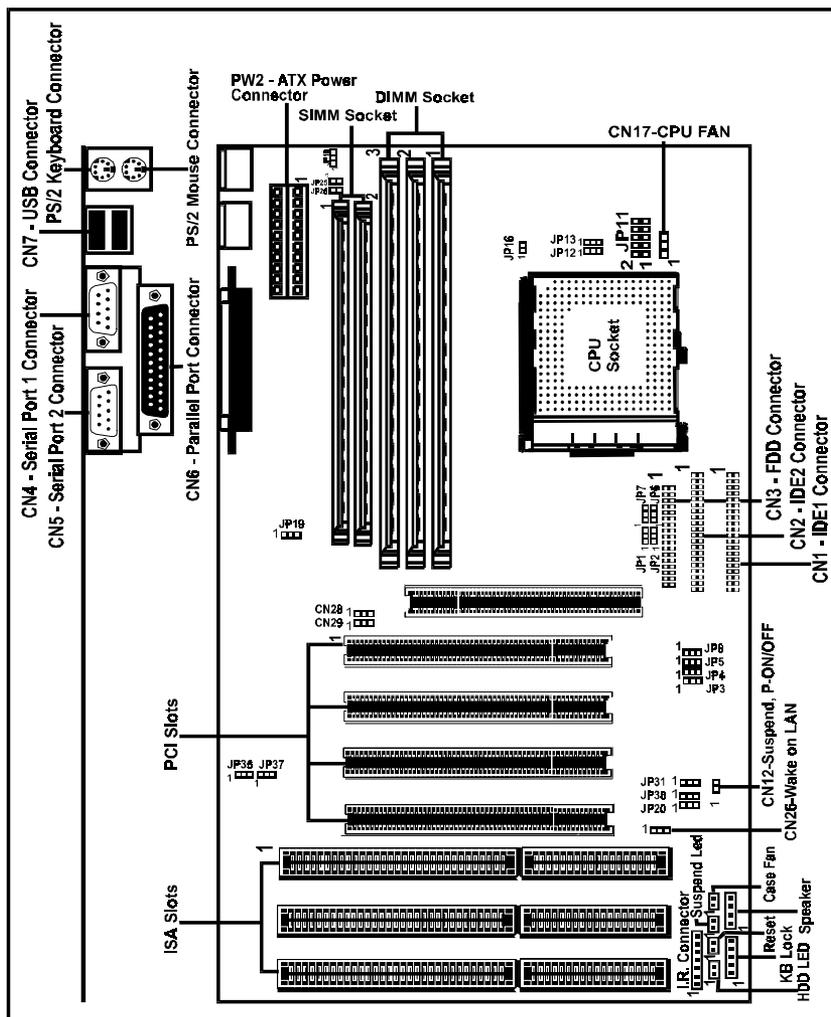
Jumper Settings

This section explains how to configure the motherboard's hardware. Before using your computer, make sure all jumpers and DRAM modules are set correctly. Refer to this chapter whenever in doubt.

## JP1, JP2, JP3, JP4, JP5, JP6 - CPU Type Selection

CPU Type & Speed	CPU Bus Clock & Jumper				CPU Type Jumper		
		JP3	JP4	JP5	JP1	JP2	JP6
Intel Pentium-100	66MHz	1-2	1-2	1-2	1-2	1-2	1-2
Intel Pentium-120	60MHz	2-3	1-2	1-2	1-2	2-3	1-2
Intel Pentium-133	66MHz	1-2	1-2	1-2	1-2	2-3	1-2
Intel Pentium-150	60MHz	2-3	1-2	1-2	2-3	2-3	1-2
Intel Pentium-166	66Mhz	1-2	1-2	1-2	2-3	2-3	1-2
Intel Pentium-180	60MHz	2-3	1-2	1-2	2-3	1-2	1-2
Intel Pentium-200*	66MHz*	1-2*	1-2*	1-2*	2-3*	1-2*	1-2*
Intel Pentium-233	66MHz	1-2	1-2	1-2	1-2	1-2	1-2
Cyrix/IBM 6x86-P120+	50MHz	2-3	2-3	2-3	1-2	2-3	1-2
Cyrix/IBM 6x86-P133+	55MHz	2-3	2-3	1-2	1-2	2-3	1-2
Cyrix/IBM 6x86-P150+	60MHz	2-3	1-2	1-2	1-2	2-3	1-2
Cyrix/IBM 6x86-P166+	66MHz	1-2	1-2	1-2	1-2	2-3	1-2
Cyrix/IBM 6x86-P200+	50MHz	2-3	2-3	2-3	1-2	1-2	1-2
Cyrix/IBM 6x86-P200+	75MHz	1-2	2-3	1-2	1-2	2-3	1-2
Cyrix/IBM 6x86MX-PR166	60MHz	2-3	1-2	1-2	2-3	2-3	1-2
Cyrix/IBM 6x86MX-PR200	66MHz	1-2	1-2	1-2	2-3	2-3	1-2
Cyrix/IBM 6x86MX-PR233	66MHz	1-2	1-2	1-2	2-3	1-2	1-2
Cyrix/IBM 6x86MX-PR233	75MHz	1-2	2-3	1-2	2-3	2-3	1-2
AMD-K5-PR100	66MHz	1-2	1-2	1-2	1-2	1-2	1-2
AMD-K5-PR120	60MHz	2-3	1-2	1-2	1-2	2-3	1-2
AMD-K5-PR133	66MHz	1-2	1-2	1-2	1-2	2-3	1-2
AMD-K5-PR166	66MHz	1-2	1-2	1-2	2-3	2-3	1-2
AMD-K5-PR200	66MHz	1-2	1-2	1-2	2-3	1-2	1-2
AMD-K6-166	66MHz	1-2	1-2	1-2	2-3	2-3	1-2
AMD-K6-200	66MHz	1-2	1-2	1-2	2-3	1-2	1-2
AMD-K6-233	66MHz	1-2	1-2	1-2	1-2	1-2	1-2
AMD-K6-266	66MHz	1-2	1-2	1-2	1-2	2-3	2-3

- This motherboard is compatible with Cyrix 6x86 CPU, which must be Revision 2.7 or newer. Please contact your CPU supplier for details on identification of Cyrix 6x86 CPU revisions

- This motherboard can be run with Cyrix 6x86-P200+ CPU specifications of all add on cards. If system does not behave reliably at 75MHz Bus Clock , you should set the Bus Clock to 50MHz (JP3 set "2-3", JP4 set "2-3", JP5 set "2-3").

- * = Default setting.

WARNING - The VIA® VP3 Chipset are not validated to run at CPU CLK of 75MHz or higher. Therefore, the reliability at these speeds are not guaranteed. Some PCI/AGP cards may not run reliably at over CPU CLK speeds higher than 66MHz.

JP1 JP7
JP6 JP2
JP8 JP5 JP4 JP3
JP16
JP13 JP12
JP11
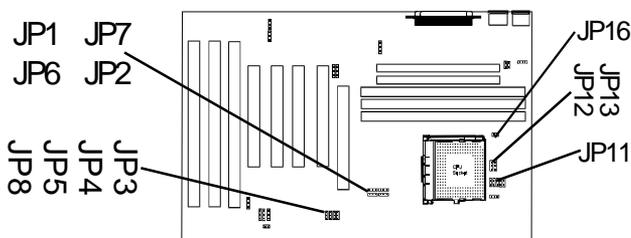
JP11, JP12, JP13, JP16 - Power Selection for the CPU Core Voltage, Bus Section and Bus Voltage

CoreVoltage JP11	BUS Section JP12, JP13	BUSVoltage JP16	CPU Examples
(1.8V)	1-2*	(3.3V)	**for further CPUs**
(2.1V)	1-2*	(3.3V)	**for further CPUs**
(2.2V)	1-2*	(3.3V)	**AMD® K6** (266MHz)
(2.5V)	1-2*	(3.3V)	**AMD K5** ("K" marking)
(2.7V)	1-2*	(3.3V)	**AMD K5** ("J" marking)
(2.8V)*	1-2*	(3.5V)*	**Intel® Pentium Processors with MMX Technology**
(2.8V)	1-2*	(3.3V)	**IBM®/Cyrix® 6x86L** (Core 2.8V I/O 3.3V)
(2.9V)	1-2*	(3.3V)	**IBM/Cyrix 6x86MX, AMD K5** ("H" marking)
(2.9V)	1-2*	(3.5V)*	**AMD K6 PR2-166**
(2.9V)	1-2*	(3.5V)*	**AMD K6 PR2-200**
(3.2V)	1-2*	(3.5V)*	**AMD K6 PR2-233**
(3.3V)	2-3	(3.5V)*	**AMD K5** ("B","C"or"F" marking)
(3.5V)	2-3	(3.5V)*	**Intel P54C**
(3.5V)	2-3	(3.5V)*	**IBM/Cyrix 6x86**

Remark: Example of AMD marking : "AMD-K5-PR100ABQ"
In the above tables, the AMD marking refers to the 2nd character - (B in the example) after P-rating (PR100 in the example).

⬚ Open   ■ Close
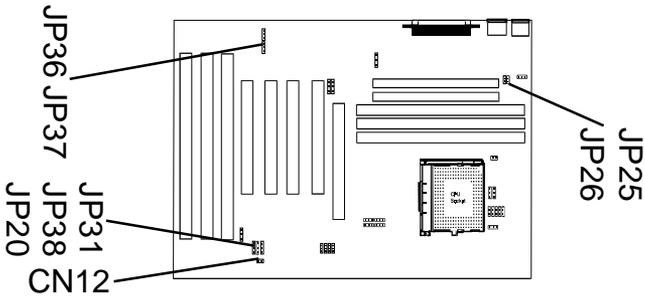
JP25, JP26 - DIMM Voltage Selection

JP25, JP26	DIMM Voltage
Open*	3.3V
Close	5V

For maximum system reliability it is recommended that DIMMs of the same voltage are used for DIMM1 and DIMM2.

JP31 - CMOS Clear

JP31	CMOS
1-2*	Normal operation
2-3	Clear

JP36, JP37 - Reserved Jumpers

Reserved jumpers are pre-installed in the factory. They should NOT be altered by the users.

* = Default setting.

CN12 - Power ON/OFF Switch (Suspend) When ATX Power Supply

is used, Pressing once can turn on the Power Supply, Pressing second can turn off the Power Supply.

Memory Configuration

The table 1 and 2 shows the possible memory combinations. The motherboard will support Fast Page Mode (FPM), Extended Data Output (EDO), Burst Extended Data Output (BEDO) and Synchronous DRAM (SDRAM) DIMMs. You can use different size SIMMs or DIMMs in different slots. The BIOS detect the size and type of installed memory.

Table 1 (SIMM Configurations)

SIMM1	SIMM2	Total
4MB	4MB	8MB
8MB	8MB	16MB
16MB	16MB	32MB
32MB	32MB	64MB
64MB	64MB	128MB

Table 2 (DIMM Configurations)

DIMM1	DIMM2	DIMM3	Total	DIMM1	DIMM2	DIMM3	Total
Empty	8MB	Empty	8MB	8MB	32MB	8MB	48MB
Empty	16MB	Empty	16MB	8MB	64MB	8MB	80MB
Empty	32MB	Empty	32MB	8MB	128MB	8MB	144MB
Empty	64MB	Empty	64MB	16MB	Empty	8MB	24MB
Empty	128MB	Empty	128MB	16MB	8MB	8MB	32MB
8MB	Empty	Empty	8MB	16MB	16MB	8MB	40MB
8MB	8MB	Empty	16MB	16MB	32MB	8MB	56MB
8MB	16MB	Empty	24MB	16MB	64MB	8MB	88MB
8MB	32MB	Empty	40MB	16MB	128MB	8MB	152MB
8MB	64MB	Empty	72MB	32MB	Empty	8MB	40MB
8MB	128MB	Empty	136MB	32MB	8MB	8MB	48MB
16MB	Empty	Empty	16MB	32MB	16MB	8MB	56MB
16MB	8MB	Empty	24MB	32MB	32MB	8MB	72MB
16MB	16MB	Empty	32MB	32MB	64MB	8MB	104MB
16MB	32MB	Empty	48MB	32MB	128MB	8MB	168MB
16MB	64MB	Empty	80MB	64MB	None	8MB	72MB
16MB	128MB	Empty	144MB	64MB	8MB	8MB	80MB
32MB	Empty	Empty	32MB	64MB	16MB	8MB	88MB
32MB	8MB	Empty	40MB	64MB	32MB	8MB	104MB
32MB	16MB	Empty	48MB	64MB	64MB	8MB	136MB
32MB	32MB	Empty	64MB	64MB	128MB	8MB	200MB
32MB	64MB	Empty	96MB	128MB	Empty	8MB	136MB
32MB	128MB	Empty	160MB	128MB	8MB	8MB	144MB
64MB	Empty	Empty	64MB	128MB	16MB	8MB	152MB
64MB	8MB	Empty	72MB	128MB	32MB	8MB	168MB
64MB	16MB	Empty	80MB	128MB	64MB	8MB	200MB
64MB	32MB	Empty	96MB	128MB	128MB	8MB	264MB
64MB	64MB	Empty	128MB	Empty	Empty	16MB	16MB
64MB	128MB	Empty	192MB	Empty	8MB	16MB	24MB
128MB	Empty	Empty	128MB	Empty	16MB	16MB	32MB
128MB	8MB	Empty	136MB	Empty	32MB	16MB	48MB
128MB	16MB	Empty	144MB	Empty	64MB	16MB	80MB
128MB	32MB	Empty	160MB	Empty	128MB	16MB	144MB
128MB	64MB	Empty	192MB	8MB	Empty	16MB	24MB
128MB	128MB	Empty	256MB	8MB	8MB	16MB	32MB
Empty	Empty	8MB	8MB	8MB	16MB	16MB	40MB
Empty	8MB	8MB	16MB	8MB	32MB	16MB	56MB
Empty	16MB	8MB	24MB	8MB	64MB	16MB	88MB
Empty	32MB	8MB	40MB	8MB	128MB	16MB	152MB
Empty	64MB	8MB	72MB	16MB	Empty	16MB	32MB
Empty	128MB	8MB	136MB	16MB	8MB	16MB	40MB
8MB	Empty	8MB	16MB	16MB	16MB	16MB	48MB
8MB	8MB	8MB	24MB	16MB	32MB	16MB	64MB
8MB	16MB	8MB	32MB	16MB	64MB	16MB	96MB

DIMM1	DIMM2	DIMM3	Total
16MB	128MB	16MB	160MB
32MB	Empty	16MB	48MB
32MB	8MB	16MB	56MB
32MB	16MB	16MB	64MB
32MB	32MB	16MB	80MB
32MB	64MB	16MB	112MB
32MB	128MB	16MB	176MB
64MB	Empty	16MB	80MB
64MB	8MB	16MB	88MB
64MB	16MB	16MB	96MB
64MB	32MB	16MB	112MB
64MB	64MB	16MB	144MB
64MB	128MB	16MB	208MB
128MB	Empty	16MB	144MB
128MB	8MB	16MB	152MB
128MB	16MB	16MB	160MB
128MB	32MB	16MB	176MB
128MB	64MB	16MB	208MB
128MB	128MB	16MB	272MB
Empty	Empty	32MB	8MB
Empty	8MB	32MB	40MB
Empty	16MB	32MB	48MB
Empty	32MB	32MB	64MB
Empty	64MB	32MB	96MB
Empty	128MB	32MB	160MB
8MB	Empty	32MB	40MB
8MB	8MB	32MB	48MB
8MB	16MB	32MB	56MB
8MB	32MB	32MB	72MB
8MB	64MB	32MB	104MB
8MB	128MB	32MB	168MB
16MB	Empty	32MB	48MB
16MB	8MB	32MB	56MB
16MB	16MB	32MB	64MB
16MB	32MB	32MB	80MB
16MB	64MB	32MB	112MB
16MB	128MB	32MB	176MB
32MB	Empty	32MB	64MB
32MB	8MB	32MB	72MB
32MB	16MB	32MB	80MB
32MB	32MB	32MB	96MB
32MB	64MB	32MB	128MB
32MB	128MB	32MB	192MB
64MB	Empty	32MB	96MB
64MB	8MB	32MB	104MB
64MB	16MB	32MB	112MB
64MB	32MB	32MB	128MB
64MB	64MB	32MB	160MB
64MB	128MB	32MB	224MB
128MB	Empty	32MB	160MB
128MB	8MB	32MB	168MB
128MB	16MB	32MB	176MB
128MB	32MB	32MB	192MB
128MB	64MB	32MB	224MB
128MB	128MB	32MB	288MB
Empty	Empty	64MB	64MB
Empty	8MB	64MB	72MB
Empty	16MB	64MB	80MB
Empty	32MB	64MB	96MB
Empty	64MB	64MB	128MB
Empty	128MB	64MB	192MB
8MB	Empty	64MB	72MB
8MB	8MB	64MB	80MB
8MB	16MB	64MB	88MB

DIMM1	DIMM2	DIMM3	Total
8MB	32MB	64MB	104MB
8MB	64MB	64MB	136MB
8MB	128MB	64MB	200MB
16MB	Empty	64MB	80MB
16MB	8MB	64MB	88MB
16MB	16MB	64MB	96MB
16MB	32MB	64MB	112MB
16MB	64MB	64MB	144MB
16MB	128MB	64MB	208MB
32MB	Empty	64MB	96MB
32MB	8MB	64MB	104MB
32MB	16MB	64MB	112MB
32MB	32MB	64MB	128MB
32MB	64MB	64MB	160MB
32MB	128MB	64MB	224MB
64MB	Empty	64MB	128MB
64MB	8MB	64MB	136MB
64MB	16MB	64MB	144MB
64MB	32MB	64MB	160MB
64MB	64MB	64MB	192MB
64MB	128MB	64MB	256MB
128MB	Empty	64MB	192MB
128MB	8MB	64MB	200MB
128MB	16MB	64MB	208MB
128MB	32MB	64MB	224MB
128MB	64MB	64MB	256MB
128MB	128MB	64MB	320MB
Empty	Empty	128MB	128MB
Empty	8MB	128MB	136MB
Empty	16MB	128MB	144MB
Empty	32MB	128MB	160MB
Empty	64MB	128MB	192MB
Empty	128MB	128MB	256MB
8MB	Empty	128MB	136MB
8MB	8MB	128MB	144MB
8MB	16MB	128MB	152MB
8MB	32MB	128MB	168MB
8MB	64MB	128MB	200MB
8MB	128MB	128MB	264MB
16MB	Empty	128MB	144MB
16MB	8MB	128MB	152MB
16MB	16MB	128MB	160MB
16MB	32MB	128MB	176MB
16MB	64MB	128MB	208MB
16MB	128MB	128MB	272MB
32MB	Empty	128MB	160MB
32MB	8MB	128MB	168MB
32MB	16MB	128MB	176MB
32MB	32MB	128MB	192MB
32MB	64MB	128MB	224MB
32MB	128MB	128MB	288MB
64MB	Empty	128MB	192MB
64MB	8MB	128MB	200MB
64MB	16MB	128MB	208MB
64MB	32MB	128MB	224MB
64MB	64MB	128MB	256MB
64MB	128MB	128MB	320MB
128MB	Empty	128MB	256MB
128MB	8MB	128MB	264MB
128MB	16MB	128MB	272MB
128MB	32MB	128MB	288MB
128MB	64MB	128MB	320MB
128MB	128MB	128MB	384MB

Installation

Installing a DRAM Module

To install a DRAM module,

- Determine the desired amount of memory and acquire the necessary DRAM modules.

- Note that a DRAM module has a polarity notch at one end so that it fits into a socket only one way. Hold the module by the edges. Do not touch the shiny contacts.

- Align the DRAM module edge connector with the slot at the center of the socket.

- Position the DRAM module to the left of the socket and press the DRAM module edge connector firmly into the socket.

If you have misaligned or only partially seated the module, remove the DRAM module gently and reinstall it.

Installing the Processor

For easy installation of the CPU, it is recommended that you remove all Cards in PCI slots first.

- Unpack the CPU and identify the pin 1 corner of the CPU.

- Match pin 1 of the CPU with pin 1 of the CPU socket. The pin 1 corner of the CPU socket is designated by a small triangle printed on the motherboard.

- Carefully insert the CPU into the CPU socket and move the metal arm downward to replace it in its original position. Change any jumper settings as detailed in the manual.

The small circle marked on the top of the CPU designates the pin 1 corner. If a heat sink is attached and covers the top of the CPU, identify the pin 1 corner by turning the CPU over. Locate the small gold finger that extends from one corner of the large central square portion of the CPU. The gold finger points towards pin 1, which is also uniquely identified by a square pad.

Positioning the CPU incorrectly in the socket can permanently damage the CPU and the computer when you turn on the system.

BIOS SETUP

This chapter discusses Setup Program built into the ROM BIOS. The Setup Program allows users to modify the basic system configuration. This special information is then stored in battery-backed RAM, which retains the setup information when the power is turned off.

Starting Setup

The BIOS is immediately activated when you turn on the computer. The BIOS reads the system information contained in the CMOS and begins the process of checking out the system and configuring it. When it finishes, the BIOS will seek an operating system on one of the disks and then launch and turn control over to the operating system .

While the BIOS is in control, the Setup Program can be activated :

1. By pressing <Del> immediately after switching the system on, or
2. By pressing the <Del> key when the following message appears briefly at the bottom of the screen during the POST (Power On Self Test)

Hit <DEL> if you want to run SETUP

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

PRESS F1 TO CONTINUE

In Case of Problems
If, after making and saving system changes with the Setup Program, you discover that your computer does not reset, use the BIOS defaults to override the CMOS settings.

Main Menu

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

```
┌──────────────────────────────────────────────────────────┐
│         AMIBIOS HIFLEX SETUP UTILITY _ VERSION 1.16        │
│      (C)1996 American Megatrends, Inc. All Rights Reserved │
├──────────────────────────────────────────────────────────┤
│                    Standard CMOS Setup                     │
│                    Advanced CMOS Setup                     │
│                   Advanced Chipset Setup                   │
│                   Power Management Setup                   │
│                  PCI / Plug and Play Setup                 │
│                      Peripheral Setup                      │
│                   CPU Configuration Setup                  │
│                   Auto-Detect Hard Disks                   │
│                    Change User Password                    │
│                 Change Supervisor Password                 │
│                   Change Language Setting                  │
│            Auto Configuration with Optimal Settings        │
│            Auto Configuration with Fail Safe Settings      │
│                    Save Settings and Exit                  │
│                     Exit Without Saving                    │
├──────────────────────────────────────────────────────────┤
│  Standard CMOS setup for changing time, date, hard disk type, etc. │
│       ESC:Exit    ↑↓:Sel    F2/F3:Color    F10:Save & Exit │
└──────────────────────────────────────────────────────────┘
```

(Note : The figures of BIOS Setup Menu included here only show a typical case, and may not be exactly the same as the one on your unit.)

Note that a brief description of each highlighted item will appear at the bottom of the screen.

Standard CMOS Setup   For Changing time, date, hard disk type, etc.

Advanced CMOS Setup   For Configuring system options.

Advanced Chipset Setup   For Configuring chipset features.

Power Management Setup For Configuring Power Management features.

PCI/Plug and Play Setup   For Configuring PCI/Plug&Play features.

Peripheral Setup   For Configuring peripheral features.

CPU configuration Setup   For Configuring CPU configuration features.

Auto-Detect Hard Disks   For auto-detecting all hard disk parameters.

Change User/Supervisor   Changes, sets, or disables password. It allows you to
Password   limit access to the system and Setup Program.

Auto Configuration   Load Configuration settings giving the highest performance.
with Optional Settings

Auto Configuration   Load fail safe Configuration settings.
with Fail Safe Settings

Save Settings and Exit   Writes the Current settings to CMOS and exits.

Exit Without Setting   Exits without saving the current settings.

Standard CMOS Setup

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes one or more setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> key to select the desired value in each item.

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╔══════════════════════════════════════════════════════════════════╗
║           AMIBIOS SETUP - STANDARD CMOS SETUP                      ║
║      (C)1996 American Megatrends, Inc. All Rights Reserved         ║
╠══════════════════════════════════════════════════════════════════╣
║  Date (mm/dd/yyyy) : Mon Oct 27, 1997      Base Memory : 0 KB      ║
║  Time (hh/mm/ss)   : 15:45:00              Extd Memory : 0 MB      ║
║                                                                    ║
║  Floppy Drive A:        1.44 MB 3 ½                                ║
║  Floppy Drive B:        Not Installed                              ║
║                                              LBA   Blk  PIO  32Bit ║
║                 Type    Size Cyln Head WPcom Sec Mode Mode Mode Mode║
║  Pri Master   : Auto                                          On   ║
║  Pri Slave    : Auto                                          On   ║
║  Sec Master   : Auto                                          On   ║
║  Sec Slave    : Auto                                          On   ║
║                                                                    ║
║  Boot Sector Virus Protection      Disabled                       ║
╠══════════════════════════════════════════════════════════════════╣
║  Month :  Jan - Dec                    ESC:Exit   ↑↓:Sel          ║
║    Day :   01 - 31                     PgUp/PgDn:Modify           ║
║     Year : 1901 - 2099                 F2/F3:Color                ║
╚══════════════════════════════════════════════════════════════════╝
```

(Note : The figures of BIOS Setup Menu included here only show a typical case, and may not be exactly the same as the one on your unit.)

Date	The date format is <day-of-the-week>. <day> <year>.
Time	The time format is <hour> <Minute> <second> displayed in 24-hour military-time clock. For example, 1 p. m. is displayed as 13:00:00.
Floppy Drive A: / Floppy Drive B :	This category identifies the types of floppy disk drive A or drive B that has been installed in the computer.
Pri Master/ Pri Slave/ Sec Master/ Sec Slave	These categories identify the types of the two channels that have been installed in the computer. There are 46 predefined types and four user definable types in BIOS. Type 1 to Type 46 are predefined. Type "user" is user-definable.

Press PgUp or PgDn to select a numbered hard disk type or type the number and press <Enter>. Note that the specification of your drive must match with those of the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can select Type "User" to define your own drive type manually.

If you select Type "User", you will need to know the information listed below. Enter the information directly from the keyboard and press <Enter>. This information should be included in the documentation from your hard disk vendor or the system manufacturer.
If the controller of the HDD interface is ESDI, the selection shall be "Type1".

If the controller of the HDD interface is SCSI, the selection shall be "Not Installed".

If you select Type "Auto", the BIOS will auto-detect the HDD and CD-ROM drive at the POST stage and show the IDE for the HDD and CD-ROM drive.

Type	-Drive type
Cyln	-Number of cylinders
Head	-Number of heads
WPcom	-Write precom
Sec	-Number of sectors
LBA Mode	-Mode type
Blk Mode	-Mode type
PIO Mode	-Mode type
32Bit Mode	-Mode type

If a hard disk has not been installed, select "Not Installed" and press <Enter> .

Boot Sector Virus Protection This category determines whether the boot sector virus protection is enabled or not

Advanced CMOS Setup

This section allows you to configure your system for basic operation. You have the opportunity to select the system's default speed, boot-up sequence, keyboard operation, shadowing and security.

Advanced Chipset Setup

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

This section allows you to configure the system based on the specific features of the installed chipset. This chipset manages bus speeds and access to system memory resources, such as DRAM and the external cache. It must be stated that these items should not be altered. The default settings have been chosen because they provide the best operating conditions for your system.

Power Management Setup

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

PCI / Plug and Play Setup

This section describes how to configure the PCI bus system. This section covers some very technical items and it is recommended that only experienced users should make any changes to the default settings.

Peripheral Setup

The Peripheral Setup allows the user to configure the onboard IDE controller, floppy disk controller, the printer port and the serial ports.

Change Supervisor / User Password

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

Supervisor Password : You can enter the Setup Program and change Supervisor/the User Password.

User Password : You can enter the Setup Program but only change the User Password.

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

ENTER PASSWORD:

Type the password, up to six characters in length, and press<Enter>. The new password will clear the previously entered password from the CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and operate without a password.

To disable a password, just press <Enter> when you are prompted to enter the password. A message will be displayed to confirm that the password is disabled.

PASSWORD DISABLED.

Once the password is disabled, the system will reset and you can enter the Setup Program freely.

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

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

The password requirement is defined by the Password Check Option of the Advanced CMOS Setup Menu. If the Password Check Option is set to "Always", the password will be required both at resetting and at entering setup. If the option is set to "Setup", the prompt only appears when you try to enter setup.

Flash Update Procedure

A program AMIFLASH.COM is included in the utility diskette. The user is recommended to follow the procedure below to update the flash BIOS.

1. Create a DOS-bootable floppy diskette. Copy the new BIOS file (just obtained or downloaded) and the utility program AMIFLASH.COM to the diskette.
2. Allow the PC system to boot from the DOS diskette.
3. At the DOS prompt, key in

   AMIFLASH.COM

   and hit <ENTER>

4. The question: "Save Existing BIOS?" is displayed.

   Key in "N" if there is no need to save the existing BIOS content...
   Key in "Y" if a backup copy of the existing BIOS is needed.
   (A file name has to be assigned to the existing BIOS binary file.)

5. Enter the file name of the new BIOS. (e.g.: PPLX0xxx.ROM)
6. The program utility will automatically update BIOS and restart computer.