486 SIS

SIS 486 PCI/ISA GREEN PC
SYSTEM BOARD
USER'S MANUAL

586

486

CE

EDITION MAY 1995

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CHAPTER 1. FEATURES

1.1 Specifications .

CPU	: 25-120 MHz Intel/AMD/Cyrix/SGS-THOMSON/IBM... 486SX/DX/DX2/DX4, 3.3V/3.45V/4V/5V CPUs.
MEMORY	: 4 x 72-pin SIMM sockets.
EXP. SLOT	: 4 x ISA and 3 x PCI slots.
CHIPSET	: SIS 85C496 PCI/CPU Memory Controller. SIS 85C497 AT Bus Controller
CACHE SIZE	: 128K/256K/512K .
BIOS	: AMI WIN BIOS.
I/O FUNCTION	: ON BOARD 2 x PCI IDE DEVICES , 1 x FDC , 2 x SERIAL PORTS (16550 FAST COM), 1 x PARALLEL PORT DEVICE /EPP/ECP.
BOARD SIZE	: 22 CM x 22 CM.

CHAPTER 2. INSTALLATION

2.1 Layout reference
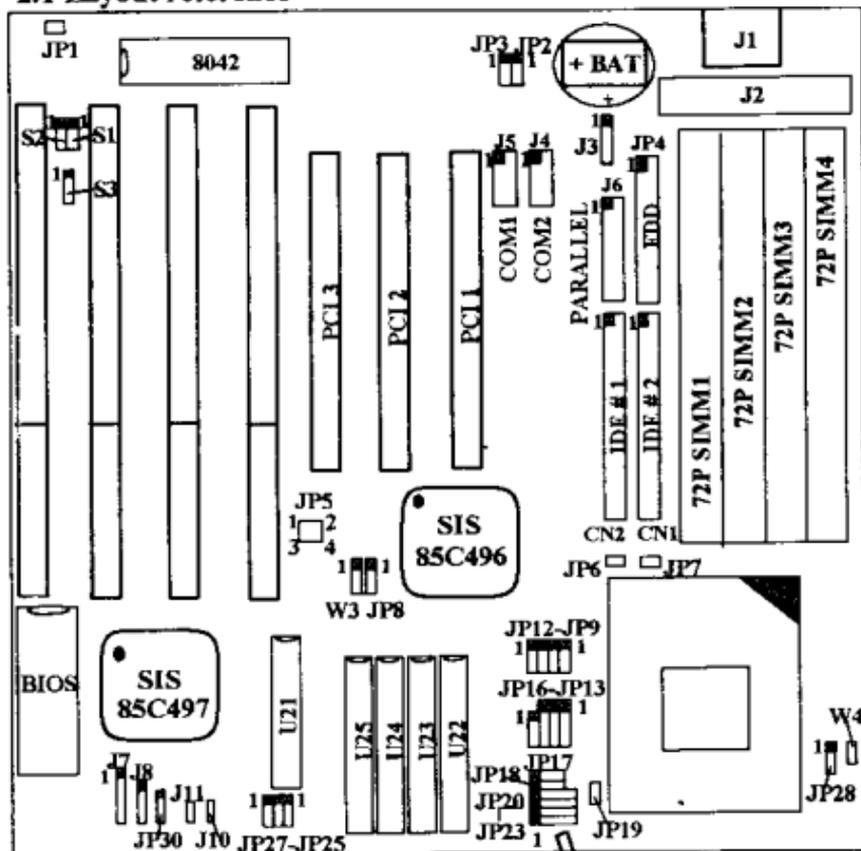
J7 : Keylock
J8 : Speaker
J10 : Reset
J11 : Turbo LED
JP30 : Turbo Switch
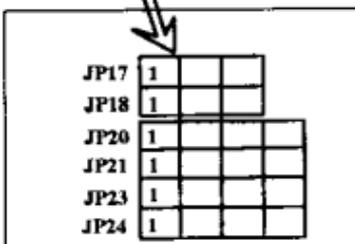
2.2 SIS 486 P1 JUMPER SETTINGS

1. JP5 : CPU CLOCK SELECTOR (YELLOW JUMPER CAP)

	(25 MHZ) 486SX/DX-25 486DX2-50 486DX4-75, P24T-63	(33 MHZ) 486SX/DX-33 486DX2-66/DX4-100 P24T-83, AMD 5X86-133	(40 MHZ) 486DX-40 486DX2-80 486DX4-120	(50 MHZ) 486DX-50
JP5	1-2 OFF 3-4 OFF	1-2 ON 3-4 ON	1-2 ON 3-4 OFF	1-2 OFF 3-4 ON

2. JP28,W4 : 3V/4V/5V CPU VOLTAGE SELECTOR (RED JUMPER CAP)

	INTEL/AMD/Cyrix/TI (3V)	Cyrix DX2-80 (4V)	ALL 5V CPU & P24T-63/83
JP28	1-2	2-3	X
W4	OFF	OFF	ON

3. CPU TYPE SELECTOR (RED JUMPER CAP)

	INTEL DX/DX2/ DX4/ODP	AMD(NV8T) DX/DX2 DX4	CYRIX 5X86	CYRIX/TI DX2/DX4	P24D AMD(SV8B) ENHANCED	P24T	AMD 5X86 -133
JP9	OFF	OFF	OFF	OFF	OFF	OFF	2-3
JP10	OFF	OFF	1-2	OFF	1-2	OFF	1-2
JP11	OFF	OFF	1-2	2-3	1-2	1-2	1-2
JP12	2-3	2-3	2-3	2-3	1-2	1-2	1-2
JP13	4-5	OFF	4-5	2-3	4-5	1-2	4-5
JP14	1-2	OFF	1-2	OFF	OFF	OFF	1-2
JP15	2-3	OFF	2-3	1-2	2-3	2-3	2-3
JP16	OFF	OFF	OFF	OFF	1-2	1-2	OFF
JP18	1-2	OFF	1-2	1-2	1-2	1-2	1-2
JP19	OFF	OFF	ON	OFF	OFF	OFF	OFF
JP20	3-4	3-4	3-4	3-4	3-4	2-3	3-4
JP21	OFF	OFF	OFF	2-3	OFF	OFF	OFF
JP23	3-4	OFF	1-2,3-4	2-3	1-2,3-4	3-4	1-2,3-4
JP24	1-2,3-4	1-2,3-4	1-2,3-4	1-2,3-4	1-2,3-4	1-2,3-4	1-2,3-4

4. JP17 : SPECIAL JUMPER **(RED JUMPER CAP)**

    1-2 : AMD (NV8T) DX4-100 CPU
- INTEL P24D WRITE-BACK CPUs LIKE DX2-66,DX4-75/100
- AMD **(SV8B)** ENHANCED WRITE-BACK CPUs
- AMD 5X86 WRITE-BACK CPUs
- CYRIX 5X86 WRITE-BACK CPUs

    2-3 : ONLY FOR 3.3V AMD DX2-66/80

    OFF : (REMOVE ALL CAPS) FOR OTHER CPUs EXCEPT ABOVE

5. JP25-27: CACHE SIZE SELECTOR.SEE PAGE 8.

6. JP1 : MONITOR TYPE SELECTOR **(BLACK JUMPER CAP)**

        OFF : COLOR (DEFAULT)
        ON : MONOCHROME

7. JP2.JP3 : BATTERY SELECTOR **(BLACK JUMPER CAP)**

        1-2 : NORMAL (DEFAULT)
        2-3 : RTC DISCHARGE

8. S1 : IRQ SELECTOR **(BLACK JUMPER CAP)**
    S2.S3 : DMA SELECTOR**(BLACK JUMPER CAP)**

    1. SELECTION TABLE

	S1	S2	S3
1-2 ON	IRQ-5	DRQ-1	DACK-1
2-3 ON	IRQ-7	DRQ-3	DACK-3

    2. NOTE:
      (1) USER USUALLY IS NO NEED TO CHANGE JUMPERS ONLY
      WHEN ENCOUNTERS I/O CONFLICT LIKE USING EPP/ECP
      DEVICES OR SOUND CARDS.
      (2) ONCE CONFLICT IS ENCOUNTERED,PLEASE SET CORRECT
      IRQ/DMA ON CARDS OR PERIPHERALS ACCORDING THE USER
      MANUAL OF PERIPHERALS OR CARDS.

9. OTHER JUMPER SETTINGS AND CONNECTORS :

CN1 : IDE CONNECTOR # 2.
CN2 : IDE CONNECTOR # 1.
J3   : EXTERNAL BATTERY CONNECTOR.
J4   : COM2 CONNECTOR.
J5   : COM1 CONNECTOR.
J6   : PARALLEL CONNECTOR.
J7   : FRONT PANEL CONNECTOR.
J8   : SPEAKER CONNECTOR.
J10 : RESET CONNECTOR.
J11 : TURBO LED CONNECTOR.
JP4 : FLOPPY DISK CONNECTOR.
JP6 : IDE # 1 LED CONNECTOR.
JP7 : IDE # 2 LED CONNECTOR.
JP30 : TURBO SWITCH CONNECTOR.

☞**NOTE : CN1 IS DEFAULTED AS IDE CONNECTOR # 2**
          CN2 IS IDE CONNECTOR # 1

REMARKS
1. BEFORE INSTALL A CPU ON MAIN BOARD,YOU NEED TO CHECK
   DETAILELLY WITH YOUR SUPPLIER WHAT'S CPU CLOCK,
   VOLTAGE , MODEL..THEN REFER TO ABOVE JUMPER SETTINGS
   FROM POINT 1 TO 4 CAREFULLY.   PLEASE NOTE IMPROPER
   JUMPER SETTING WILL CAUSE SYSTEM TO SHUTDOWN.
2. P24T-63/83 ARE INTEL PENTIUM ODP CPUs HAVE ON PACKAGE
   3.3V/5V REGULATION, SO MAIN BOARD IS SET AS "5V".
3. AMD PLUS SERIES ARE AMD'S LATEST "WRITE-BACK"
   TECHNOLOGY CPUs.
4. THIS BOARD IS NOT DESIGNED FOR ANY TI 486 CPU.

2.3 Memory Configuration

This section provides information on how to install the DRAM and Cache RAM. Improper installation of DRAM or Cache RAM will cause the system to shutdown.

There are no jumpers for the DRAM configuration. The BIOS will test the DRAM type and size automatically. There are four -banks from SIMM1 to SIMM4 on main board. please follow SIMM1, then 2,3,4 to install memory. DRAM speed must be 70ns or faster. Both parity (x36) or non-parity (x32) are acceptable.

TOTAL	SIMM1	SIMM2	SIMM3	SIMM4
1MBytes	1MB	—	—	—
2MBytes	1MB	1MB	—	—
4MBytes	1MB	1MB	1MB	1MB
5MBytes	1MB	4MB	—	—
8MBytes	4MB	4MB	—	—
8MBytes	8MB	—	—	—
10MBytes	1MB	1MB	8MB	—
12MBytes	4MB	—	8MB	—
16MBytes	4MB	4MB	4MB	4MB
16MBytes	8MB	—	8MB	—
16MBytes	16MB	—	—	—
20MBytes	4MB	16MB	—	—
24MBytes	8MB	—	16MB	—
32MBytes	16MB	16MB	—	—
40MBytes	8MB	—	16MB	16MB
64MBytes	16MB	16MB	16MB	16MB
64MBytes	64MB	—	—	—
128MBytes	64MB	—	64MB	—

NOTE : SIMM1 and SIMM3 accept both single side and double side DRAM. SIMM2, SIMM4 just for single side only, check carefully before installation.

2.4 Cache RAM Configurations

The SIS 496 P.I. system is very flexible in its configuration of
Cache SRAM. Please refer to the Following tables.
(BLACK JUMPER CAP)

JMP	128K	256K	512K
JP25	1-2	2-3	2-3
JP27	2-3	2-3	1-2

JP26 : TAG RAM SIZE SELECTOR

```
1-2 : 32K X 8/8K X 8
2-3 : 16K X 8
```

(1) 128KB Cache RAM
   Bank 0 (U22,U23,U24,U25) : 32Kx8 SRAM 4pcs.
   Tag RAM (U21)   : 8Kx8/32Kx8   SRAM 1pc

(2) 256KB Cache RAM
   Bank 0 (U22,U23,U24,U25) : 64Kx8 SRAM 4pcs.
   Tag RAM (U21)   : 32Kx8/16Kx8 SRAM 1pc

(3) 512KB Cache RAM
   Bank 0 (U22,U23,U24,U25) : 128Kx8 SRAM 4pcs.
   Tag RAM (U21)   : 32Kx8   SRAM 1pc

CHAPTER 3 BIOS SETUP

WinBIOS Power-On Self Test

WinBIOS provides all IBM standard Power-On Self Test (POST) routines as well as enhanced WinBIOS POST routines. WinBIOS POST supports CPU internal diagnostics. WinBIOS POST checkpoint codes are accessible via the Manufacturing Test Port (I/O Port 80h).

WinBIOS Beep Codes

Beeps	Error message	Description
1	Refresh Failure	The memory refresh circuitry is faulty.
2	Parity Error	Parity error in the base memory (the first 64 KB block) of memory.
3	Base 64 KB Memory Failure	Memory failure in first 64 KB.
4	Timer Not Operational	A memory failure in the first 64 KB of memory, or Timer 1 is not functioning.
5	Processor error	The CPU generated error.
6	8042 - Gate A20 Failure	Cannot switch to protected mode.
7	Processor Exception Interrupt Error	The CPU on the CPU Card generated an exception interrupt.
8	Display Memory Read/Write Error	The system video adapter is either missing or its memory is faulty. This is not a fatal error.
9	ROM Checksum Error	The ROM checksum value does not match the value encoded in WinBIOS.
10	CMOS Shutdown Register Read/Write Error	The shutdown register for CMOS RAM has failed.
11	Cache memory bad - do not enable cache	The cache memory test failed. Cache memory is disabled. *Do not press <Ctrl> <Alt> <Shift> <+> to enable cache memory.*

What to Do If the Computer Beeps

Here is what you need to do if your computer has a WinBIOS and it starts beeping:

If the system beeps...	then...
1, 2, or 3 times...	reseat the memory SIMMs or DIPs. If the system still beeps, replace the memory.
6 times...	reseat the keyboard controller chip. If it still beeps, replace the keyboard controller. If it still beeps, try a different keyboard, or replace the keyboard fuse, if the keyboard has one.
8 times...	there is a memory error on the video adapter. Replace the video adapter, or the RAM on the video adapter.
9 times...	the BIOS ROM chip is bad. The system probably needs a new BIOS ROM chip.
11 times...	reseat the cache memory on the motherboard. If it still beeps, replace the cache memory.
4, 5, 7, or 10 times...	the motherboard must be replaced.

3-1 WinBIOS Setup

WinBIOS Setup configures system information that is stored in CMOS RAM WinBIOS Setup has an easy-to-use graphical user interface that will be immediately recognizable to anyone who has ever used Microsoft Windows. WinBIOS Setup sets a new standard in BIOS user interfaces.

Starting WinBIOS Setup

As POST executes, the following appears:

```
Hit <DEL> if you want to run SETUP
```

Press <Del> to run WinBIOS Setup.

Using a Mouse with WinBIOS Setup

WinBIOS Setup can be accessed via a keyboard, a mouse or a pen .
The mouse click functions are :

* single click to change or select both global and current fields and

* double click to perform an operation in the selected field.

Using the Keyboard with WinBIOS Setup

WinBIOS Setup has a built-in keyboard driver that uses simple keystroke
combinations:

Keystroke	Function
\<Tab>	Move to the next window or field.
. . .	Move to the next field to the right, left, above, or below.
\<Enter>	Select in the current field.
+	Increments a value.
-	Decrements a value.
\<Esc>	Closes the current operation and return to previous level
\<PgUp>	Returns to the previous page.
\<PgDn>	Advances to the next page.
\<Home>	Returns to the beginning of the text.
\<End>	Advances to the end of the text.
\<Alt> \<H>	Access a help window.
\<Alt> \<Spacebar>	Exit WinBIOS Setup.
Alphabetic keys	A to Z are used in the Virtual Keyboard, and are not case-sensitive.
Numeric keys	0 to 9 are used in the Virtual Keyboard and Numeric Keypad.

WinBIOS Setup Main Menu

The WinBIOS Setup main menu, shown below, is organized into four windows. Each window corresponds to a section in this chapter.
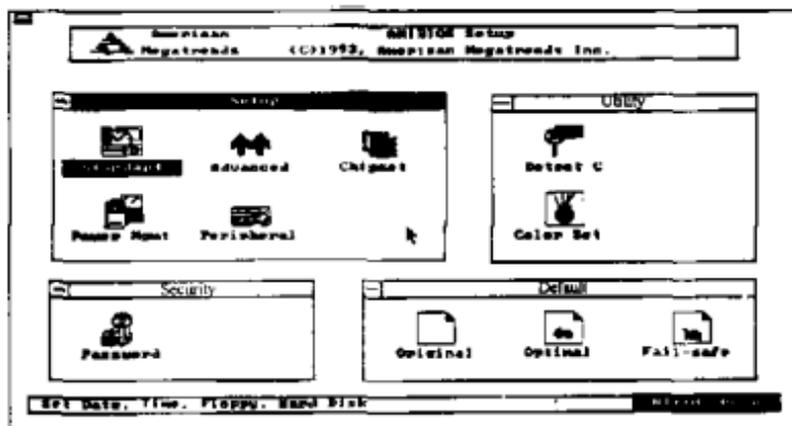
3-2 Standard Setup

This option is used to set *system time,date, floppy drives and hard disk type.*

Using Auto Detect Hard Disk (Only for IDE Drives)

If you select Detect C: or Detect D: from the Utility section of the WinBIOS Setup main menu, WinBIOS automatically finds all IDE hard disk drive parameters. WinBIOS places the hard disk drive parameters that it finds in the Drive C: Type or Drive D: Type fields in Standard Setup.

3-3 Advanced Setup

The Advanced System Setup menu illustrated above has three submenus, allow you to configure the following chipset performance and compatibility options.

Typematic Rate (Chars/Sec)

Typematic Rate sets the rate at which characters on the screen repeat when a key is pressed and held down. The settings are *15, 20, 24,* or *30 characters per second.*

System Keyboard

This option does not specify if a keyboard is attached to the computer. Rather, it specifies if error messages are displayed if a keyboard is not attached. This option permits you to configure workstations with no keyboards. The settings are *Absent* or *Present*.

Primary Display

Select this icon to configure the type of monitor attached to the computer. The settings are *Monochrome, Color 40x25, Color 80x25, VGA/PGA/EGA,* or *Not Installed.*

Mouse Support

When this option is enabled, WinBIOS supports a PS/2-type mouse. The settings are *Enabled* or *Disabled.*

Above 1 MB Memory Test

When this option is enabled, the WinBIOS memory test is performed on all system memory. When this option is disabled, the memory test is done only on the first 1 MB of system memory. The settings are *Enabled* or *Disabled.*

Memory Test Tick Sound

This option enables (turns on) or disables (turns off) the ticking sound during the memory test. The settings are *Enabled* or *Disabled.*

Hit <DEL> Message Display

Disabling this option prevents

     Hit <DEL> if you want to run Setup

from appearing when the system boots. The settings are *Enabled* or *Disabled.*

Extended BIOS RAM Area

Specify in this option if the top 1 KB of the system programming area beginning at 639K or 0:300 in the system BIOS area in low memory will be used to store hard disk information. The settings are *Top 1K* OR *0:300.*

Wait for <F1> If Any Error

WinBIOS POST runs system diagnostic tests that can generate a message followed by:

> Press <F1> to continue

If this option is enabled, WinBIOS waits for the end user to press <F1> before continuing. If this option is disabled, WinBIOS continues the boot process without waiting for <F1> to be pressed. There settings are *Enabled* or *Disabled.*

System Boot Up Num Lock

When On, this option turns off Num Lock when the system is powered on so the end user can use the arrow keys on both the numeric keypad and the keyboard. The settings are *On* or *Off.*

Floppy Drive Seek At Boot

When this option is enabled, WinBIOS performs a Seek command on floppy drive A: before booting the system. The settings are *Enabled* or *Disabled.*

System Boot Up Sequence

This option sets the sequence of boot drives (either floppy drive A: or hard disk drive C:) that WinBIOS attempts to boot from after POST completes. The settings are *C:, A:* or *A:, C:.*

System Boot UP CPU Speed

This option sets the speed of the CPU at system boot time. The settings are *High* or *Low*.

External Cache

This option selects the type of caching algorithm used by WinBIOS and the computer for L2 (external) secondary cache memory. The settings are *Wr-Thru* or *Wr-Back*.

Password Checking

This option enables the password check option every time the system boots or the end user runs Setup. If Always is chosen, a user password prompt appears every time the computer is turned on. If Setup is chosen, the password prompt appears if WinBIOS is executed. See page   for instructions on changing a password. The Optimal and fail-safe default settings are Setup.

Video ROM Shadow C000, 32K

When this option is set to Enabled, the video ROM area from C0000h - C7FFFh is copied (shadowed) to RAM for faster execution. The settings are *Absent, No Shadow, or Shadow,. Shadow C800, 16k Shadow CC00, 16k Shadow D000, 16k Shadow D400, 16k Shadow D800, 16k Shadow DC00, 16k*
These options enable shadowing of the contents of the ROM area named in the option title. The settings are Absent, No Shadow, or Shadow. The ROM area that is not used by ISA adapter cards will be allocated to PCI adapter cards.

3-4. Chipset Setup:

The chipset setup allows user to configure chipset performance and compatibility options. Please do not to change default settings since improper setting causes system to shutdown.

Auto Configuration Function:
The settings are *enabled* and *disabled*, when set to *enabled*,
WinBios automatically detects all default settings. Set to *disabled*
allows user to set the following options.

DRAM Speed:
This option allows user to select DRAM ACCESS TIME. Don't
select *fastest* if DRAM is not good quality.

RAS To CAS Delay:
These settings allow user to set DELAY CYCLES between RAS
To CAS. Please refer to DRAM databook.

Write Cycle Post:
The 486 SIS P.I. implements a 32-BIT ONE-LEVEL POST
memory buffer. The setting as *0-WAIT* enables it and *1-WAIT*
disables it. Please refer to Chipset databook.

Write Cycle CAS Pulse:
This option allows user to set how many CPU cycles which write
CAS needs. Please refer to DRAM databook.

CAS Precharge Time:
This option allows user to set how many CPU cycles which CAS
PRECHARGE needs. Please refer to DRAM databook.

Cache Write Cycle:
This option allows user to set how many CPU cycles which L2
cache memory to complete "WRITE".

Burst Read Cycle:

BRUST READ cycle needs 4 BYTEs to complete. The setting *1T* means the second to fourth BYTEs each needs 1 cycle like X-1-1-1. *2T* means X-2-2-2. Please refer to DRAM databook.

Single Read Cycle:

SINGLE READ needs one BYTE to complete. This option allows user to complete one SINGLE READ by 3 CPU cycles (*3T*) or 2 CPU cycles (*2T*).

VESA LBD Sampling Poing: N/A

AT BUS Clock:

Please always set 7.159 MHZ.

CPU-to-Memory Post Write Buffer:

This option allows user to enable/disable *CPU-TO-MEMORY* posting buffer. Please refer to chipset databook.

CPU-to-Memory Burst Write:

This option allows user to enable/disable *CPU-TO-MEMORY* Burst Write register. Please refer to Chipset databook.

Memory Hole at 15MB:

This option allows user to set memory limit to 15MB when *enabled* is set. Please always set *disabled*.

Slow Refresh:

This option allows user to enable/disable slow REFRESH for memory.

On Chip IDE:

This option allows user to enable/disable ON-BOARD IDE ports.

IDE Port Channel Selection:

This option allows user to select IDE address either *1Fx/17x* or *17x/1Fx*.

Primary (Secondary) Master (Slave) PIO Mode:

These options allow user to set proper PIO Mode of HDDs.
Improper setting will cause system to shutdown!

IDE Post Write Buffer:

This option allows user to enable/disable IDE-POST-WRITE
Buffer on Chipset. (*Enabled* is faster but not recommended since
some HDDs are not suitable for this option).

IDE Prefetch Read Buffer:

Similar to above buffer. *Disabled* is recommended.

PCI IDE Non Compliant Card:

This option allows user to use IDE card (cards) instead of IDE
ports on board. Set proper slot (slots) number in BIOS according
to PCI slot (slots) card (cards) installed.

Primary (Secondary) PCI IDE Card Uses:

These options allow user to set INTA, INTB...... for PCI IDE add
on cards.

PCI Latency Time Adjust:

This option allows user to set different values for PCI LATENCY
TIMER. Please refer to PCI Hardware and Software databook.

PCI IRQ Allocation:
These options allow user to configure INT, IRQ, IRQ TRIGGER for PCI slot 1.2.3.......when set to manual. Set to Auto lets system configure by itself.

3-5. POWER MANAGEMENT SETUP

The SIS 486 P.I. supports GREEN or ENERGY SAVING features by using the following options:

Bios Power Management Mode:
This setting allows user to set as *disabled* to ignore POWER SAVING features or set as *"IRQ 10"* to *"IRQ 15"* to allow more options as follows.

APM Interface
This option allows user to enable/disable APM *(Advanced Power Management)* interface which *BIOS* provides. When using Operation System like UNIX, WINDOWS .... please enable it. (Only DOS can accept *disabled*)

Doze Timer:
User can set *disabled* or time values to enter DOZE MODE, After time out CPU will slow down to 8MHz.

Standby Timer:
Similar to DOZE Timer,After STANDBY Timer CPU remains in 8MHz but monitor will be blank if CPU is GREEN type like INTEL SL-Enhanced.

Suspend Timer:
When timer out, CPU clock stops and monitor remains in blank condition.

Event:

The WINBIOS supports several EVENTs like keyboard, video (display), HDD/FDD .... activities to wake up system. Please refer to BIOS.

Display Adapter Type:

Set YES if VGA card provides POWER SAVING function.

SMOUT Value

Please do not change the factory default values.

3-6 Peripheral Setup

If You Use On Board FDD & I/O Function , The BIOS Peripheral Setup Must Be *Enabled* (DEFAULT)

On-Board Floppy Drive

This option enables the use of the floppy drive controller on the mother board (if installed). the settings are *Enabled* or *Disabled*.

First Serial Port Address

IRQ4 is used for the first serial port (COM1). This option enables serial port 1 on the mother board (if installed). The settings are *2E8h*.

Second Serial Port Address

IRQ3 is used for the second serial port (COM2). This option enables serial port 2 on the mother board, if installed. The settings are *2E8h*.

Parallel Port Address

IRQ7 is used for the parallel port (LPT1). The IRQ can be changed to IRQ5. This option enables the parallel port on the mother board, if installed. The setting are *278h*.

IRQ Active State

This option specifies if the parallel and serial port IRQs are active high or active low. The settings are *low* or *high*.

Parallel Port Mode

This option specifies the parallel port Mode. The settings are *Normal* or *Extended*.

3-7 Utility

The following icons appear in this section:

IDE SETUP :   if HDD is an IDE drive, the hard disk drive
                parameters for IDE drive are automatically detected
                and reported to the Hard Disk Drive C: /D: screen in
                Standard Setup, so you can easily configure drive
                C: /D:.

Color Set   sets the WinBIOS Setup screen colors.

3-8 Security

WinBIOS Password Support

WinBIOS Setup has an optional password feature. The system can be configured so that all users must enter a password every time the system boots or when WinBIOS Setup is executed.

You can enter a password by:

* typing the password on the keyboard,
* selecting each letter via the mouse, or
* selecting each letter via the pen stylus.

Pen access must be customized for each specific hardware platform.

Setting a Password

The password check option is enabled in Advanced Setup by choosing either *Always* (the password prompt appears every time the system is powered on) or *Setup* (the password prompt appears only when WinBIOS Setup is run). The password is stored in CMOS RAM. The system asks for a password.

Enter a 1 - 6 character password. The password does not appear on the screen when typed. WinBIOS will ask you to retype the password. Make sure you write it down. If you forget it, you must drain CMOS RAM and reconfigure the system.

Changing a Password

Select the *Password* icon from the Security section of the WinBIOS Setup main menu. Enter the password and press <Enter>. The screen does not display the characters entered. After the new password is entered, retype the new password as prompted and press <Enter>.

If the password confirmation is incorrect, an error message appears. If the new password is entered without error, press <Esc> to return to the WinBIOS Setup Main Menu. The password is stored in CMOS RAM after WinBIOS Setup completes. The next time the system boots, you are prompted for the password if the password function is present and is enabled.

Remember the Password

Keep a record of the new password when the password is changed. If you forget the password and your computer has an American Megatrends motherboard, remove the computer cover, set battery selector switch to RTC discharge to ON, power on the computer. WinBIOS erases the password.

3-9 Default

The icons in this section permit you to select a group of settings for all WinBIOS Setup options. Not only you can use these icons to quickly set system configuration parameters, you can choose a group of settings that have a better chance of working when the system is having configuration-related problems.

Original

Choose the Original icon to return to the system configuration values present in WinBIOS Setup when you first began this WinBIOS Setup session.

Optimal

You can load the optimal default settings for the WinBIOS Setup options by selecting the Optimal icon. The Optimal default settings are best-case values that should optimize system performance. If CMOS RAM is corrupted, the Optimal settings are loaded automatically.

Fail-Safe

You can load the Fail-Safe WinBIOS Setup option settings by selecting the Fail-Safe icon from the Default section of the WinBIOS Setup main menu. The Fail-Safe settings provide far from optimal system performance, but are the most stable settings. Use this option as a diagnostic aid if the system is behaving erratically.

4-1 SOFTWARE DRIVER

THE SIS 486 P.I. PROVIDES DRIVERS FOR IDE HDDs. PLEASE REFER TO README.* IN DISKETTE.

1. README.NOW: FOR DOS , WINDOWS, NETWARE.

2. README.SCO : FOR UNIX 3.2.X .

3. README.DOC : FOR OS/2.

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SIS 496+497-C