SOYO™

About This Guide

This User's Guide is for assisting system manufacturers and end users in setting up and installing the mainboard. Information in this guide has been carefully checked for reliability; however, no guarantee is given as to the correctness of the contents. The information in this document is subject to change without notice.

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25Q/R/7 SERIAL

Table of Contents

Chapter 1: Introduction ................................................. 1
  Key Features .......................................................... 1
  Unpacking the Mainboard ............................................. 2
  Electrostatic Discharge Precautions ................................. 2
  Mainboard Layout w/ default settings* ............................. 3

Chapter 2: Hardware Setup .............................................. 4
  JP14-JP16: Factory setting at pins 2-3 (5 Volt) ................. 4
  JP29: CMOS Reset Jumper ........................................... 4
  JP24: Reserved ....................................................... 4
  JP25: Suspend Switch Connector .................................... 4
  CPU Type Configuration ............................................. 5
  Intel/AMD CPU Jumper Settings .................................... 5
  Cyrix CPU Jumper Settings .......................................... 15
  AMD CPU Jumper Settings .......................................... 14
  Cache Configuration .................................................. 5
  Cache Jumper Settings ............................................... 15
  Cache Size and RAM Locations ..................................... 15
  Memory Configuration 1 .............................................. 17
  Memory Configuration 2 .............................................. 18
  Connections .......................................................... 19
  J17: Keylock & Power LED Connector .............................. 19
  J18: Speaker Connector ............................................. 19
  J19: Hardware Reset Control ........................................ 19
  J20: External Battery Connector .................................... 19
  J21: Turbo Switch Connector ....................................... 19
  J22: Turbo LED Connector .......................................... 19
  KB1: Keyboard Connector ........................................... 20
  P1: Power Supply Connectors ...................................... 20
Chapter 3: BIOS Setup

Standard CMOS Setup ........................................ 22
BIOS Features Setup ......................................... 23
Chipset Features Setup ....................................... 26
Power Management Setup .................................... 27
Load Setup Defaults ........................................... 28
Password Setting .................................................. 29
IDE HDD Auto Detection ...................................... 29

1 Introduction

The 486 VESA mainboard is a high-performance system board that supports Intel 486DX2/DX/SX/SL Enhanced 486, P24T, P24D, Cyrix, and UMC CPUs. The mainboard is fully compatible with industry standards, while incorporating many technical enhancements.

The 486 VESA mainboard offers superior system performance, compatibility, and reliability, and is the ideal choice for a wide variety of system applications.

Key Features

- Fully AT compatible. Supports Intel 486DX2/DX/SL Enhanced 486, P24T, P24D, Cyrix M7 CPUs, AMD CPUs, and UMC CPUs.
- Supports Power Management Mode
  - Supports the S4M and the S5M
  - CPU Stop Clock Function
  - Four S3 Power Saving States (on / doze / standby / inactive)
  - Supports the APm control
  - Supports Suspend Switch control
  - Power Saving also on non-SMU CPU
  - More System Event Monitoring and the Power Saving Control
- Direct memory controller that supports 256K cache size
- Fast page burst mode DRAM controller
- Memory configurations from 1MB to 64MB using combinations of 80ns 256K, 512K, 1M, 2M, 4M, 8M and 16M SMM modules.
- Shadow RAM in increments of 32KB
- Supports ISA mode hard disks
- Hardware turbo switch
- Seven 16-bit ISA slots, three master VESA slots
- Built-in 8042 keyboard controller
- Support for both 5V and 3.45V / 3.6V / 4.0V CPUs.

2 Unpacking the Mainboard

The mainboard package contains:
- The 486 VESA Mainboard
- This User's Guide

Note: Do not unpack the mainboard until you are ready to install it.

Follow the precautions below while unpacking the mainboard.
1. Before handling the mainboard, ground yourself by grasping an unpainted portion of the system's metal chassis.
2. Remove the mainboard from its anti-static packaging and place it on a grounded surface, component side up.
3. Check the mainboard for damage. If any chip appears loose, press carefully to seat it firmly in its socket.

Do not apply power if the mainboard appears damaged. If there is damage to the board contact your dealer immediately.

Electrostatic Discharge Precautions

Make sure you ground yourself before handling the mainboard or other system components. Electrostatic discharge can easily damage the components. Note that you must take special precaution when handling the mainboard in dry or air-conditioned environments.

Abide by the precautions below to protect your equipment from electrostatic discharge:
- Do not remove the anti-static packaging until you are ready to install the mainboard and other system components.
- Ground yourself before removing any system component from its protective anti-static packaging. To ground yourself, grasp the expansion slot covers or other unpainted portions of the computer chassis.
- Frequently ground yourself while working, or use a grounding strap.
- Handle the mainboard by the edges and avoid touching its components.

SY-25 Q/R serial
Mainboard Layout w/ default settings*

*Default settings are for an Intel DX2-66 SL Enhanced CPU, 256K cache

---

Figure 1-1. Mainboard Layout

Note: If you use a CPU not listed in this manual, please contact your dealer to determine the correct CPU setting.


2 Hardware Setup

This chapter explains how to configure the mainboard’s hardware. After you install the mainboard, you can set jumpers, install memory, and a coprocessor on the mainboard and make case connections. Refer to this chapter whenever you upgrade or reconfigure your system.

**CAUTION:** Turn off power to the mainboard, system chassis, and peripheral devices before performing any work on the mainboard or system.

**J20:** CMOS Reset Jumper

J20 lets you discharge CMOS memory in the event you forget your password or encounter a BIOS Setup problem. Before you install the mainboard make sure that J20 is set to retain CMOS memory.

<table>
<thead>
<tr>
<th>CMOS Setting</th>
<th>J20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retain CMOS Data</td>
<td>1</td>
</tr>
<tr>
<td>(Default)</td>
<td>2</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>3</td>
</tr>
<tr>
<td>Discharge CMOS</td>
<td>4</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>External Battery</td>
<td>1</td>
</tr>
<tr>
<td>(pins 1 and 4)</td>
<td>2</td>
</tr>
<tr>
<td>3 4</td>
<td></td>
</tr>
</tbody>
</table>

**JP20, JP24:** Reserved

**JP25:** Suspend Switch Connector

Attach the suspend switch to connector JP25. The connector is open for normal operation, closed for Greem operation (power saving).

---

6 Hardware Setup

**CPU Type Configuration**

Configure the 486 VESA mainboard’s CPU by inserting the specified CPU and setting jumpers as described in the diagrams that follow. Note that the CPU Type jumpers on the mainboard have yellow caps and the Clock Setting jumpers have red caps.

**Intel/AMD CPU Jumper Settings**

**Intel**

486SX-25/33 Settings

<table>
<thead>
<tr>
<th>486SX-25 (Red Caps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP4</td>
</tr>
<tr>
<td>JP5</td>
</tr>
<tr>
<td>JP6</td>
</tr>
</tbody>
</table>

486SX-33 (Red Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-25 (Red Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-26* (Red Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-26* (Red Caps) (5V)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Intel/AMD 486DX-25/33/40*/50* & DX2-50*/66*/80* Settings

**486DX-40** (Red Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-50* (Red Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-25* (Red Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-25 (Red Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-26* (Red Caps) (5V)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-26* (Red Caps) (Blue Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-26 (Blue Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-26 (Red Caps) (Blue Caps)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

486DX-26 (Red Caps) (Blue Caps) (5V)

<table>
<thead>
<tr>
<th>JP4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

---

**Figure 2-2. 486DX-25/33/40*/50*, 486DX-26* Jumper Settings**

* For these CPUs a cooling fan is necessary for system stability.
Intel
486DX-25/33SL, DX2-50*/66* SL Settings
DX4-75/100 ODP (5V) (Green CPU)

486DX-33, 486DX2-66*
486DX4-100 ODP
(Red Caps)
JP4
JP5
JP6

486DX4-75 ODP,
486DX2-50*
(Red Caps)
JP4
JP5
JP6
(Blue Caps)

Figure 2-3. Intel 486DX-25/33, DX2-50/66 SL Jumper Settings

* For these CPUs a cooling fan is necessary for system stability.

Intel
486DX4-75*/100* SL (3.45V) Settings
(Green CPU)

486DX4-100*
(Red Caps)
JP4
JP5
JP6

486DX4-75*
(Red Caps)
JP4
JP5
JP6
(Blue Caps)

Figure 2-5. Intel DX4-75*/100 SL Jumper Settings

* For these CPUs a cooling fan is necessary for system stability.

WARNING: The Intel DX4-75/100 CPU is a 3.45 volt CPU. You must make sure jumpers JP14–JP16 are set correctly to avoid damaging the CPU.

Intel
P24T-66*/80* (Green CPU) Settings
(Pentium Overdrive, 238-pin, internal 2.5x clock,
8K WB cache)

Figure 2-4. Intel P24T-66/80 Jumper Settings

* For these CPUs a cooling fan is necessary for system stability.

Intel
P24D-50*/66* (Green CPU) Settings
(Internal 8K WB Cache)

Figure 2-6. Intel P24D-50/66 Jumper Settings

* For these CPUs a cooling fan is necessary for system stability.
For these CPUs a cooling fan is necessary for system stability.

WARNING: The AMD DX2-80 and DX4-100 are 3.45 volt CPUs. You must make sure jumpers JP14-JP16 are set correctly to avoid damaging the CPU.

For these CPUs a cooling fan is necessary for system stability.

WARNING: The Cyrix DX2-V66 CPU is a 3.6 volt CPU, and the Cyrix DX2-80 is a 4 volt CPU. You must make sure jumpers JP14-JP16 are set correctly to avoid damaging the CPU.
Cache Configuration

The 486 VESA mainboard has a write-back caching scheme. You can configure the mainboard's external cache for 256KB by setting jumper switches and installing cache chips. Refer to the following pages for jumper switch settings and cache socket locations.

Cache Jumper Settings

You must set jumpers JP9 and JP10 to configure cache size. See the illustrations below. Note that the cache jumpers on the mainboard have white jumper caps.

Cache Size and RAM Locations

You can configure 256KB cache size using either 32KB or 64KB cache chips. The table below describes the chip type and socket locations for each configuration.

<table>
<thead>
<tr>
<th>Cache Size</th>
<th>Cache RAM</th>
<th>Tag RAM</th>
<th>Cacheable Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>256KB</td>
<td>32K x 8 /</td>
<td>32K x 8 /</td>
<td>32 MB</td>
</tr>
<tr>
<td></td>
<td>U10-U13, U14</td>
<td>U14</td>
<td></td>
</tr>
<tr>
<td>256KB</td>
<td>64K x 8 /</td>
<td>32K x 8 /</td>
<td>32 MB</td>
</tr>
<tr>
<td></td>
<td>U10-U13</td>
<td>U14</td>
<td></td>
</tr>
</tbody>
</table>

Note: Tag and Data RAM use 20ns for all conditions.

Memory Configuration 1 (SY-25 Q/R serial)

Bank 0: 4 x 30-pin SIMM
Bank 1: 1 x 72-pin SIMM
Bank 2: 1 x 72-pin SIMM

You must follow the memory combinations table below. Unlisted combinations are invalid.

<table>
<thead>
<tr>
<th>Single-Sided SIMM</th>
<th>Double-Sided SIMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1MB = 256K x 36(32)</td>
<td>2MB = 512K x 36(32)</td>
</tr>
<tr>
<td>4MB = 1MB x 36(32)</td>
<td>8MB = 2MB x 36(32)</td>
</tr>
<tr>
<td>8MB = 4MB x 36(32)</td>
<td>16MB = 8MB x 36(32)</td>
</tr>
<tr>
<td>64MB = 16MB x 36(32)</td>
<td></td>
</tr>
</tbody>
</table>

Memory Configuration 2 (SY-25 Q/R serial)

Bank 0: 1 x 72-pin SIMM
Bank 1: 1 x 72-pin SIMM
Bank 2: 4 x 30-pin SIMM

You must follow the memory combinations table below. Unlisted combinations are invalid.

<table>
<thead>
<tr>
<th>Total</th>
<th>Bank 0</th>
<th>Bank 1</th>
<th>Bank 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1MB</td>
<td>1MB</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2MB</td>
<td>1MB</td>
<td>1MB</td>
<td>—</td>
</tr>
<tr>
<td>4MB</td>
<td>4MB</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>8MB</td>
<td>4MB</td>
<td>4MB</td>
<td>—</td>
</tr>
<tr>
<td>12MB</td>
<td>4MB</td>
<td>4MB</td>
<td>4MB</td>
</tr>
<tr>
<td>16MB</td>
<td>16MB</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>17MB</td>
<td>1MB</td>
<td>16MB</td>
<td>—</td>
</tr>
<tr>
<td>18MB</td>
<td>1MB</td>
<td>1MB</td>
<td>16MB</td>
</tr>
<tr>
<td>20MB</td>
<td>4MB</td>
<td>16MB</td>
<td>—</td>
</tr>
</tbody>
</table>

Note: Supports parity SIMM (X36) and non-parity SIMM (X32).
Memory Configuration (SY-25 T serial)

The mainboard supports four banks of 72-pin SIMM (Single In-Line Memory Modules). The mainboard requires SIMM of at least 80ns access time.

<table>
<thead>
<tr>
<th>Single Side SIMM</th>
<th>Doubled Side SIMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1MB * 256K x 36(32)</td>
<td>1MB * 512K x 36(32)</td>
</tr>
<tr>
<td>4MB * 1MB x 36(32)</td>
<td>8MB * 2MB x 36(32)</td>
</tr>
<tr>
<td>16MB * 1MB x 36(32)</td>
<td>32MB * 4MB x 36(32)</td>
</tr>
<tr>
<td>64MB * 16MB x 36(32)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Supports parity SIMM (x36) and non-parity SIMM (x32).

You must follow the memory combinations table below. Unlisted combinations are invalid.

<table>
<thead>
<tr>
<th>Total</th>
<th>Bank 0</th>
<th>Bank 1</th>
<th>Bank 2</th>
<th>Bank 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1MB</td>
<td>1MB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2MB</td>
<td>1MB</td>
<td>1MB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4MB</td>
<td>1MB</td>
<td>1MB</td>
<td>2MB</td>
<td></td>
</tr>
<tr>
<td>8MB</td>
<td>1MB</td>
<td>1MB</td>
<td>2MB</td>
<td>4MB</td>
</tr>
<tr>
<td>8MB</td>
<td>4MB</td>
<td>4MB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16MB</td>
<td>1MB</td>
<td>1MB</td>
<td>4MB</td>
<td>4MB</td>
</tr>
<tr>
<td>32MB</td>
<td>4MB</td>
<td>4MB</td>
<td>4MB</td>
<td></td>
</tr>
<tr>
<td>64MB</td>
<td>1MB</td>
<td>1MB</td>
<td>4MB</td>
<td>8MB</td>
</tr>
<tr>
<td>128MB</td>
<td>4MB</td>
<td>4MB</td>
<td>4MB</td>
<td>16MB</td>
</tr>
</tbody>
</table>

Hardware Setup

Connectors

Attach the 486 VESA mainboard to case devices, or an external battery, via connectors on the mainboard. Refer to Figure 1-1 for connector locations and connector pin positions.

J17 - Keylock & Power LED Connector

J17 is a connector for a lock that may be installed on the system case for enabling or disabling the keyboard. J17 also attaches to the case's Power LED.

J18 - Speaker Connector

Attach the system speaker to connector J18.

J19 - Hardware Reset Control

Attach the Reset switch to J19. Closing the Reset switch restarts the system.

J20 - External Battery Connector

J20 is a 4-pin connector to which you can attach an external battery. Pin 1 of J20 is positive (+) and pin 4 is negative (-). (Refer to Page 4)

J21 - Turbo Switch Connector

J21 is connected to a Turbo switch on the front of the system case. The connector's pins are shorted for normal operation and open for turbo operation.

J22 - Turbo LED Connector

J22 connects to a Turbo LED on the case control panel and works with the Turbo Switch. If the mainboard is in Turbo mode, the Turbo LED lights.

Hardware Setup

KB1 - Keyboard Connector

A five-pin female D IN keyboard connector is located at the rear of the board. Plug the keyboard jack into this connector.

P1 - Power Supply Connectors

The mainboard requires a power supply with at least 200 watts and a "power good" signal. P1 has two six-pin male header connectors.

Plug the dual connectors from the power directly onto the board connector while making sure the black leads are in the center.
3 BIOS Setup

The motherboard's BIOS setup program is the ROM ISA BIOS from Award Software Inc. Enter the Award BIOS program's Main Menu as follows:

1. Turn on or reboot the system. After a series of diagnostic checks, you are asked to press DEL to enter setup.

2. Press the <DEL> key to enter the Award BIOS program and the main screen appears:

```
ROM-ISA-BIOS
CMOS SETUP UTILITY
AWARD SOFTWARE INC.

STANDARD CMOS SETUP
8086 FEATURES SETUP
POWER MANAGEMENT SETUP
LOADER SETUP DEFAULTS
Res :Quit  
F1 :Previous  
F2 :Select Item
F5 :Save & Exit Setup 
F6 :Set Date/Time Type...

PASSWORD SETUP
IDE HDD AUTO DETECTION
SILENT SETUP
SPARE SETUP
POWER MANAGEMENT SETUP
EXIT SETUP WITHOUT SAVING

Time :Day   Date :Month  Year :1994
31  9  1994

ROM-ISA-BIOS  STANDARD CMOS SETUP
AWARD SOFTWARE INC.

Date [mm/dd/yy] : 10/12/94
Time [hh:mm:ss] : 12:00:00
CMOS RAM size: 32K
30 10 32
Drive C : None
Drive D : None
Drive A : 1.44M
Drive B : None
Video : EGA/VGA
Wait On All Errors

Data Memory: 640K
Extended Memory: 640K
Total Memory: 1280K

Res : Quit  F1 : Help  F2 : Select Item  F5 : Modify  F6 : Set Date/Time Type...

2. Use the arrow keys to move between items and to select values. Modify selected fields using PgUp/PgDn/+/- keys. Some fields let you key in values directly.

Date [mm/dd/yy]  Type the current date.
Time [hh:mm:ss]  Type the current time.
Drive C & D  Choose from the standard hard disk types 1 to 46. Type 47 is user definable. If a hard disk is not installed choose "Not installed." (default)

Drive A & B  Choose 550KB, 5 1/4", 1.2MB, 5 1/4", 720KB, 3 1/2", 1.44MB, 3 1/2" (default), 2.88MB, 3 1/2" or Not installed.

Video  Choose Monochrome, Color: 40x25, VGA/Ega (default), Color: 64x25

3. When you finish, press the <ESC> key to return to the Main Menu.

BIOS Setup

BIOS Features Setup

Run the BIOS Features Setup as follows:

1. Choose "BIOS FEATURES SETUP" from the Main Menu and a screen with a list of items appears. (The screen below shows the BIOS default settings.)

```
ROM-ISA-BIOS
BIOS FEATURES SETUP
AWARD SOFTWARE INC.

CPU Internal Cache  Enabled
External Cache  Disabled
Quick Power On Self Test  Enabled
Boot Sequence  A,C
Swap Floppy Type  A:C
IDE HDD Block Mode  Disabled
Data Area Option  Disabled
Memory Parity Check  Disabled
Dynamic Area Setting  Disabled
Dynamic Area (Bytes)  Disabled
Security Option  Disabled

Res :Quit  F1 :Help  F2 :Set Password  F5 :Set Date/Time Type...

2. Use the arrow keys to move between items and to select values. Modify the selected fields using PgUp/PgDn/+/- keys. <F5> keys are explained below:

<F1>: "Help" gives options available for each item.

<Shift+F2>: Change color.

<Shift+F3>: Get the old values. These values are the values with which the user started the current session.

<Shift+F4>: Load all options with the BIOS Setup default values.

<Shift+F7>: Load all options with the Setup default values.

BIOS Setup

Standard CMOS Setup

Run the Standard CMOS Setup as follows.

1. Choose "STANDARD CMOS SETUP" from the Main Menu. A screen appears.

2. Use arrow keys to move between items and to select values. Modify selected fields using PgUp/PgDn/+/- keys. Some fields let you key in values directly.

Date [mm/dd/yy]  Type the current date.

Time [hh:mm:ss]  Type the current time.

Drive C & D  Choose from the standard hard disk types 1 to 46. Type 47 is user definable. If a hard disk is not installed choose "Not installed." (default)

Drive A & B  Choose 550KB, 5 1/4", 1.2MB, 5 1/4", 720KB, 3 1/2", 1.44MB, 3 1/2" (default), 2.88MB, 3 1/2" or Not installed.

Video  Choose Monochrome, Color: 40x25, VGA/Ega (default), Color: 64x25

3. When you finish, press the <ESC> key to return to the Main Menu.

BIOS Setup

A short description of screen items follows:

CPU Internal Cache  This option enables/disables the CPU's internal cache. (The Default setting is Enabled.)

External Cache  This option enables/disables the external cache memory. (The Default setting is Enabled.)

Quick Power On  Enabled provides a fast POST at boot-up.

Self Test  The default setting attempts to fast boot from drive A and then from hard disk C. You can reverse this sequence with "C,A", but then drive A cannot boot directly.

Boot Sequence  Enabled changes the sequence of the A and B drives. (The Default setting is Disabled.)

Swap Floppy Drive  Off

Boot Up Num Lock  Choose On or Off. On puts numeric keypad in Num Lock mode at boot-up. Off puts this keypad in arrow key mode at boot-up.

IDE HDD Block Mode  This option enables/disables the IDE HDD Block Mode function. Not all HDDs support this function.

Gate A20 Option  Choose Normal or Fast. Normal allows RAM accesses above 1MB using the fast gate A20 line.

Memory Parity Check  This option enables/disables the memory parity check function. (The Default setting is Disabled.)

Typematic Rate Setting  Enable this option to adjust the keystroke repeat rate.

Typematic Rate (Chars/Sec)  Choose the rate a character keeps repeating.

Typematic Delay (Msec)  Choose how long after you press a key that a character begins repeating.
**BIOS Setup**

**Security Option**
Choose Setup or System. Use this feature to prevent unauthorized system boot-up or use of BIOS Setup.

*System* - Each time the system is booted the password prompt appears.

*Setup* - If a password is set, the password prompt only appears if you attempt to enter the Setup program.

**Video or Adaptor BIOS Shadow**
BIOS shadow copies BIOS code from slower ROM to faster RAM. BIOS can then execute from RAM. These 512K segments can be shadowed from ROM to RAM. BIOS is shadowed in a 512K segment if it is enabled and it has BIOS present.

3. After you have finished with the BIOS Features Setup program, press the <ESC> key and follow the screen instructions to save or disregard your settings.

**30**

**Bid Set**

**Power Management Setup**

The Power Management Setup option sets the system's power saving functions.

Run the Power Management Setup as follows.

1. Choose "POWER MANAGEMENT SETUP" from the Main Menu and a screen with a list of items appears.

<table>
<thead>
<tr>
<th>POWER MANAGEMENT SETUP</th>
<th>AUTO CONFIGURED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Management</td>
<td>Disabled</td>
</tr>
<tr>
<td>Video Off Method</td>
<td>V/H Sync Clock</td>
</tr>
<tr>
<td>Doze Timer</td>
<td>Disabled</td>
</tr>
<tr>
<td>Standby Timer</td>
<td>Disabled</td>
</tr>
<tr>
<td>Doze Timer Select</td>
<td>512 Min</td>
</tr>
<tr>
<td>Standby Timer Select</td>
<td>512 Min</td>
</tr>
<tr>
<td>Standby Activity</td>
<td>Disabled</td>
</tr>
<tr>
<td>HDD Activity</td>
<td>Disabled</td>
</tr>
<tr>
<td>IDE Activity</td>
<td>Disabled</td>
</tr>
<tr>
<td>COM Port Activity</td>
<td>Disabled</td>
</tr>
<tr>
<td>USB Activity</td>
<td>Disabled</td>
</tr>
<tr>
<td>Keyboard Activity</td>
<td>Disabled</td>
</tr>
</tbody>
</table>


2. Use the arrow keys to move between items and to select values. Modify the selected fields using the PgUp/PgDn/+/- keys.

A short description of selected screen items follows:

**Power Management**

*Options are as follows:*

*User Define*  
Let you define the HDD and system power down times.

*Disabled*  
Disables the Green PC Features.

*Min Saving*  
Doze timer = 512 Min  
Sleep timer = 512 Min  
Inactive timer = 512 Min

*Max Saving*  
Doze timer = 0.5 Min  
Sleep timer = 2 Min  
Inactive timer = 2 Min

*Optimize*  
Doze timer = 8 Min  
Standby timer = 8 Min  
Inactive timer = 8 Min

**Load Setup Defaults**

This item loads the system values you have previously saved. Choose this item and the following message appears:

"Load SETUP Defaults (Y/N)?"  
To use the SETUP defaults, change the prompt to "Y" and press "Enter".
Password Setting

This Main Menu item lets you configure the system so that a password is required every time the system boots or an attempt is made to enter the Setup program. Change the password as follows:

1. Choose "PASSWORD SETTING" in the Main Menu and press <Enter>. The following message appears:
   
   "Enter Password:" 
   
2. Enter a password and press <Enter>. (If you do not wish to use the password function, you can just press <Enter> and a "Password disabled" message appears.)

3. After you enter your password, the following message appears prompting you to confirm the new password:
   
   "Confirm Password:" 
   
4. Re-enter your password and then Press <ESC> to exit to the Main Menu.

Important: If you forget or lose the password, the only way to access the system is to set jumper J20 to clear the CMOS RAM. All setup information is lost and you must run the BIOS setup program again.

IDE HDD Auto Detection

This Main Menu item automatically detects the hard disk type and configures the STANDARD CMOS SETUP accordingly.

Note: This function is only valid for IDE hard disks.

ROM ISA BIOS
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