

# SY-6BA+ III Motherboard

Pentium<sup>®</sup> III, Pentium<sup>®</sup> II & Celeron<sup>™</sup>
Processor supported

82440 BX AGP/PCI Motherboard

66&100MHz Front Side Bus supported

ATX Form Factor

User's Guide &
Technical Reference

#### About This Guide

This User's Guide is for assisting system manufacturers and end users in setting up and installing the Motherboard. 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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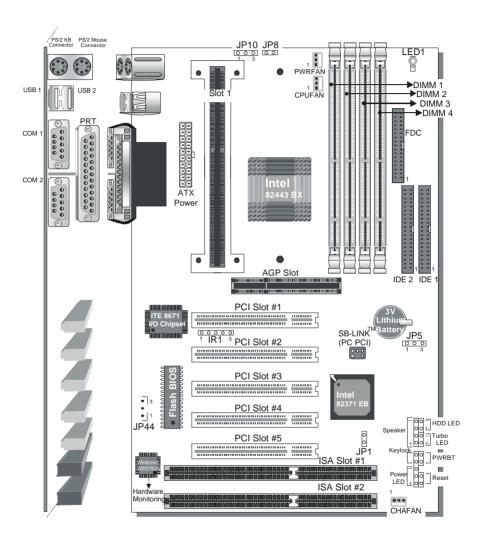
Edition: July 1999 Version 1.2 6BA+ III SERIAL FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

100% POST CONSUMER
RECYCLED PAPER

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#### SY-6BA+ III MOTHERBOARD LAYOUT



**Back Panel** 

SY-6BA+ III Platform

Introduction SY-6BA+ III

# Chapter 1

#### INTRODUCTION

The **SY-6BA+ III** AGP/PCI Motherboard is a high-performance Slot 1 processor supported ATX form-factor system board. **SY-6BA+ III** uses the 82440 BX Chipset technology and supports Slot 1 processors. This Motherboard is fully compatible with industry standards and adds many technical enhancements.

#### 1-1 KEY FEATURES

Supports Intel Pentium® III processor (450-600MHz), Pentium® II processor (233-450MHz) & CeleronTM processor (266-433MHz)) Jumperless and CPU core voltage Adjustable

PC98, ACPI, Ultra DMA/33

Power-on by modem or alarm

SOYO COMBO Setup

Supports Wake-On-LAN (WOL)

Supports onboard hardware monitoring and includes Hardware Doctor ™utility

Supports Creative SB-LINK ™for PCI audio card

1 x 32-bit AGP slot

5 x 32-bit bus mastering PCI slots

2 x USB ports onboard

1 x IrDA port

Supports multiple-boot function

Y2K Compliant

Supports Power Failure Resume (Optional)

Introduction SY-6BA+ III

#### SY-6BA+ III PLATFORM FEATURES

Board Size 4-layer PCB, 19x30.5cm(7.5"x12"), ATX Form

Factor

Slot1 Slot 1 for Pentium<sup>®</sup> III, Pentium<sup>®</sup> II & Celeron<sup>TM</sup>

Processor

Supports the following processors

#### ◆ 100MHz FSB

Pentium® II 350/400/450 MHz Pentium® III 450/500/550/600 MHz

#### ◆ 66MHz FSB

Pentium<sup>®</sup> II 233/266/300/333 MHz Celeron<sup>™</sup> 300A/333/366/400/433 MHz Celeron<sup>™</sup> 266/300 MHz

- Supports both boxed and non-boxed type of CPUs
- > Includes a CPU mount kit with retention clip
- Features Auto-detection of CPU voltage

Chipset 82440 BX AGP Set

ATX Power 20-pin Male Connector

CPUFAN 3-pin CPU Cooling Fan Connector

Memory DIMM Bank (DIMM1~4)

Four strips of 168-pin Unbuffered SDRAM DIMM

Supports 8/16/32/64/128/256MB DIMM modules in each bank

Provides up to 1 Gbytes of main memory

Supports ECC configuration

BIOS System BIOS built-in, Award BIOS

> APM, ACPI and "Plug-and-Play" function

Supports multiple-boot function

Onboard FLASH memory for easy upgrade

> Y2K Compliant

Bus Controller Compliant with version 2.1 PCI specifications

PCI Slots 5 x 32-bit Bus Mastering Slots

AGP Slot 1 x 32-bit AGP Slot ISA Slots 2 x 16-bit ISA Slots

Introduction SY-6BA+ III

IDE1, IDE2 2 x 40-pin Bus Mastering E-IDE/ATAPI Ports

> IDE1: Primary IDE Device Connector

> IDE2: Secondary IDE Device Connector

➤ Supports Ultra DMA/33

FDC 1 Floppy Disk Drive (FDD) Port

(Supports 1.2MB/1.44MB/2.88MB and LS120/3-mode FDD)

IR1 5-pin Serial Infrared Device Header

Keylock 5-pin KeyLock Header

Reset 2-pin Reset Switch Header Speaker 4-pin PC Speaker Header TB\_LED 2-pin Turbo LED Header

HDD\_LED 2-pin IDE Device LED Header

PWRBT ATX Power On/Off Switch 2-pin Header

JP1 External Suspend Button JP5 CMOS Clear Jumper

JP8 CPU multiplier release Jumper
JP10 Power On by Keyboard Jumper
JP44 WOL (Wake-On-LAN) 3-pin Header

LED 1 5V Stand-by indicator LED

SBLINK ™ PCI Audio Card Header (PC-PCI)

#### SY-6BA+ III BACK-PANEL FEATURES

PRT 1 x Onboard 25-pin Female Parallel Printer Port

ECP/EPP/SPP multi-mode parallel printer port

COM1, COM2 2 x Onboard RS-232 Serial Ports

Feature 2 x high-speed UARTs (with 16550 FIFO)

PS/2 KB 1 x Onboard PS/2 Keyboard Connector

PS/2 Mouse 1 x Onboard PS/2 Mouse Connector

USB1, USB2 2 x Onboard USB (Universal Serial Bus) Connectors

Introduction SY-6BA+ III

#### HANDLING THE MOTHERBOARD 1-2

To avoid damage to your Motherboard, follow these simple rules while unpacking:

- Before handling the Motherboard, ground yourself by grasping an unpainted portion of the system's metal chassis.
- $\triangleright$ Remove the Motherboard from its anti-static packaging. Hold the Motherboard by the edges and avoid touching its components.
- Check the Motherboard for damage. If any chip appears loose. press carefully to seat it firmly in its socket.



Warning: Do not apply power if the Motherboard appears damaged. If there is damage to the board, contact your dealer immediately.

#### 1-3 ELECTROSTATIC DISCHARGE PRECAUTIONS

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

To protect your equipment from electrostatic discharge, take the following precautions:

- Do not remove the anti-static packaging until you are ready to install.
- 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 Motherboard by its edges and avoid touching its components.

# Chapter 2

#### HARDWARE SETUP

Congratulations on your purchase of **SY-6BA+ III** Motherboard. You are about to install and connect your new Motherboard.



**Note:** Do not unpack the Motherboard from its protective anti-static packaging until you have made the following preparations.

#### 2-1 PREPARATIONS

Gather and prepare all the following hardware equipment to complete the installation successfully:

1. Slot 1 processor with built-in CPU cooling fan (boxed type).



**Note:** This Motherboard supports non-boxed type CPUs. The heavier CPU cooling fan requires the installation of a CPU support stand.

- 2. DIMM memory module
- 3. Computer case and chassis with adequate power supply unit
- 4. Monitor
- 5. PS/2 Keyboard
- 6. Pointing Device (PS/2 mouse)
- 7. Speaker(s) (optional)
- 8. Disk Drives: HDD, CD-ROM, Floppy drive ...
- 9. External Peripherals: Printer, Plotter, and Modem (optional)
- 10. Internal Peripherals: Modem and LAN cards (optional)

#### 2-2 UNPACKING THE MOTHERBOARD

When unpacking the Motherboard, check for the following items:

 The SY-6BA+ III 82440 BX AGP/PCI Motherboard



- ◆ This User's Manual
- ◆ The Installation CD-ROM
- SOYO 3-in-1 Bonus Pack CD-ROM (Norton AntiVirus, Ghost and Virtual Drive)



- ◆ The CPU Retention Set
- One IDE Device Flat Cable
- One Floppy Disk Drive Flat Cable





**Warning:** Do not unpack the Motherboard from its antistatic packaging until you are ready to install it.

Like most electronic equipment, your Motherboard may be damaged by electrostatic discharge. To avoid permanent damage to components ground yourself while working by using a grounding strap. Otherwise, ground yourself frequently by touching the unpainted portion of the computer chassis to drain the static charges.

Handle the Motherboard carefully, holding it by the edges. You are now ready to start the installation.

#### 2-3 INSTALLATION GUIDE

We will now begin the installation of the Motherboard. Please follow the step-by-step procedure designed to lead you to a complete and correct installation.



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

# **BEGIN THE INSTALLATION**

#### Step 1. CPU Installation

Your SY-6BA+ III motherboard comes with a CPU retention set kit. The retention set is used to hold the processor attached to the Slot 1 CPU connector on the motherboard.

**✓ Mark your CPU Frequency:** Record the working frequency of your CPU that should be clearly marked on the CPU cover.

#### FSB 66MHz

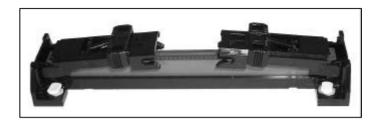
266MHz (66 x 4.0)	333MHz (66 x 5.0)	400MHz (66 x 6.0)	
300MHz (66 x 4.5)	366MHz (66 x 5.5)	433MHz (66 x 6.5)	

#### FSB 100MHz

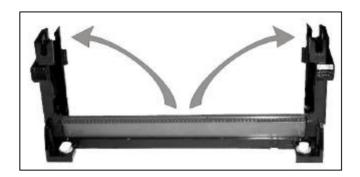
	450MHz (100 x 4.5) 550MHz (100 x 5.5)	
400MHz (100 x 4.0)	□500MHz (100 x 5.0) □ 600MHz (100 x 6.0)	

Follow these instructions to install your Slot 1 processor correctly.

#### Retention Module



1. Open the two sides by folding them up.



2. Push the locks on top of the CPU inward.



3. Insert the CPU into the retention module. The CPU fits in the CPU slot in only ONE way, do not try to force it in.



4. After completely inserting the CPU, push the two locks on top of the CPU outward. Now your CPU is ready for use.





To remove the CPU, press the two notches on top of the CPU inward. Now press the two slides on the retention module down and remove the CPU.



Note: Installing a heat sink and cooling fan on top of your CPU is necessary for proper heat dissipation. Failing to install these items may result in overheating and possible burn-out of your CPU.

#### Step 2. CPU Fan Installation

Your Slot 1 processor kit comes with a cooling fan. Mount the fan on the processor according to the instructions provided by the manufacturer. The fan is a key component that will ensure system stability. The fan prevents overheating, therefore prolonging the life of your CPU.



**Note:** Remember to connect the fan to the appropriate power source.

### Step 3. SDRAM Memory Module Installation

This Motherboard features 4 x DIMM Banks for 168-pin 3.3V unbuffered and registered DIMM modules. Your board comes with four DIMM sockets, providing support for up to 1GB of main memory using DIMM modules from 8MB to 256MB. For 66MHz front side bus CPUs use 12ns or faster memory; for 100MHz front side bus CPUs use 8ns (100MHz, PC100 compliant) memory.

Number of Memory Modules	DIMM 1	DIMM 2	DIMM 3	DIMM 4
1	1 <sup>st</sup>			
2	1 <sup>st</sup>	2 <sup>nd</sup>		
3	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
4	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
RAM Type		SDF	RAM	
Memory Module Size (MB)	8/16/32/64/128/256 Mbytes			
Note: (1) 256 MB memory modules available on PC registered DIMM only.  (2) Always install memory modules in the order prescribed in this table.  (3) Do not install unbuffered and registered memory modules together.				

*Important:* It is of prime importance that you install DIMM modules as outlined in the table above in order to preserve signal integrity on 100MHz front side bus systems.

#### Step 4. IDE Device Installation (HDD, CD-ROM)

This Motherboard offers two primary and secondary IDE device connectors (IDE1, IDE2.) It can support up to four high-speed HDD or CD-ROM.

Connect one side of the 40-pin flat cable to the IDE device (HDD or CD-ROM) and plug the other end to the primary (IDE1) or secondary (IDE2) directionally keyed IDE connector on the Motherboard.

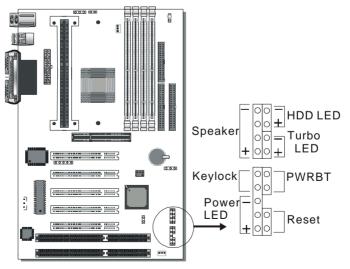
This Motherboard can support up to four HDDs.

## Step 5. Floppy Drive Installation

The system supports 5 possible floppy drive types: 720 KB, 1.2 MB, 1.44 MB, 2.88 MB, and LS-120. In addition, this Motherboard supports a 3-mode (720KB/1.2MB/1.44MB) floppy commonly used in Japan.

Connect one side of the 34-pin flat cable to the floppy drive and plug the other end to the floppy drive connector on the Motherboard. This Motherboard can support up to 2 floppy drives.

**Step 6. Front Panel Connections** 



Plug the computer case's front panel devices to the corresponding headers on the Motherboard.

#### 1. Power LED & KeyLock

Plug the Power LED cable into the 5-pin Keylock header.

Some systems may feature a KeyLock function with a front panel switch for enabling or disabling the keyboard. Connect the KeyLock switch to the 5-pin Keylock header on the Motherboard.

Please install according to the following pin assignment: pin 1,3 are for Power LED and pin 4,5 are for Keylock.

#### 2. Reset

Plug the Reset push-button cable into the 2-pin Reset header on the Motherboard. Pushing the Reset button on the front panel will cause the system to restart the boot-up sequence.

#### 3. Speaker

Attach the 4-pin PC speaker cable from the case to the Speaker header on the Motherboard.

#### 4. Turbo LED

Connecting the 2-pin Turbo LED cable to the corresponding Turbo LED header will cause the LED to light whenever the system is in Turbo mode.

The manufacturer has permanently set this Motherboard in Turbo mode due to most hardware and software compliance to turbo mode.

#### 5. IDE LED

Attach the 2-pin IDE device LED cable to the corresponding IDE LED header on the Motherboard. This will cause the LED to lighten when an IDE (HDD, CD-ROM) device is active.

#### 6. ATX Power On/Off Switch

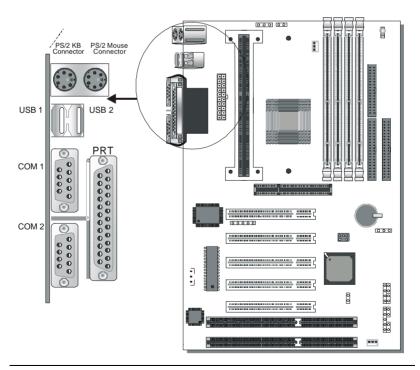
Attach the 2-pin momentary type switch to the PWRBT header for turning On or Off your ATX power supply.

#### Step 7. Back Panel Connections

All external devices such as the PS/2 keyboard, PS/2 mouse, printer, modem, USB can be plugged directly onto the Motherboard back panel.

Only after you have fixed and locked the Motherboard to the computer case can you start connecting the external peripheral devices.

When connecting an external device, use the following figure to locate and identify which back panel connector to plug the device to.



#### 1. Onboard Serial Ports COM1/COM2

External peripherals that use serial transmission scheme include:

- serial mouse,
- and modem.

Plug the serial device cables directly into the COM1/COM2 9-pin male connectors located at the rear panel of the Motherboard.

#### 2. Parallel Port PRT

This parallel port is used to connect the printer or other parallel devices.

Plug the parallel device cable into the 25-pin female connector located at the rear panel of the Motherboard.

#### 3. PS/2 Keyboard

Plug the keyboard jack directly into the 6-pin female PS/2 keyboard connector located at the rear panel of the Motherboard.

#### 4. PS/2 Mouse

Similarly, plug the mouse jack directly into the 6-pin female PS/2 mouse connector.

#### 5. Universal Serial Bus USB1/USB2

This Motherboard provides two USB ports for your additional devices. Plug the USB device jack into the available USB connector USB1 or USB2.

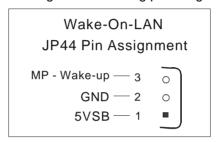
- USB devices under Win98 are allowed.
- With Win95, use the flow UniversalHCI specifications.

#### Step 8. Other Connections

#### 1. Wake-On-LAN (WOL)

Attach the 3-pin connector from the LAN card which supports the Wake-On-LAN (WOL) function to the JP44 header on the Motherboard. This WOL function lets users wake up the connected computer through the LAN card.

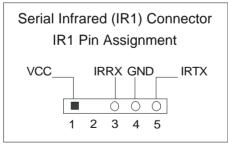
Please install according to the following pin assignment:



#### 2. Infrared (IR1)

Plug the 5-pin infrared device cable to the IR1 header. This will enable the infrared transfer function. This Motherboard meets both the ASKIR and HPSIR specifications.

Please install according to the following pin assignment:



#### 3. Other Display Cards

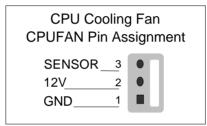
Insert other types of VGA cards into the PCI or ISA expansion slots according to card specifications.

#### Step 9. Cooling Fan Installation

#### 1. CPU Cooling Fan

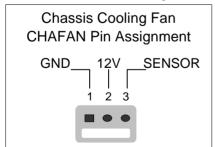
After you have seated the CPU properly on the processor, attach the 3-pin fan cable to the CPUFAN connector on the Motherboard. The fan will stop when the system enters into Suspend Mode. (Suspend mode can be enabled from the BIOS Setup Utility, [POWER MANAGEMENT] menu.)

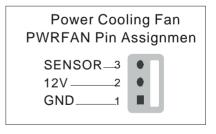
To avoid damage to the system, install according to the following pin assignment:



#### 2. Chassis Cooling Fan & Power Cooling Fan

Some chassis also feature a cooling fan. This Motherboard features a CHAFAN connector to provide 12V power to the chassis fan. Connect the cable from the chassis fan to the CHAFAN 3-pin connector. Install according to the following pin assignment:







**Note:** CPUFAN must be installed for this Motherboard, CHAFAN and PWRFAN are optional.

#### Step 10. AGP VGA Card

Insert the AGP VGA card into the AGP slot. Then connect the monitor information cable to the AGP card back plane external connector.

Follow the manufacturer's instructions to perform the AGP VGA drivers installation.

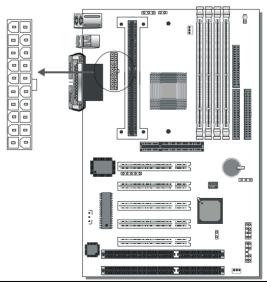
**Other Display Cards:** Insert other types of VGA cards into the PCI or ISA expansion slots according to card specifications.

#### Step 11. PCI Audio Card

Some PCI soundcards require a PC-PCI DMA channel. Attach the 5-pin cable from your PCI audio card to the SB-LINK ™header on the Motherboard. The SB-LINK ™will forward requests for legacy DMA channel to the PCI Bus.

#### Step 12. ATX Power Supply

Plug the connector from the power directly into the 20-pin male ATX PW connector on the Motherboard, as shown in the following figure.



**Warning:** Follow these precautions to preserve your Motherboard from any remnant currents when connecting to ATX power supply:



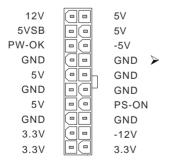
Turn off the power supply and unplug the power cord of the ATX power supply before connecting to ATX PW connector.

The Motherboard requires a power supply with at least 200 Watts and a "power good" signal. Make sure the ATX power supply can take at least 720 mA \* load on the 5V Standby lead (5VSB) to meet the standard ATX specification.

\* **Note:** If you use the Wake-On-LAN (WOL) function, make sure the ATX power supply can support at least 720 mA on the 5V Standby lead (5VSB).

Please install the ATX power according to the following pin assignment:

#### **ATX Power**



Pay special care to the directionality.

#### Step 13. 5V Stand-by indicator LED (LED 1)

This LED is lit whenever the 5V Standby voltage coming from the ATX powersupply is available. If you have connected your ATX powersupply to the mains, LED 1 should be lit.

#### Step 14. External Suspend Button (JP1)

Some cases come with a suspend button, insert the plug into JP1. In addition to this button, the system can also enter the suspend mode through your OS.



**Note:** Suspend mode only functions if your Power Management mode is APM. Make sure that the BIOS setting for Power Management is APM. Windows 98 can be installed with ACPI Power Management (default is APM), in this case suspend mode will not function either.

#### Step 15. CMOS Clearing (JP5)

After you have turned off your computer, clear the CMOS memory by momentarily shorting pins 2-3 on jumper JP5, for a few seconds. Then restore JP5 to the initial 1-2 jumper setting in order to recover and retain the default settings.

Jumper JP5 can be easily identified by its white colored cap.

CMOS Clearing	Clear CMOS Data	Retain CMOS Data		
Setting	at least 5 seconds	Short pin 1-2 to retain new settings		
<b>Note:</b> You must unplug the ATX power cable from the ATX power				
connector when performing the CMOS Clear operation				

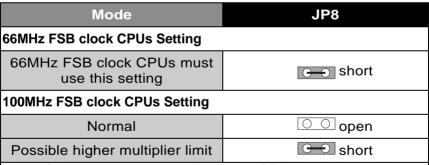
#### Step 16. CPU multiplier release Jumper: (JP8)

Closing JP8 can make higher multiplier settings available on some INTEL CPUs. For technical details read the following:

Your Pentium CPU has an input pin B21 (100/66# signal) to tell it at what Front Side Bus (FSB) Frequency it is running; JP8 is connected to this input pin. The actual FSB Frequency is however set through the BIOS and it may therefore differ from the Frequency specified to the CPU through JP8.

Because some INTEL CPUs have their multipliers limited at a FSB Frequency of 100MHz and higher, telling the CPU that it is running at 66MHz though JP8 while setting a different (higher) FSB Frequency in the BIOS may allow the user to set a higher multiplier value. Doing so will however force your CPU to operate out of its specifications, and therefore SOYO can not guarantee the proper functioning of your system.

Refer to the following table:



Note: Shorting the jumper will tell the CPU that it is running on 66MHz, this will release more multiplier settings on some INTEL CPUs, but will make the system operate out of its specifications if the actual frequency is 100 MHz or higher.

#### Step 17. Power-On by Keyboard Jumper (JP10)

You can choose to enable the Power-On by Keyboard function by shorting pin 1-2 on jumper JP10, otherwise, short pin 2-3 to disable this function.

Power-On by Keyboard	Enable	Disable	
JP10 Setting	Short pin 1-2 to enable the Power-On by Keyboard function.  O O O 1 2 3	Short pin 2-3 and the Power-On by Keyboard function is disabled.	



**Note:** When using the Power-On by Keyboard function, please make sure the ATX power supply can take at least 720mA load on the 5V Standby lead (5VSB) to meet the standard ATX specification.

#### Step 18. Power On

You have now completed the hardware installation of your Motherboard successfully.

- 1. Turn the power on
- To enter the BIOS Setup Utility, press the <DEL> key while the system is performing the diagnostic checks,



**Note:** If you have failed to enter the BIOS, wait until the boot up sequence is completed. Then push the RESET button and press <DEL> key again at the beginning of boot-up, during diagnostic checks.

Repeat this operation until you get the following screen.

#### 3. The BIOS Setup screen appears:

ROM PCI/ISA BIOS CMOS SETUP UTILITY				
AWARD SOF	TWARE, INC.			
SOYO COMBO SETUP INTEGRATED PERIPHERALS				
STANDARD CMOS SETUP SUPERVISOR PASSWORD				
BIOS FEATURES SETUP	USER PASSWORD			
CHIPSET FEATURES SETUP	IDE HDD AUTO DETECTION			
POWER MANAGEMENT SETUP SAVE & EXIT SETUP				
PNP/PCI CONFIGURATION	EXIT WITHOUT SAVING			
LOAD SETUP DEFAULTS				
Esc : Quit $\uparrow \downarrow \rightarrow \leftarrow$ : Select Item				
F10 : Save & Exit Setup	F10 : Save & Exit Setup (Shift) F2 : Change Color			
Time, Date, Ha	rd Disk Type			

#### Step 19. Quick BIOS Setup

This Motherboard does not use any hardware jumpers to set the CPU frequency. Instead, CPU settings are software configurable with the BIOS **[SOYO COMBO SETUP]**. The [SOYO COMBO SETUP] menu combines the main parameters that you need to configure, all in one menu, for a quick setup in BIOS.

After the hardware installation is complete, turn the power switch on, then press the <DEL> key during the system diagnostic checks to enter the Award BIOS Setup program. The CMOS SETUP UTILITY will display on screen. Follow these steps to configure the CPU settings.

SETUP UTILITY will display on screen. Then, follow these steps to configure the CPU settings.

# **Step 1.** Select [STANDARD CMOS SETUP] Set [Date/Time] and [Floppy drive type], then set [Hard Disk Type] to "Auto".

#### Step 2. Select [LOAD SETUP DEFAULT]

Select the "LOAD SETUP DEFAULT" menu and type "Y" at the prompt to load the BIOS optimal setup.

#### Step 3. Select [SOYO COMBO SETUP]

Move the cursor to the **[CPU Frequency]** field to set the CPU frequency.

#### (1) CPU Name & CPU ID

The BIOS will read the CPU name string and CPU ID code From the CPU and it will display it here. This item provides information only and can not be change.

#### (2) CPU Frequency

Available [CPU Frequency] settings on your SY-6BA+ III Motherboard are detailed in the following table.

CPU Frequ	ency (MHz)	Select the working frequency of your Pentium® III, Pentium® II,
		Celeron™ processor among
233MHz (66 x 3.5)	350MHz (100 x 3.5)	these preset values.
266MHz (66 x 4 ) 400MHz (100 x 4 )		Note: Mark the checkbox
300MHz (66 x 4.5) 450MHz (100 x 4.5)		that corresponds to the working frequency of your Pentium® III,
☐ 333MHz (66 x 5 ) ☐500MHz (100 x		Pentium <sup>®</sup> II, Celeron™
☐ 366MHz (66 x 5.5) ☐ 550MHz (100 x 5.5)		processor in case the CMOS configuration should be lost.
400MHz (66 x 6 )	600MHz (100 x 6 )	Comiguration should be lost.
433MHz (66 x 6.5)	650MHz (100 x 6.5)	

If you set this field to [Manual], you are then required to fill in the next two consecutive fields: (a) the CPU Host/PCI Clock, and (b) the CPU Ratio.

#### (a) CPU Host/PCI Clock

			Under this item you find the frequencies your PCI and		
	□95/31	<b>□</b> 115/38	<b>□</b> 124/41	<b>□</b> 140/35	AGP slots run at. These
					frequencies are derived from the CPU host clock in
<b>□</b> 78/39	<b>□</b> 105/35	<b>□</b> 118/39	<b>□</b> 133/33	<b>□</b> 144/36	the following way:
<b>□</b> 81/40	<b>□</b> 110/36	<b>□</b> 120/40	<b>□</b> 135/33	<b>□</b> 150/37	CPU host clock > 100MHz
□83/40	<b>□</b> 112/37	<b>□</b> 122/37	<b>□</b> 137/34	<b>□</b> 155/38	PCI = CPU host clock /3, CPU host clock < 100MHz
<b>□</b> 90/30	□113/37	<b>□</b> 124/31	<b>□</b> 138/34		PCI = CPU host clock /2,

#### (b) CPU Ratio

After you have selected the CPU Host/ PCI Clock, choose the right multiplier for the CPU. CPU Ratio options are:

<b>□</b> x 2	<b>□</b> x 2.5	<b>□</b> x 3	<b>□</b> x 3.5	<b>□</b> x 4
<b>□</b> x 4.5	<b>□</b> x 5	<b>□</b> x 5.5	<b>□</b> x 6	<b>□</b> x 6.5
<b>□</b> x 7	<b>□</b> x 7.5	<b>□</b> x 8		

The CPU frequency is then defined as [host clock freq.] x [multiplier], and should the working frequency of your CPUs processor.

#### (c) AGP Clock

This option allows you to manually adjust the AGP host bus clock frequency to a value determined as a fraction of the CPU host clock. For example:

With a CPU front side bus of 100MHz,

[Auto] sets → When [auto] is selected and the (FSB Frequency) is less then 100MHz, it will be divided by [/ 1]. Otherwise it will be divided by [/ 1.5].

[/ 1] sets → AGP Clock = 100MHz [/ 1.5] sets → AGP Clock = 66.6MHz

AGP Clock options are:

☐ Auto	<b>□</b> ÷1.0	<b>□</b> ÷1.5

#### (d) Vcore Voltage Adjust

The CPU notifies the board of what core voltage it requires by its VID outputs. The on-board voltage regulator uses the VID code to set the core voltage. If the **Vcore Voltage Adjust** is set to normal, the Vcore will be exactly what the VID code specifies. If an adjustment percentage is selected the Vcore will be that percentage higher than the VID code specifies. For instance the CPU VID code specifies 2.0V and the Vcore Voltage adjust is set to +10.0% the actual CPU Voltage will be 2.2V. This function should only be used if the CPU is running on FSB Frequencies beyond the CPU specifications, note that SOYO does not guarantee system stability if this item is not set to normal.

Don't forget to raise the upper limit of the CPU Vcore monitoring voltage in the Hardware Doctor<sup>TM</sup> utility if Vcore is set to higher voltage than VID specifies.

□ Normal	<b>1</b> + 2.5 %	<b>□</b> + 5.0 %	<b>-</b> + 7.5%	<b>-</b> +10.0 %

#### Step 4. Select [SAVE & EXIT SETUP]

Press **<Enter>** to save the new configuration to the CMOS memory, and continue the boot sequence.

#### **Troubleshooting at First Start**

#### • What should I do if the Motherboard refuses to start?

- Check that all DIMM memory modules are inserted completely. Sometimes a DIMM that is not inserted properly can cause boot problems.
- 2. Check whether all Add-on cards have been inserted properly. Re-insert the Add-on cards to make sure that they make proper contact with the slots. Try removing all Add-on cards one by one to see whether or not one of them is causing problems. (Switch the system off before removing any of the cards.

- 3. Verify that speed settings are not exceeding specifications. This applies to the PCI bus, that is specified to run at 33 MHz. Also check the speed setting for the memory, make sure conservative setting is used. If the CPU is overclocked the system may not start up, read the section below.
- 4. Make sure that the Harddisk IDE cables are attached properly, if not the system will not boot. In case of doubt try reversing the IDE connector on one end of the cable.
- 5. Verify that the 110/220V switch on the back of the power supply is set correctly.
- 6. Go through the jumper setting section again to make sure that all jumpers are set correctly.



#### Note on Over-clocking Capability

The SY-6BA+ III provides over-clocking capability. Due to the over-clocking setting your system may fail to boot up or hang during run time. Please perform the following steps to recover your system from the abnormal situation:

- 1. Turn off system power (If you use an ATX power supply, and depending on your system, you may have to press the power button for more than 4 seconds to shut down the system.)
- 2. Set the JP8 to short if you use a FSB 66MHz CPU
- 3. Press and hold down the <Insert> key while turning on the system power. Keep holding down the <Insert> key until you see the message of the CPU type and frequency shown on the screen.
- 4. Press the <Del> key during the system diagnostic checks to enter the Award BIOS Setup program.
- 5. Select [SOYO COMBO SETUP] and move the cursor to the [CPU Frequency] field to set the proper working frequency.
- Select [Save & Exit SETUP] and press <Enter> to save the new configuration to the CMOS memory, and continue the boot sequence.

Note: SOYO does not guarantee system stability if the user over clocks the system. Any malfunctions due to over-clocking are not covered by the warranty.

#### Step 20. Power Off

There are two possible ways to turn off the system:

- 1. Use the **Shutdown** command in the **Start Menu** of Windows 95/98 to turn off your computer.
- Press the mechanical power-button and hold down for over 4 seconds, to shutdown the computer. If you press the powerbutton for less than 4 seconds, then your system will enter into Suspend Mode.

You are now ready to configure your system with the BIOS setup program. Go to *Chapter 3: BIOS SETUP* 

# Chapter 3

#### **BIOS SETUP UTILITY**

This Motherboard's BIOS setup program uses the ROM PCI/ISA BIOS program from Award Software Inc.

To enter the Award BIOS program's Main Menu:

- 1. Turn on or reboot the system.
- 2. After the diagnostic checks, press the [Del] key to enter the Award BIOS Setup Utility.

ROM PCI/ISA BIOS CMOS SETUP UTILITY AWARD SOFTWARE, INC.						
SOYO COMBO SETUP STANDARD CMOS SETUP BIOS FEATURES SETUP CHIPSET FEATURES SETUP	INTEGRATED PERIPHERALS SUPERVISOR PASSWORD USER PASSWORD IDE HDD AUTO DETECTION					
POWER MANAGEMENT SETUP PNP/PCI CONFIGURATION LOAD SETUP DEFAULTS	SAVE & EXIT SETUP EXIT WITHOUT SAVING					
Esc : Quit $\uparrow \downarrow \rightarrow \leftarrow$ : Select Item  F10 : Save & Exit Setup (Shift) F2 : Change Color  Time, Date, Hard Disk Type						

#### Selecting items

- Use the arrow keys to move between items and select fields.
- From the Main Menu press arrow keys to enter the selected submenu.

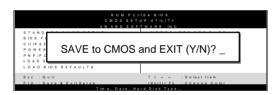
#### Modifying selected items

 Use the [Up]/[Down] keys to modify values within the selected fields. Some fields let you enter values directly. **Hot Keys:** Function keys give you access to a group of commands throughout the BIOS utility.

Function	Command	Description
F1	Help	Gives the list of options available for each item.
Shift F2	Color	Change the color of the display window.
F5	Old values	Restore the old values. These are the values that the user started the current session with.
F6	Load BIOS Defaults	Loads all options with the BIOS Setup default values.
F7	Load Setup Defaults	Loads all options with the Power-On default values.
F10	Save & Exit Setup	Saves your changes and reboots the system.
[Esc]	Quit	Lets you return at anytime and from any location to the Main Menu.

#### SAVE AND EXIT SETUP

Select the [SAVE & EXIT SETUP] option from the Main Menu to save data to CMOS and exit the setup utility. This option saves all your changes and causes the system to reboot.



Type [Y] to save the changes and exit or [N] to return to the Main Menu and keep current values.

#### **EXIT WITHOUT SAVING**

Selecting the [EXIT WITHOUT SAVING] option allows you to abandon all data and exit setup, therefore ignoring all your changes.



Type [Y] to abandon changes and exit or [N] to return to the Main Menu and keep current values.

#### 3-1 SOYO COMBO SETUP

This Motherboard does not use any hardware jumpers to set the CPU frequency. Instead, CPU settings are software configurable with the BIOS [SOYO COMBO SETUP].

After the hardware installation is complete, turn the power switch on, then press the <DEL> key during the system diagnostic checks to enter the Award BIOS Setup program. The CMOS SETUP UTILITY will display on screen. Then, select the [SOYO COMBO SETUP] option from the main menu and press the <Enter> key.

ROM PCI/ISA BIOS										
SOYO COMBO SETUP										
AWARD SOFTWARE, INC.										
CPU Name : Pentium II,		CPU Warning Temperature : Disabled								
CPU Frequency (MHz)		Current System Temp. : 26 ½ C / 78 ½ F								
CPU Host/PCI Clock		Current CPU Temperature : 28 ½ C / 82 ½ F								
	: X 3.5 = 350MHz	Current CPUFAN Speed : 5433 RPM								
	: = 66MHz	Current PWRFAN Speed : 0 RPM								
Vcore Voltage Adjust	: Normal	Current CHAFAN Speed : 0 RPM								
		Vcore : 1.98 V VTT (V) : 1.50 V								
CPU L2 Cache ECC Checking : Enabled		3.3 (V) : 3.55 V + 5 (V) : 4.94 V								
		+12 (V) : 11.97 V -12 (V) : -12.04 V								
Boot Sequence	: A,C,SCSI	- 5 (V) : - 0.02 V VBAT(V) : 3.07 V								
Quick Power On Self Test	: Enabled	5VSB(V) : 5.02 V								
POWER ON Function	: BUTTYON ONLY									
		CPUFAN Off In Suspend : Enabled								
		RTC Y2K H/W Roll over : Disabled								
		ESC : Quit $\uparrow \downarrow \rightarrow \leftarrow$ : Select Item:								
Soft – Off by PWR-BTTN	: Instant-Off	F1 : Help PU / PD / + / - : Modify								
Power-On by Ring/LAN	: Enabled	F5 : Old Values (Shift) F2 : Color								
Resume by Alarm	: Disabled	F7 : Load Setup Defaults								

The [SOYO COMBO SETUP] menu combines the main parameters that you need to configure, all in one menu, for a quick setup in BIOS.

# 3-1.1 Quick CPU Frequency Setup

Quick CPU Frequency Setup	Setting	Descripti	on		Note
CPU Name & CPU ID	The BIOS will read the CPU name string and CPU ID code From the CPU and it will display it here. This item provides information only and can not be change.				
	Manual 233MHz (66 x 3.5) 266MHz (66 x 4) 300MHz (66 x 4.5) 333MHz (66 x 5.5) 400MHz (66 x 5.5) 400MHz (66 x 6.5) 466MHz (66 x 6.5) 466MHz (66 x 7) 350MHz (100 x 3.5) 400MHz (100 x 4.5) 500MHz (100 x 5.5) 550MHz (100 x 5.5) 600MHz (100 x 6.5) 1 field is set to [Manual		Select the working frequency of your Slot 1 processor among these preset values.  Note: Setting this field to [Manual] requires you to fill in the next two consecutive fields: (1) the CPU Host/PCI Clock, and (2) the CPU Ratio.		
CPU Host/PCI Clock	66/33 MHz 75/37 MHz 78/39 MHz 81/40 MHz 83/40 MHz 90/30 MHz 100/33 MH 105/35 MH 110/36 MH 112/37 MH 113/37 MH 115/38 MH 117/39 MH 118/39 MH	124/31 124/41 126/31 133/33 135/33 z 137/34 z 138/34 z 140/35 z 142/35 z 144/36 z 150/37 z 155/38	MHz MHz MHz MHz MHz MHz MHz MHz MHz MHz	Select the hose of your Slot 1 processor ame these values.  Note: For the chipset, 66 and 100 MHz hose clock freques are accepta. However, the system stabe not guarante other freques due to the limitations of chipset.	ne ZX and est encies ble. e ility is eed for encies

# **Quick CPU Frequency Setup (Continued)**

Quick CPU Frequency Setup	Setting	Description	Note		
If [CPU Frequency] CPU Ratio	After you have selected the host clock, choose the right multiplier for the CPU. Options are: [2, 2.5, 3., 3.5, 4, 4.5, 5, 5.5,6,6.5,7.0,7.5,8.0]. The CPU frequency is then defined as [host clock freq.]x[multiplier], and should the working frequency of your Pentium®III, Pentium®II & Celeron™ processor.				
AGP Clock	Auto / 1	This option allows you to manually a AGP host bus clock frequency to a voletermined as a fraction of the CPU clock.  For example:  Vith a CPU front side bus of 66 of 1] sets → AGP Clock = 6 of 1.5] sets → AGP Clock = 4	value I host 6MHz, 66MHz		
Vcore voltage Adjust	+5.0% c c c c c c c c c c c c c c c c c c c	The CPU notifies the board of vore voltage it requires by its Vore voltage it requires by its Vore voltage egulator uses the VID code to core voltage. If the Vcore Voltage edulation is set to normal, the Vcore vacatly what the VID code specing adjustment percentage is seen adjustment percentage is seen adjustment be that percentage in the ViD code specing in the V	set the ge re will be bifies. If elected ge fies. If ifies just is voltage ld only		

# 3-1.2 L2 Cache Memory

	Setting	Description	Note
CPU L2 Cache ECC	Disabled		
Checking	Enabled	This option activates	Default
		the CPU L2 cache ECC	
		checking function.	

## 3-1.3 System Boot Control Settings

System Boot Control Settings	Setting	Description	Note
Boot Sequence	A, C, SCSI C, A, SCSI C, CD-ROM, A CD-ROM, C, A D, A, SCSI E, A, SCSI F, A, SCSI SCSI, A, C SCSI, C, A C only LS/ZIP, C	Choose the boot sequence adapted to your needs, for example:  • [A, C, SCSI] means the BIOS will look for an operating system first in drive A, then in drive C, and eventually in SCSI device.	
Quick Power On Self Test	Disabled Enabled	Provides a fast POTS at boot-up.	Default

# 3-1.4 Power Management

PM Events	Setting	Description	Note
POWER ON	<b>BUTTON-ONLY</b>	Disables the Wake-Up by	Default
Function		Keyboard function.	
	KB Power ON	Enables you to wake-up the	
	Password	system by entering a	
		password at the keyboard.	
	Hot Key	You can wake-up the system	
		by pressing the key	
		combination of your choice	
		(Ctrl-F1~F12).	

# **Power Management (Continued)**

PM Events	Setting	Description	Note		
If [POWER ON	If [POWER ON Function] is set to [KB Power ON Password]				
KB Power ON Password	Enter (your password)	r Set the password that will wake-up your system.			
If [POWER ON	N Function]	is set to [Hot Key]			
KB Power ON Password	Ctrl- F1~F12	Choose the key combination that wake-up the system. [Ctrl-F1 to C			
Soft-Off by	Instant-off		Default		
PWR-BTTN	Delay 4 Sec.	Turns off the system power 4 seconds after pushing the power button.			
Power-On by	Disabled		Default		
Ring/LAN	Enabled	The system will self-power on me when the modem is ringing.			
Resume by	Disabled	The system ignores the alarm.	Default		
Alarm	Enabled	Set alarm to power on the system by the date (1-31) or time (hh:mm:ss). If the date is set to [0], the system will self-power on by alarm everyday at the set time.			

# 3-1.5 CPU Device Monitoring

CPU Device Monitoring	Setting	Description	Note
CPU Warning Temperature	Disabled Enabled	Set CPU temperature from 50°C to 70°C. The CPU will slow down when CPU temperature goes beyond the preset value. The CPU will continue to run slow until the temperature	Default
		returns back within the safe range.	

# **CPU Device Monitoring (Continued)**

CPU Device Monitoring	Setting	Description	Note
Current System Temp.	°C/°F	Show the current status of the system temperature.	
Current CPU Temperature	°C/°F	Show the current status of CPU temperature.	
Current CPUFAN Speed	°C/°F	Show the current status of CPU Fan	
Current PWRFAN Speed	°C/°F	Show the current status of the Power Fan	
Current CHAFAN Speed	°C/°F	Show the current status of the chassis Fan	
Vcore, VTT, 3.3V, +12V, -5V, +5V, -12V, VBAT, 5VSB	V	Show the current voltage status.	
CPUFAN Off In	Disabled	Disables the PM timer.	
Suspend	Enabled	Switches off the CPU Fan when the system enters Suspend Mode.	Default
RTC Y2K H/W	Disabled		Default
Roll over	Enabled	Setting this item to enabled will help the system pass some Y2K test programs. The system performance is influenced by enabling this item, set it to disabled if not necessary.	

#### 3-2 STANDARD CMOS SETUP

Select the [STANDARD CMOS SETUP] option from the Main Menu and press [Enter] key.

		ROM STANDA AWARD	ARD CI		ETUP			
Date (mm:dd:yy)	: Fri, July	31 1998						
Time (hh:mm:ss)	: 11 : 30 :	33						
HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master	: AUTO	0	0	0	0	0	0	AUTO
Primary Slave	: None	0	0	0	0	0	0	
Secondary Master	: None	0	0	0	0	0	0	
Secondary Slave	: None	0	0	0	0	0	0	
Drive A : 1.44M, 3.5 Drive B : None Floppy 3 Mode Sup		led		I	Base Me Extended Me Other Me	emory:	640K 3328K 128K	
Video : EGA/VG Halt On : All Erro				_	Total Me	emory:	4096K	
Esc : Quit	$\uparrow \downarrow \rightarrow \leftarrow$	- : Se	elect Ite	m	PU/PD/	/+/- : <b>!</b>	Modify	
F1 : Help	(Shift) F2	: C	hange (	Color	F3	: 7	Foggle Cal	endar

This screen allows you to modify the basic CMOS settings.

After you have completed the changes, press [Esc] key to return to the Main Menu.

#### 3-2.1 Date & Time

	Display	Setting	Please Note
Date	mm/dd/yyyy	Type the current date	You can also the PUp/PDn keys to toggle
Time	hh:mm:ss	Type the current time	24-hour clock format 3:15 PM is displayed as 15:15:00

## 3-2.2 Hard Disks Type & Mode

Choose the type and mode for the hard disks that you have already installed.

Primary (Secondary) Master & Slave	Setting	Description	Note
Туре	Auto	BIOS detects hard disk type automatically.	Default
	User	User defines the type of hard disk.	
	None		
Mode	Auto	BIOS detects hard disk mode automatically.	Default
	Normal	Normal IDE hard disk	<528MB
	LBA	Enhanced IDE hard disk	>528MB
	Large	Large IDE hard disk (for certain hard disk)	



**Note:** If you have any questions on your hard disk type or mode, ask your hard disk provider or previous user for details.

## 3-2.3 Floppy Drives

Floppy Drives	Setting	Description	Note
Drives A & B	360KB, 5.25 in.		
	1.2MB, 5.25 in.		
	720KB, 3.5 in.		
	1.44MB, 3.5 in.		Default
	2.88MB, 3.5 in.		
	None	Not installed	
Floppy 3-Mode	Disabled		Default
Support	Drive A Drive B Both	Supports 3-mode floppy diskette: 740KB/1.2MB/ 1.44MB on	Special disk drive commonly used in Japan
		selected disk drive.	

#### 3-2.4 Video

Select the video mode: EGA/VGA (Default), CGA 40, CGA 80, Mono (Monochrome).

#### 3-2.5 Halt On

When the BIOS detects system errors, this function will stop the system. Select which type of error will cause the system halt: All Errors (Default), No Errors, All But Diskette, All But Keyboard, All But Disk/Key.

#### 3-3 BIOS FEATURES SETUP

Select the [BIOS FEATURES SETUP] option from the Main Menu and press [Enter] key.

	ROM PCI/	ISA BIOS
	<b>BIOS FEATU</b>	RES SETUP
	AWARD SOF	TWARE, INC.
Anti - Virus Protection	: Enabled	Assign IRQ For VGA : Enabled
CPU Internal Cache External Cache	: Enabled : Enabled	HDD S.M.A.R.T. capability : Disabled
Swap Floppy Drive Report No FDD For WIN 95	: Disabled : Yes	Video BIOS Shadow : Enabled C8000-CBFFF Shadow : Disabled CC000-CFFF Shadow : Disabled D000-D3FFF Shadow : Disabled
Boot Up NumLock Status Security Option PCI/VGA Palette Snoop OS Select For DRAM > 64 MB	: On : Setup : Disabled : Non-OS2	D4000-D7FFF Shadow : Disabled D8000-DBFFF Shadow : Disabled DC000-DFFFF Shadow : Disabled
Typematic Rate Setting Typematic Rate (Chars/Sec) Typematic Delay (Msec)	: Disabled : 6 : 250	ESC: Quit - ® ¬: Select Item F1: Help PU/PD/+/-: Modify F5: Old Values (Shift) F2: Color F7: Load Setup Defaults

After you have completed the changes, press [Esc] key and follow the instructions on your screen to save your settings or exit without saving.

# 3-3.1 Virus Warning

	Setting	Description	Note
Anti - Virus	Disabled		
Protection	Enabled	If set to enabled, the Paragon Anti-Virus. Function will scan your boot drive for boot virusses. If a boot virus is detected, the BIOS will display a warning message.	Default

## 3-3.2 Cache Memory Options

	Setting	Description	Note	
CPU Internal Cache	Disabled			
	Enabled	Enables the CPU's internal cache.	Default	
External Cache	Disabled			
	Enabled	Enables the external	Default	
		memory.		

## 3-3.3 Floppy Driver Settings

Floppy Driver Settings	Setting	Description	Note
Swap Floppy Drive	Disabled Enabled	Changes the sequence of A	Default
Drive	Lilabieu	and B drives.	
Report No FDD For WIN 95	Yes	Windows will release IRQ line 6 (normally used by the Floppy Disk Drive) after you disable your on-board FDD and set this field to [Yes].	
	No	Windows will reserve INT 6 for your FDD, whether it is disabled or not.	

## 3-3.4 Other Control Options

Other Control Options	Setting	Description	Note
Boot Up NumLock	On	Puts numeric keypad in NumLock mode at boot-up.	Default
Status	Off	Puts numeric keypad in arrow key mode at boot-up.	

## 3-3.5 Security Option

Use this feature to prevent unauthorized system boot-up or use of BIOS Setup. The following table describes the security settings.

	Setting	Description
Security Option System		Each time the system is booted, the
		password prompt appears.
	Setup	If a password is set, the password
		prompt only appears when you attempt
		to enter the BIOS Setup program.

#### 3-3.6 Other Control Options

Other Control Options	Setting	Description	Note
PCI/VGA	Disabled		Default
<b>Palette Snoop</b>	Enabled		
	The color of when using option to recolor.		
OS Select for DRAM>64MB	OS2	When using an OS2 operating system.	
	Non-OS2	When using another, non-OS2 operating system.	Default

# 3-3.7 Typematic Settings

Typematic Settings	Setting	Description	Note
Typematic Rate Setting	Disabled Enabled	Enables to adjust the keystroke repeat rate.	Default
		f [Typematic Delay] fields ng] is set to [Enabled]	are
Typematic Rate	6 (Char/sec) 8 (Char/sec) 10 (Char/sec) 12 (Char/sec) 15 (Char/sec) 20 (Char/sec) 24 (Char/sec) 30 (Char/sec)	Choose the rate at which a character is repeated when holding down a key.	Default
Typematic Delay	250 (msec) 500 (msec) 750 (msec) 1000 (msec)	Choose how long after you press a key down the character begins repeating.	Default

# 3-3.8 Other Control Options

Other Control Options	Setting	Description	Note
Assign IRQ	Disabled		
For VGA	Enabled	Use this default setting.	Default
HDD	Disabled		
S.M.A.R.T. capability	Enabled	Enable this field when your HDD supports the S.M.A.R.T. function.	
		Consult your HDD provider for details.	

# **Other Control Options**

Other Control Options	Setting	Description	Note		
Video or	Disabled				
Adapter BIOS	Enabled		Default		
Shadow	The BIOS i	s shadowed in a 16K segment if			
	it is enabled and if it has BIOS present.				
	These 16 segments can be shadowed				
	from ROM	to RAM. BIOS shadow copies			
	BIOS code	from slower ROM to faster			
	RAM. BIOS	S can then execute from RAM.			

#### **3-4 CHIPSET FEATURES SETUP**



**Caution:** Change these settings only if you are already familiar with the Chipset.

The [CHIPSET FEATURES SETUP] option changes the values of the chipset registers. These registers control the system options in the computer.

ROM PCI/ISA BIOS CMOS SETUP UTILITY CHIPSET FEATURES SETUP						
Auto Configuration	: Enabled	Passive Release	: Enabled			
SDRAM RAS-to CAS Delay	: 3	Delayed Transaction	: Disabled			
SDRAM RAS Precharge Time	: 3					
SDRAM CAS latency Time	: 3	AGP Aperture Size	: 64			
SDRAM Precharge Control	: Disabled					
DRAM Data Integrity Mode	: Non-ECC					
System BIOS Cacheable Video BIOS Cacheable	: Disabled					
Video RAM Cacheable	: Disabled					
8 Bit I/O Recovery Time	: 1					
16 Bit I/O Recovery Time	: 1					
Memory Hole At 15M –16M	: Disabled	ESC : Quit F1 : Help F5 : Old Values F7 : Load Setup	- <sup>-</sup> ® ¬ : Select Item PU/PD/+/- : Modify (Shift) F2 : Color Defaults			

After you have completed the changes, press [Esc] and follow the instructions on your screen to save your settings or exit without saving.

The following table describes each field in the CHIPSET FEATURES SETUP Menu and how to configure each parameter.

# **CHIPSET FEATURES SETUP**

CHIPSET FEATURES	Setting	Description	Note
A4 a	Disablad		
Auto Configuration	Disabled Enabled	It is strongly recommended to enable this option so that the system automatically sets all chipset feature options on the left panel of the screen (except for cache update & BIOS cacheable).	Default
SDRAM RAS-to- CAS Delay	3 2	Use the default setting	Default
SDRAM RAS Precharge Time	3 2	Use the default setting	Default
SDRAM Cache Latency Time	3	Use the default setting	Default
SDRAM Precharge Control	Disabled Enabled	Use the default setting	Default
DRAM Data Integrity Mode	Non-ECC ECC	Choose according to the DRAM type you have.	Default
System BIOS	Disabled		
Cacheable	Enabled	The ROM area F0000H-FFFFH is cacheable.	Default
Video BIOS	Disabled		
Cacheable	Enabled	The video BIOS C0000H-C7FFFH is cacheable.	Default
Video RAM	Disabled		Default
Cacheable	Enabled	The ROM area A0000-BFFFF is cacheable.	
8 BIT I/O Recovery Time	1	Use the default setting	Default

# **CHIPSET FEATURES SETUP (Continued)**

CHIPSET FEATURES	Setting	Description	Note
16 BIT I/O Recovery Time	1	Use the default setting	Default
Memory Hole At 15M-16M	Disabled Enabled	Some interface cards will map their ROM address to this area. If this occurs, select [Enabled] in this field.	Default
Passive Release	Enabled	Use the default setting	Default
Delayed Transaction	Enabled	Use the default setting	Default
AGP Aperture Size	64 4-256MB	AGP could use the DRAM as its video RAM. Choose the DRAM size that you wish to allocate as video RAM.	Default
Spread Spectrum Modulated	Disabled Enabled	When using Spread Spectrum Modulated 1.5% or 6% for FCC or DOC testing.	Default

#### 3-5 POWER MANAGEMENT SETUP

The [POWER MANAGEMENT SETUP] sets the system's power saving functions.

ROM PCI/ISA BIOS POWER MANAGEMENT SETUP AWARD SOFTWARE, INC.					
ACPI function PM Control by APM	: Enabled : Yes	** Reload Global Tin	ner Events **		
Video Off Method	: V/H SYNC+Blank	IRQ [3-7, 9-15], NMI	: Disabled		
Video Off After	: Standby	Primary IDE 0	: Disabled		
MODEM Use IRQ	: 3	Primary IDE1	: Disabled		
		Secondary IDE 0	: Disabled		
Power Management	: User Define	Secondary IDE1	: Disabled		
Doze Mode	: Disable	Floppy Disk	: Disabled		
Standby Mode	: Disable	Serial Port	: Enabled		
Suspend Mode	: Disable	Parallel Port	: Disabled		
HDD Power Down	: Disabled				
PCI/VGA Act-Monitor	: Disabled				
IRQ 8 Break Suspend	: Disabled	ESC : Quit F1 : Help F5 : Old Values F7 : Load Setup	$\uparrow \downarrow \rightarrow \leftarrow$ : Select Item PU/PD/+/- : Modify (Shift) F2 : Color Defaults		

After you have completed the Power Management Setup, press [Esc] to return to the Main Menu.

# **3-5.1 Power Management Controls**

Power Management Controls	Setting	Description	Note
ACPI	Disabled		Default
function	Enabled	ACPI (Advanced Configuration Power Management Interface)	
PM Control by APM	Yes	To use Advanced Power Management (APM) you must run [power.exe] under DOS V6.0 or later version.	Default
	No		
Video Off Method	V/H Sync+Blank Blank screen DPMS Supported	Selects the method by which the monitor is blanked.	Default
Video Off After	Standby Suspend Doze	Choose the PM mode you want video to go off after the mode is being active.	
MODEM Use IRQ	3 3-11, NA	Assigns an IRQ# to the modem device.	Default

# 3-5.2 PM Timers

PM Timers	Setting		Descrip	tion			Note
Power	User Defi	ne	•	define th			l Default
Management				ower dov			
	Disable		Disables Features	the Gree s.	en P(	2	
			Doze timer	Standby timer	Susp timer		HDD power down
	Min Savin	ıg	1 Hour	1 Hour	1 H	our	15 Min
	Max Savii	ng	1 Min	1 Min	1 M	in	1 Min
The following [ Management]				e configu	red o	only if	[Power
Doze Mode	Disable					Defau	ılt
	1Min-	Whe	en the set	time has	;	Syste	m clock
	1Hour			S sends a		drops	
		command to the system to 33MHz					z.
		enter Doze Mode.					
Management] Standby	is set to [L Disable	Jser	Define]			Defau	ılt
Mode	1Min-	\	46.0.04	time has		Defau	ilt
Wode	1Hour			S sends a			
	111001		nmand to the system to				
			r Standb	•			
•							
The following [ [Power Manag					figur	ed onl	y if
Suspend	Disable					Defau	ılt
Mode	1Min-			node, the		Only a	
	1Hour			ompletely			ced (or
		instr	uctions a	re execu	ted.)	,	CPU can his mode.
HDD Power	Disabled					Defau	ılt
Down	1-15Min	Whe	en the set	time has	;	Some	
		elap	sed, BIO	S sends a	а	model	
				the HDD		_	ot support lvanced
			er down. HDD mot	This turn or.	s off	function	

## 3-5.3 PM Events

PM Events	Setting	Description	Note
VGA Active	Disabled		
		= 11 a	D ( )
Monitor	Enabled	Enables the power management timers when a [no activity] event is detected.	Default
IRQ 8 Break	Disabled		Default
Suspend	Enabled	Alarm function is active.	

## 3-5.4 Reload Global Timer Events

Power Down & Resume Events	Setting	Description	Note
IRQ [3-7,9-	Disabled		
15], NMI	Enabled	The system monitors these elements for activity. The system will resume if [IRQ activity] is detected.	Default
IDE0, IDE1	Disabled		Default
➤ Primary ➤ Secondary	Enabled	Enables the PM timers when [No Activity Event] is detected.	
Floppy Disk	Disabled		Default
Serial Port Parallel Port	Enabled	Enables the PM timers when [No Activity Event] is detected.	

#### 3-6 PNP/PCI CONFIGURATION SETUP

This option sets the Motherboard's PCI Slots.

The option determine Methological of Choice.								
		ROM PCI	/ISA BIOS					
		PNP/PCI CON	NFIGURATION					
	AWARD SOFTWARE, INC.							
Resources	Controlled By	: Manual	Slot 1,5 /AGP	Use IRQ	: Auto			
Reset Con	figuration Data	: Disabled	Slot 2	Use IRQ	: Auto			
			Slot 3	Use IRQ	: Auto			
IRQ - 3	assigned to	: Legacy ISA	Slot 4/USB	Use IRQ	: Auto			
IRQ - 4	assigned to	: Legacy ISA						
IRQ - 5	assigned to	: PCI/ISA PnP	Used MEM ba	se addr	: N/A			
IRQ - 7	assigned to	: PCI/ISA PnP						
IRQ - 9	assigned to	: PCI/ISA PnP						
IRQ - 10	assigned to	: PCI/ISA PnP	Assign IRQ Fo	r USB	: Enabled			
IRQ - 11	assigned to	: PCI/ISA PnP						
IRQ –12	assigned to	: PCI/ISA PnP	PNP OS Insta	lled	: No			
IRQ - 14	assigned to	: PCI/ISA PnP						
IRQ - 15	assigned to	: PCI/ISA PnP						
DMA - 0	assigned to	: PCI/ISA PnP						
DMA - 1	assigned to	: PCI/ISA PnP						
DMA - 3	assigned to	: PCI/ISA PnP	ESC : Quit	1	$\downarrow \rightarrow \leftarrow$ : Select Item			
DMA - 5	assigned to	: PCI/ISA PnP	F1 : Help	PL	J/PD/+/- : Modify			
DMA - 6	assigned to	: PCI/ISA PnP	F5 : Old V	alues (S	Shift) F2 : Color			
DMA - 7	assigned to	: PCI/ISA PnP	F7 : Load	Setup Defa	aults			



**Note:** Starred (\*) items will disappear when the [Resources Controlled By] option is set to [Auto].

After you have completed the PCI Slot Configuration, press [Esc] and follow the instructions on your screen to save your settings or exit without saving.

#### 3-6.1 PNP/PCI Configuration Controls

PNP/PCI Controls	Setting	Description	Note				
Resources Controlled By		BIOS does not manage PO PnP card IRQ assignment.					
	Requires	to assign IRQ-# and DMA-#	# to PCI				
		P manually.					
		4,5,7,9,10,11,12,14,15 assigned to: _					
		-0,1,3,5,6,7 assigned to: _					
	Auto The Plug-and-Play BIOS auto manages PCI/ISA PnP card IRQ assignme automatically.						
Reset Configuration	Disabled	Retain PnP configuration data in BIOS.	Default				
Data	Enabled	Reset PnP configuration data in BIOS.					

#### 3-6.2 PNP/PCI Configuration Setup

PNP/PCI Setup	Setting	Description	Note
If [Resources C	ontrolled By] i	s set to [Manual]	
IRQ-# and DMA-# assigned to:	PCI/ISA PnP	Choose IRQ-# and DMA-# assigned to PCI/ISA PnP card.	IRQ-3,4,5,7,9,10, 11,12,14,15 DMA-0,1,3,5,6,7
	Legacy ISA	Choose IRQ-# and DMA-# assigned to Legacy ISA card.	IRQ-3,4,5,7,9,10, 11,12,14,15 DMA-0,1,3,5,6,7

Under this item the user can assign an IRQ to a PCI slot. However, there under some conditions the IRQ will not be assigned as selected under this item:

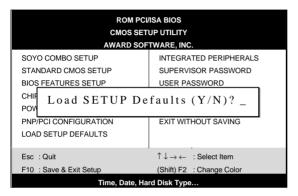
- 1. IRQs 0, 1, 2, 6, 8, 13 can NOT be assigned, because they are fixed.
- 2. IRQs 5, 9, 10, 11 are available
- 3. IRQs 3,4,7,12,14 and 15 will only be assigned if they are free. See the table below on how to free them:

# PNP/PCI Configuration Setup (Continued)

PNP/PC	1	Setting		cription	Note
Setup		Jetting	Des	oripuori	11013
	How t	o set the B	IOS to r	elease the IRQ to the P	nP Interrupt pool:
Line	PnP/	PCI config	uration	Integrated Peripherals	
IRQ 15	IRQ 1	5: <b>PCI/I</b>	SA PnP	On-Chip Secondary PC	CLIDE: disabled
IRQ 14	IRQ 1	4: <b>PCI/IS</b>	SA PnP	On-Chip Primary PCI II	DE: <b>disabled</b>
				Interrupt 12 will be rele	•
IRQ 12	IRQ 1	2: <b>PCI/I</b> S	SA PnP	BIOS automatically if the	ne PS/2 Mouse
				Port is not used.	
	IRQ 7			Onboard parallel port:	
	IRQ 4			Onboard Serial port 1:	
	IRQ 3			Onboard Serial port 2:	
				interrupt to a PCI slot a you use Windows 95, 98	
Slot 1/2/		Auto	Cially II	you ago villaows 55, 90	Default
Use IRQ		. 1010	Select	one of the interrupts.	
NO.				The selected IRQ will	
			only be	e assigned if it is	
				ole. (Windows may	
			reassi	gn IRQs).	
Used MI	EM	Memory	8K 16I	K,32K,64K.	This item
base ad		length		e ask your card	appears only
				er for the exactly	when the
				ry length of this add-	[Based MEM
			on car	d.)	base addr] set
					to I/O address.
Assign	IRQ	Enabled	BIOS	will assign IRQ for	Default
For USE			USB p		_ 0.00
		Disabled		won't assign IRQ for	
			USB p		
PnP OS		Yes	Sot thi	s field to [Veel if year	
Installed		165		s field to [Yes] if you nning Windows 95,	
motanec	•			is PnP compatible.	
		No		OS you are running	Default
				not support PnP	(If there is any
				uration.	doubt, set this
					field to [No])

#### 3-7 LOAD SETUP DEFAULTS

Select the [LOAD SETUP DEFAULTS] option from the Main Menu to load the system values you have previously saved. This option is recommended if you need to reset the system setup and to retrieve the old values.



Type [Y] to use the Setup Defaults followed by [Enter] or otherwise [N] to return to the Main Menu and keep current values.



**Warning:** If you run into any problem after changing the BIOS configuration, please load the SETUP DEFAULTS for stable performance.

#### 3-8 INTEGRATED PERIPHERALS



**Caution:** Change these settings only if you are already familiar with the Chipset.

The [INTEGRATED PERIPHERALS] option changes the values of the chipset registers. These registers control the system options in the computer.

The following screen shows setup default settings.

	ROM PC	I/ISA BIOS				
	INTEGRATED	PWEIPHERALS				
AWARD SOFTWARD, INC.						
IDE HDD Block Mode	: Enabled	Onboard FDC Controller	: Enabled			
IDE Primary Master PIO	: Auto	Onboard Serial Port 1	: 3F8/IRQ4			
IDE Primary Slave PIO	: Auto	Onboard Serial Port 2	: 2F8/IRQ3			
IDE Secondary Master PIO	: Auto					
IDE Secondary Slave PIO	: Auto	UR2 Mode	: Standard			
IDE Primary Master UDMA	: Auto					
IDE Primary Slave UDMA	: Auto		070#507			
IDE Secondary Master UNMA	: Auto	Onboard Parallel Port	: 378/IRQ7			
IDE Secondary Slave UDMA	: Auto : Enabled	Parallel Port Mode	: SPP			
On-Chip Primary PCI IDE On-Chip Secondary PCI IDE	: Enabled	PWRON After PWR-Fail	: Off			
On-Chip Secondary FCI IDE	. Lilabieu	FWKON AILEI FWK-I all	. Oii			
USB Keyboard Support	: Disabled					
Init Display First	: PCI Slot					
		F1 : Help PU/PD/-	-: Select Item 			

The following tables describe each field in the INTEGRATED PERIPHERALS Menu and provide instructions on how to configure the IDE controls, FDC controls, and the onboard serial and parallel ports.

## 3-8.1 IDE Device Controls

IDE Controls	Setting	Description	Note
IDE HDD Block Mode	Disabled		
	Enabled	Invokes multi-sector transfer instead of one sector per transfer. Not all HDDs support this function.	Default
IDE > Primary Master PIO	mode 0-4	0 is the slowest speed 4 is the fastest speed	
<ul> <li>➢ Primary Slave PIO</li> <li>➢ Secondary Master PIO</li> <li>➢ Secondary Slave PIO</li> </ul>	Auto	For better performance and stability, we suggest you use the Auto setting to set the HDD control timing.	Default
IDE	Disabled		
>Primary Master UDMA >Primary Slave UDMA >Secondary Master UDMA >Secondary Slave UDMA	Auto	Select Auto to enable Ultra DMA Mode support.	Default
On-Chip PCI IDE  > Primary	Disabled	Turn off the on-board IDE	
Secondary	Enabled	Use the on-board IDE	Default

# 3-8.2 Keyboard Controls

<b>Keyboard Controls</b>	Setting	Description	Note
USB Keyboard Support	Disabled	Turn off the on-board IDE	Default
	Enabled	Use a USB keyboard	
Init Display First	PCI Slot	Choose which card -	Default
	AGP	AGP Display card or	
		PCI VGA card – to	
		initialize first.	

## 3-8.3 FDC Controls

FDC Controls	Setting	Description	Note
Onboard FDC controller	Disabled	Turn off the on-board floppy controller	
	Enabled	Use the on-board floppy controller	Default

## 3-8.4 Onboard Serial Ports

Onboard Serial Ports	Setting	Description	Note
Onboard UART 1	Disabled		
Onboard UART 2	3F8/IRQ4	Choose serial port 1 & 2's I/O address.	Default (port 1)
	2F8/IRQ3	Do not set port 1 & 2 to the same address	
	3E8/IRQ4	except for Disabled or	/
	2E8/IRQ3	Auto.	
	Auto		
UR2 Mode	Standard	Supports a Standard serial infrared IrDA.	Default
	IrDA 1.0		
	ASKIR	Supports a Sharp serial interface format.	
If [UR2 Mode] is set	to [IrDA 1.0]/[AS	SKIR]	
<b>UR2 Duplex Mode</b>	Half	Choose [Half] or	Default
	Duplex	[Duplex] to set UR2 in	
	-	half duplex mode or	
		full duplex mode	
		respectively. Refer to	
		your IR device	
		specifications to select the suitable mode.	

# 3-8.5 Onboard Parallel Ports

Onboard Parallel Ports	Setting	Description	Note
Onboard Parallel Port	378H/IRQ7 3BCH/IRQ7 278H/IRQ5	Choose the printer I/O address.	Default
Parallel Port Mode	ECP/EPP SPP ECP EPP/SPP	The mode depends on your external device that connects to this port.	Default
If [Parallel Port Mode] ECP Mode use DMA	is set to [ECP] 3	mode Choose DMA3 Choose DMA1	Default
If [Parallel Port Mode] EPP Mode Select	is set to [EPP] EPP 1.9 EPP 1.7	mode Select EPP port type 1.9 Select EPP port type 1.7	Default
PWRON After PWR-Fail	On	The system will switch on when power comes back after a power failure.	
	Off	The system will remain off when power comes back after a power failure.	Default
	Former-sts	The system will return to the state it was in before the power failure when power returns. (i.e: If the system was on, it will switch on again, if it was off, it will remain off)	

#### 3-8.6 MULTI I/O ADDRESSES

Default settings for multi-I/O addresses are as follows:

Port	I/O Address	IRQ	Status
LPT1	378H	7	ECP/EPP
COM1	3F8H	4	
COM2	2F8H	3	



*Warning:* If a default I/O address conflicts with other I/O cards such as sound card, you must change one of the I/O addresses to remedy to this address conflict. (I/O addresses can be adjusted from the BIOS Setup Utility)

#### 3-9 SUPERVISOR PASSWORD

Based on the setting you have made in the [Security Option] of the [BIOS FEATURES SETUP] section, the password prevents access to the system or the setup program by unauthorized users. Follow this procedure to set a new password or disable the password:

- Choose [BIOS FEATURES SETUP] in the Main Menu and press [Enter]. Select the [Security Options] item and set the field to:
  - a. [System]: The password is required every time the system is booted. This means only a person who knows the password can use this computer.
  - b. [Setup]: The password is required only when you attempt to enter the BIOS Setup program.
- 2. Choose [SUPERVISOR PASSWORD] from the Main Menu and press [Enter]. The following prompt appear:

Enter Password:



**Warning:** If you forget or lose the password, the only way to access the system is to set jumper JP5 to clear the CMOS RAM. All setup information is lost and you must run the BIOS setup program again.



**Note:** If you do not wish to use the password function, press [Enter] directly and the following message appears:

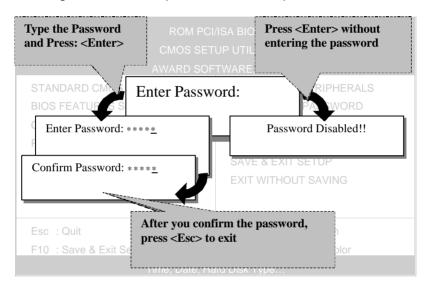
Password Disabled!!

3. Enter your new password and press [Enter]. The following message appears, prompting to confirm the new password:

Confirm Password:

 Re-enter your password and then press [Enter] to exit to the Main Menu.

This diagram outlines the password selection procedure:



#### 3-10 USER PASSWORD

When the user password option is on, you are not allowed to change any setting in the [CMOS SETUP UTILITY] except for changing the user's password.

The password setting procedure is similar to that for the [SUPERVISOR PASSWORD] (Refer to section 3-9).

#### 3-11 IDE HDD AUTO DETECTION

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

				CMOS S	PCI/ISA BIOS	ΤΥ			
			Α	WARD S	OFTWARE,	INC.			
HARD DI	SKS	TYPE	SIZE	CYLS	HEAD PF	ECOMP	LANDZ	SECTOR	MODE
Primary N	Master :								
Primary N	Master :								
Primary N	Master :	Selec	t Primai	y Master	Option (N	=Skip) : I	N		
Primary N	Master : OPTIONS	Selec SIZE	ct Primai	y Master HEAD	Option (Na	. ,		MODE	
Primary N				HEAD	PRECOME	. ,	SECTOR	MODE	-
Primary N	OPTIONS	SIZE	CYLS	HEAD 64	PRECOME	LANDZ 0 3308	SECTOR 63		-

ESC: Skip



**Note:** This function is only valid for IDE type of hard disk drives.

# Chapter 4

## **DRIVERS INSTALLATION**

Your SY-6BA+ III Motherboard comes with a CD-ROM labeled "SOYO CD." The SOYO CD contains the user's manual file for your new Motherboard, the drivers software available for installation, and a database in HTML format with information on SOYO Motherboards and other products.

The SOYO CD Start Up Program automatically detects which SOYO Motherboard you own and displays the corresponding model name.

# Step 1. Insert the SOYO CD into the CD-ROM drive

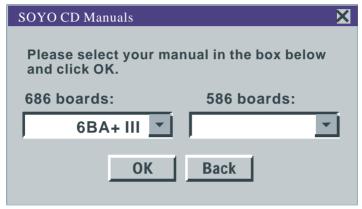
The SOYO CD will auto-run, and the SOYO CD Start Up Menu will display as shown below.



## Step 2. Read SOYO [6BA+ III] Manual

Click the *Read Manual* button to open the user's manual file of your Motherboard.

Please note that if the Start Up program was unable to determine which SOYO Motherboard you own, the manual selection menu will pop up, as shown below. Then select the user's manual file that corresponds to your Motherboard model name and click **OK**.



(Manual Selection Menu)

The user's manual files included on the SOYO CD can be read in PDF (Postscript Document) format. In order to read a PDF file, the appropriate Acrobat Reader software must be installed in your system.

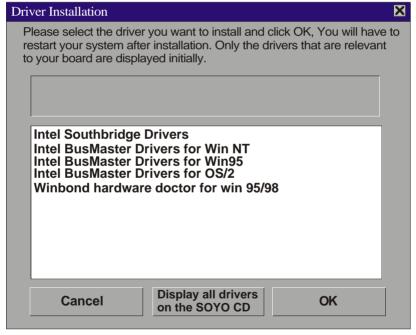
**Note:** The Start Up program automatically detects if the Acrobat Reader utility is already present in your system, and otherwise prompts you on whether or not you want to install it. You must install the Acrobat Reader utility to be able to read the user's manual file. Follow the instructions on your screen during installation, then once the installation is completed, restart your system and re-run the SOYO CD.

## Step 3. Install Drivers

Click the Install Drivers button to display the list of drivers software that can be installed with your Motherboard. The Start Up program displays the drivers available for the particular model of Motherboard you own. We recommend that you only install those drivers.

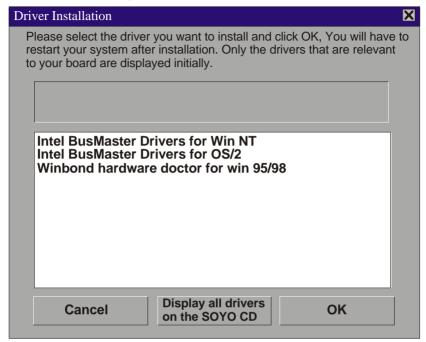
However, to display the list of all drivers software available with SOYO Motherboards, click the *Display all drivers on the SOYO CD* button. Please make sure to install only the drivers adapted to your system, or otherwise this cause system malfunctions.

The following drivers are available for Windows 95



(Driver Installation Menu)

#### The following drivers are available for Windows 98



(Driver Installation Menu)

#### A short description of all available drivers follows:

## Intel Southbridge Drivers

Because Windows 95 does not recognize the Southbridge of the newer Intel chipsets (TX, BX, ZX etc) this utility has to be run, it will update the necessary Windows files. (Only for Windows 95)

- Intel Busmaster Drivers for Windows 95
- Intel Busmaster Drivers for Win NT
- Intel Busmaster Drivers for OS/2

These are the official busmaster drivers as supplied by Intel.



Note: Do NEVER install two types of busmaster drivers on your system, this will lead to conflicts and system instability.

#### Winbond hardware doctor for Windows 9x

Your motherboard comes with a hardware monitoring IC. By installing this utility Temperature, Fan speed and Voltages can be monitored. It is also possible to set alarms when current system values exceed or fall below pre-set values.

This utility comes with a preset monitoring rage for the CPU voltage. However, the core voltage of the processor you purchased may fall out of this preset range, so you may need to adjust the pre-set value. Please refer to the SY-6BA+ III Motherboard's CD manual for the details.

Select which driver you want to install and click **OK**, or click **Cancel** to abort the driver installation and return to the main menu.

**Note:** Once you have selected a driver, the system will automatically exit the SOYO CD to begin the driver installation program. When the installation is complete, most drivers require to restart your system before they can become active.

#### Core voltage

The core voltage differs between generations of Intel CPUs, if the Hardware monitor gives a warning, the settings for the safe range of the core voltage has to be adjusted. This can be done by simply clicking and dragging the upper and lower limit bars.

#### For example:

Newer Slot 1 CPUs have a core voltage of 2.0V. Therefore, set the CPU Vcore limits to 1.8V and 2.2V. For 2.8V core voltage CPUs the limits would be 2.6V and 3.0V.

#### Fan speed

The Hardware monitor can keep track of three fans. If the user does not use all fans, the fans that are not in use should be disabled in the Hardware monitor program, otherwise the Hardware monitor will give an alarm. If this happens, make sure to disable monitoring for that fan.

**Note:** However, to display the list of all drivers software available with SOYO Motherboards, click the **Display all drivers on the SOYO CD** button. Please make sure to install only the drivers adapted to your system, or otherwise this cause system malfunctions.

## Step 4. Check the Latest Releases

Click the 'Check the latest Releases' button to go the SOYO Website to automatically find the latest BIOS, manual and driver releases for your motherboard. This button will only work if your computer is connected to the internet through a network or modem connection. Make sure to get your modem connection up before clicking this button.

# Step 5. Select which driver you want to install and click OK

- Notice 1: Once you have selected a driver, the system will automatically exit the SOYO CD to begin the driver installation program.When the installation is complete, most drivers require to restart your system before they can become active.
- **Notice 2:** You may click **Cancel** to abort the driver installation and return to the main menu.
- **Notice 3:** Once you have selected a driver, the system will automatically exit the SOYO CD to begin the driver installation program. When the installation is complete, most drivers require to restart your system before they can become active.

