# SY-5SSM
# SY-5SSM/5
# V1.0
# Motherboard

# Quick Start Guide

Introduction

Hardware Installation

Quick BIOS Setup

The SOYO CD

SiS VGA Drive Installation

ESS™Audio Driver Installation

FC Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE

100% POST CONSUMER RECYCLED PAPER

# SPORTON INTERNATIONAL INC.

SPORTON LAB.    NVLAP

# FC

# Declaration of Conformity

According to 47 CFR, Part 2 and 15 of the FCC Rules

Declaration No.: D920207                                                1999/3/6

The following designated product

**EQUIPMENT: Main Board**
**MODEL NO.: SY-5SSM**

which is the Class B digital device complies with 47 CFR Parts 2 and 15 of the FCC rules.

Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The product was tested with the following configuration:

Monitor: HITACHI/CM814U                          PS/2 Keyboard: DELL/GYUM90SK
PS/2 Mouse: GENIUS/FSUGMZFC              USB Mouse: WINIC/ F4ZFDM-A50
Printer: HP/DS16XU225                              Modem: ACEEX/IFAXDM1414
Speaker: JUSTER/SP-1000                          Stereo Cassette Player: KOKA/ KW-247
Microphone: KOKA/ SR-M02                      Joystick: MICROSOFT/ C3KMJI
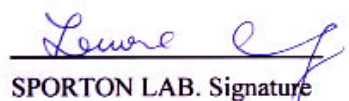
This declaration is given for the manufacturer

**SOYO COMPUTER INC.**
No.21, Wu-Kung 5 Rd., Hsing Chuang City,
Taipei Hsien, Taiwan, R.O.C.

The test was carried out by

**SPORTON INTERNATIONAL INC.**
**6F, No. 106, Hsin Tai Wu Rd., Sec. 1, His Chih,**
**Taipei Hsien, Taiwan, R.O.C**

Manufacturer Signature                              SPORTON LAB. Signature

**SOYO ™**

# SY-5SSM & SY-5SSM/5 Motherboard

Pentium® Class CPU (66&100MHz Host Bus) supported
SiS530 AGP/PCI Motherboard
Micro-ATX Form Factor

**About This Guide:**
This Quick Start 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.

If you need any further information, please visit our **Web Site** on the Internet. The address is **"http://www.soyo.com.tw".**

**SY-5SSM & SY-5SSM/5 - Version 2.5 - Edition: June 2000**
\* These specifications are subject to change without notice

# **1** *Introduction*

Congratulations on your purchase of the **SY-5SSM or SY-5SSM/5** Motherboard. This *Quick Start Guide* describes the steps for installing and setting up your new Motherboard.

This guide is designed for all users to provide the basic steps of Motherboard setting and operation. For further information, please refer to *SY-5SSM & SY-5SSM/5 Motherboard User's Guide and Technical Reference* online manual included on the CD-ROM packed with your Motherboard.

## *Unpacking*

When unpacking the Motherboard, check for the following items:

◆ The SY-5SSM or SY-5SSM/5 Motherboard

◆ This Quick Start Guide

◆ The Installation CD-ROM

◆ SOYO Bonus Pack CD-ROM (Norton AntiVirus and Ghost Drivers)

◆ One IDE Device Flat Cable

◆ One Floppy Disk Drive Flat Cable
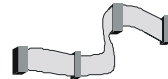
◆ One serial port flat cable with a 9-pin connector
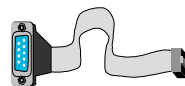
## *SY-5SSM or SY-5SSM/5 Motherboard Layout*

for model 5SSM only
(1 MB Cache) featuring
two P.B. SRAM.

PS/2 KB Connector
PS/2 Mouse Connector

USB 1 USB 2

PRT

COM 1

VGA

JOYSTICK

LINE-OUT

LINE-IN

MIC JACK

J1

ATX Power

COM2

CHAFAN

CPUFAN

JP32

CD IN1
CD IN2

ESS 1938

JP9

ISA Slot #1

P.B. SRAM 64K X 64

P.B. SRAM 64K X 64

Socket7

SiS 530 Chipset

DIMM1
DIMM2
DIMM3

PCI Slot #1
PCI Slot #2
PCI Slot #3
(Slaving) PCI Slot #4

SiS 5595

JP30

SW1

IDE2 IDE1

FDD

Reset PWRBT ACPI LED HDD LED

Power LED
KEY LOCK
Speaker

JP5

3V Lithium Battery

JP44

WOL Header

IR1

I/O Chip ITE 8661

Flash BIOS

## *Key Features*

- ➢ Integrated 3D AGP accelerator supports UMA or non-UMA (option)
- ➢ 3D PnP PCI Audio onboard
- ➢ 512KB/1MB L2 cache on board
- ➢ Supports CPU voltage from 2.0V to 3.5V in 0.1V increment
- ➢ PC98, ACPI, Ultra DMA 33/66
- ➢ Power-on by modem or alarm
- ➢ Supports Wake-On-LAN (WOL)

- ➢ Supports power-off by hot-key
- ➢ 3 x 32-bit bus mastering PCI slots & 1 x 32-bit bus slaving PCI slot
- ➢ 2 x USB ports
- ➢ 1 x IrDA port
- ➢ Supports multiple-boot function
- ➢ Supports Pentium ® class CPU with host bus clock of 66/100 MHz
- ➢ Supports system memory up to 768MBytes

# **2** *Installation*

To avoid damage to your Motherboard, follow these simple rules while handling this equipment:

● Before handling the Motherboard, ground yourself by grasping an unpainted portion of the system's metal chassis.

● Remove the Motherboard from its anti-static packaging. Hold it 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.

Follow the directions in this section designed to guide you through a quick and correct installation of your new **SY-5SSM or SY-5SSM/5** Motherboard. For detailed information, please refer to *SY-5SSM or SY-5SSM/5 Motherboard User's guide and Technical Reference* online manual included on the CD-ROM packed with your Motherboard.

## *PREPARATIONS*

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

◆ Pentium® processor with cooling fan

◆ DIMM memory module

◆ Computer case and chassis with adequate power supply unit

◆ Monitor

◆ Keyboard

◆ Pointing Device (PS/2 mouse)

◆ Speaker(s) (optional)

◆ Disk Drives: HDD, CD-ROM, Floppy drive ...

◆ External Peripherals: Printer, Plotter, and Modem- (optional)

◆ Internal Peripherals: Modem and LAN cards (optional)

***Notice 1:*** This Motherboard features one built-in VGA port and three built-in audio-stereo ports. Therefore you do not need to install neither a VGA card nor a sound card.

***Notice 2:*** When using the onboard VGA, please install DRAM modules in bank "DIMM 1" in priority.

***Notice 3:*** If you want to use an external speaker connected to "Line-out" port, make sure to use an "amplified speaker" that can generate proper output sound volume.

## *Install the Motherboard*

Follow the steps below in order to perform the installation of your new **SY-5SSM or SY-5SSM/5** Motherboard.

### *Step 1.* Install the CPU

To mount the Pentium® class processor that you have purchased separately, follow these instructions.

### *CPU Mount Procedure*
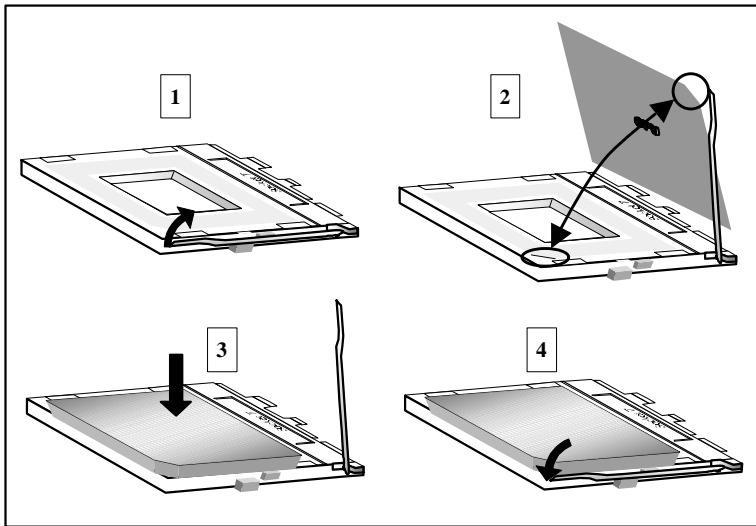


1.  Lift the socket handle up to a vertical position.

2.  Align the blunt edge of the CPU with the matching pinhole distinctive edge on the socket.

3.  Seat the processor in the socket completely and without forcing.

4.  Then close the socket handle to secure the CPU in place.

Remember to connect the CPU Cooling Fan to the appropriate power connector (CPUFAN) on the Motherboard. *The fan is a key component that will ensure system stability. The fan prevents overheating, therefore prolonging the life of your CPU.*

### *Step 2.* Set the CPU Voltage ( JP30)

For CPUs that come with different voltages, please verify the correct voltage settings with your dealer before installation. Use the following table to set JP30 to the proper "voltage value", according to the specifications marked on your CPU:

| Processor | Voltage | Voltage Setting: JP30 | | | | |
|---|---|---|---|---|---|---|
| | | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 |
| AMD K5 PR100<br>AMD K5 PR133<br>AMD K5 PR166 | 3.52 V | open | **short** | **short** | **short** | **short** |
| | The AMD K5 and K6 come in several versions with different voltages. Please verify the correct voltage settings with your dealer before installation. The most common K5 runs on 3.52V. | | | | | |
| AMD K6    166<br>AMD K6    200 | 2.9 V | open | **short** | open | open | **short** |
| AMD K6    233 | 3.2 V | open | **short** | **short** | open | open |
| AMD K6    266<br>AMD K6    300<br>AMD K6-2    266<br>AMD K6-2    300<br>AMD K6-2    333<br>AMD K6-2    350<br>AMD K6-2    366<br>AMD K6-2    380<br>AMD K6-2    400<br>AMD K6-2+    450 | 2.2 V | open | open | open | **short** | open |
| AMD K6-2    550 | 2.3 V | open | open | open | **short** | **short** |
| AMD K6-2    450<br>AMD K6-2    475<br>AMD K6-2    500<br>AMD K6-III    400<br>AMD K6-III    450 | 2.2 V | open | open | open | **short** | open |
| | 2.4 V | open | open | **short** | open | open |
| | The AMD K6-2 and K6-III comes in several versions with different voltages. Please ask your dealer for the correct voltage. | | | | | |
| Cyrix 6x86(L) PR166+<br>Cyrix 6x86(L) PR200+ | The Cyrix 6X86(L) and MΙΙ come in several versions with different voltages. Please ask your dealer for the correct voltage. | | | | | |
| Cyrix 6x86MX PR166<br>Cyrix 6x86MX PR200<br>Cyrix 6x86MX PR233<br>Cyrix 6x86MX PR266<br>Cyrix MII 300<br>Cyrix MII 333<br>Cyrix MII 350<br>Cyrix MII 366 | 2.9 V | open | **short** | open | open | **short** |
| Cyrix MII 400<br>Cyrix MII 433 | 2.2 V | open | open | open | **short** | open |
| Intel P54C    P100<br>Intel P54C    P133<br>Intel P54C    P166<br>Intel P54C    P200 | 3.3 V | open | **short** | **short** | open | **short** |
| | The P54C (standard Pentium ®) comes in several versions with different voltages. Please ask your dealer for the correct voltage. The most common P54C runs on 3.3V. | | | | | |

| Processor | Voltage | Voltage Setting: JP30 | | | | |
|---|---|---|---|---|---|---|
| | | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 |
| Intel P55C P166 | 2.8 V | open | **short** | open | open | open |
| Intel P55C P200<br>Intel P55C P233 | The P55C (MMX) processors have the same voltage setting. | | | | | |
| IDT X86 CPU C6/2-225 | 3.52 V | open | **short** | **short** | **short** | **short** |
| IDT X86 CPU 2-266<br>IDT X86 CPU 2-300 | The IDT X86 CPU C6/2 comes in several versions with different voltages. Please ask your dealer for the correct voltage. | | | | | |
| IDT X86 CPU C6/2-200<br>IDT X86 CPU 2-233 | 3.3 V | open | **short** | **short** | open | **short** |
| Rise mP6 PR266 | 2.8 V | open | **short** | open | open | open |

### *Step 3.* Set JP32, SW1 for CPU Frequency

The DIP switch SW1 enable you to assign the Multiplier and Bus Clock, as shown in the following table:

| Processor | Bus Clock | Multi-plier | CPU Host Bus Setting: JP32 | | | | Frequency Multiplier: SW1 | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| AMD K5 PR100 | 66 MHz | 1.5 x | open | **short** | **short** | **short** | open | open | open |
| AMD K5 PR133 | 66 MHz | 2.0 x | open | **short** | **short** | **short** | **short** | open | open |
| AMD K5 PR166 | 66 MHz | 2.5 x | open | **short** | **short** | **short** | **short** | **short** | open |
| AMD K6 166 | 66 MHz | 2.5 x | open | **short** | **short** | **short** | **short** | **short** | open |
| AMD K6 200 | 66 MHz | 3.0 x | open | **short** | **short** | **short** | open | **short** | open |
| AMD K6 233 | 66 MHz | 3.5 x | open | **short** | **short** | **short** | open | open | open |
| AMD K6 266 | 66 MHz | 4.0 x | open | **short** | **short** | **short** | **short** | open | **short** |
| AMD K6 300 | 66 MHz | 4.5 x | open | **short** | **short** | **short** | **short** | **short** | **short** |
| AMD K6-2 266 | 66 MHz | 4.0 x | open | **short** | **short** | **short** | **short** | open | **short** |
| AMD K6-2 300 | 66 MHz | 4.5 x | open | **short** | **short** | **short** | **short** | **short** | **short** |
| AMD K6-2 300 | 100 MHz | 3.0 x | open | open | **short** | **short** | open | **short** | open |
| AMD K6-2 333 | 66MHz | 5.0 x | open | **short** | **short** | **short** | open | **short** | **short** |
| AMD K6-2 333 | 95MHz | 3.5 x | open | **short** | open | open | open | open | open |
| AMD K6-2 350 | 100MHz | 3.5 x | open | open | **short** | **short** | open | open | open |
| AMD K6-2 366 | 66MHz | 5.5 x | open | **short** | **short** | **short** | open | open | **short** |
| AMD K6-2 380 | 95MHz | 4.0 x | open | **short** | open | open | **short** | open | **short** |
| AMD K6-2 400 | 100MHz | 4.0 x | open | open | **short** | **short** | **short** | open | **short** |
| AMD K6-2 450 | 100MHz | 4.5 x | open | open | **short** | **short** | **short** | **short** | **short** |
| AMD K6-2 475 | 95MHz | 5.0 x | open | **short** | open | open | open | **short** | **short** |
| AMD K6-2 500 | 100MHz | 5.0 x | open | open | **short** | **short** | open | **short** | **short** |
| AMD K6-2 550 | 100MHz | 5.5 x | open | open | **short** | **short** | open | open | **short** |
| AMD K6-2+ 450 | 100MHz | 4.5 x | open | open | **short** | **short** | **short** | **short** | **short** |
| AMD K6-III 400 | 100MHz | 4.0 x | open | open | **short** | **short** | **short** | open | **short** |
| AMD K6-III 450 | 100MHz | 4.5 x | open | open | **short** | **short** | **short** | **short** | **short** |
| Cyrix 6x86 PR166+ | 66 MHz | 2.0 x | open | **short** | **short** | **short** | **short** | open | open |
| Cyrix 6x86 PR200+ | 75 MHz | 2.0 x | open | **short** | **short** | open | **short** | open | open |
| Cyrix 6x86MX PR166 | 66 MHz | 2.0 x | open | **short** | **short** | **short** | **short** | open | open |

| Processor | Bus Clock | Multi-plier | CPU Host Bus Setting: JP32 | | | | Frequency Multiplier: SW1 | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1-2 | 3-4 | 5-6 | 7-8 | 1-2 | 3-4 | 5-6 |
| Cyrix 6x86MX PR200 | 66 MHz | 2.5 x | open | short | short | short | short | short | open |
| Cyrix 6x86MX PR200 | 75 MHz | 2.0 x | open | short | short | open | short | open | open |
| Cyrix 6x86MX PR233 | 75 MHz | 2.5 x | open | short | short | open | short | short | open |
| Cyrix 6x86MX PR266 | 83 MHz | 2.5 x | open | short | open | short | short | short | open |
| Cyrix M II-300 | 66 MHz | 3.5 x | open | short | short | short | open | open | open |
| | 75 MHz | 3.0 x | open | short | short | open | open | short | open |
| Cyrix M II-333 | 66 MHz | 4.0 x | open | short | short | short | short | open | short |
| | 75 MHz | 3.5 x | open | short | short | open | open | open | open |
| | 83MHz | 3.0 x | open | short | open | short | open | short | open |
| Cyrix M II-350 | 90 MHz | 3.0 x | short | short | short | short | open | short | open |
| Cyrix M II-366 | 100MHz | 2.5 x | open | open | short | short | short | short | open |
| Cyrix M II-400 | 95 MHz | 3.0 x | open | short | open | open | open | short | open |
| Cyrix M II-433 | 90 MHz | 3.5 x | short | short | short | short | open | open | open |
| | 100MHz | 3.0 x | open | open | short | short | open | short | open |
| Intel P54C    P100 | 66 MHz | 1.5 x | open | short | short | short | open | open | open |
| Intel P54C    P133 | 66 MHz | 2.0 x | open | short | short | short | short | open | open |
| Intel P54C    P166 | 66 MHz | 2.5 x | open | short | short | short | short | short | open |
| Intel P54C    P200 | 66 MHz | 3.0 x | open | short | short | short | open | short | open |
| Intel P55C    P200 | 66 MHz | 3.0 x | open | short | short | short | open | short | open |
| Intel P55C    P233 | 66 MHz | 3.5 x | open | short | short | short | open | open | open |
| IDT X86 CPU C6/2-200 | 66 MHz | 3.0 x | open | short | short | short | open | short | open |
| IDT X86 CPU C6/2-225 | 75 MHz | 3.0 x | open | short | short | open | open | short | open |
| IDT X86 CPU 2-233 | 66 MHz | 3.5 x | open | short | short | short | open | open | open |
| IDT X86 CPU 2-266 | 100 MHz | 2.33 x | open | open | short | short | open | short | short |
| IDT X86 CPU 2-300 | 100 MHz | 2.5 x | open | open | short | short | short | short | open |
| Rise mP6 PR266 | 66 MHz | 3.0 x | open | short | short | short | open | short | open |
| | 100 MHz | 2.0 x | open | open | short | short | short | open | open |

*This main board supports various CPU multiplier and host bus frequency settings.*
*Please select the proper frequency setting based on specifications of the CPU you have purchased. System stability or components damage, in case of over-specification setting, is not guaranteed.*

Hardware Installation

### *Step 4.* Make Connections to the Motherboard

This section tells how to connect internal peripherals and power supply to the Motherboard.

Internal peripherals include IDE devices (HDD, CD-ROM), Floppy Disk Drive, Front Panel Devices (ACPI LED, Internal Speaker, Reset Button, IDE LED, and KeyLock Switch.), Wake-On-LAN card, and other devices.

For more details on how to connect internal and external peripherals to your new SY-5SSM or SY-5SSM/5 Motherboard, please refer to *SY-5SSM or SY-5SSM/5 Motherboard User's Guide and Technical Reference* online manual on CD-ROM.

*Note: An ATA/66 cable (40-pin, 80-conductor cable) must be used to ensure proper operation of the Ultra ATA/66 hard drive.*

## *Connectors and Plug-ins*

| IrDA (Infrared Device Header): IR1 | | | | | Wake-On-LAN Header: JP44 | | |
|---|---|---|---|---|---|---|---|
| Pin1 | Pin2 | Pin3 | Pin4 | Pin5 | Pin1 | Pin2 | Pin3 |
| VCC | None | IRRX | GND | IRTX | 5VSB | GND | MP-Wakeup |

| CPU Cooling Fan: CPUFAN | | | Chassis Fan: CHAFAN | | |
|---|---|---|---|---|---|
| Pin1 | Pin2 | Pin3 | Pin1 | Pin2 | Pin3 |
| GND | 12V | SENSOR | GND | 12V | SENSOR |

| CD Line-in: CD IN1,CD IN2 | | Pin1 | Pin2 | Pin3 | Pin4 |
|---|---|---|---|---|---|
| Connect the CD Line-in cord from the CR-ROM device to the matching connector CD IN1 or CD IN2. | CD IN1 | L | G | G | R |
| | CD IN2 | G | L | G | R |



| Power LED | | | Keylock | |
|---|---|---|---|---|
| Pin1 | Pin2 | Pin3 | Pin1 | Pin2 |
| 5V | NC | GND | Control Pin | GND |

| Speaker | | | |
|---|---|---|---|
| Pin1 | Pin2 | Pin3 | Pin4 |
| 5V | NC | NC | Speaker out |

| HDD LED | | ACPI LED | | PWRBT | | RESET | |
|---|---|---|---|---|---|---|---|
| Pin1 | Pin2 | Pin1 | Pin2 | Pin1 | Pin2 | Pin1 | Pin2 |
| LED Anode | LED Cathode | LED Anode | LED Cathode | Power On/Off | GND | Power Good | GND |

| ATX Power On/Off: PWRBT |
|---|
| Connect your power switch to this header (momentary switch type). *To turn off the system, please press this switch and hold down for longer than 4 seconds.* |

| ATX Power Supply: ATX PW |
|---|
| Attach the ATX Power cable to this connector. *When using the Power-On by PS/2 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 specifications.* |

**Step 5.** Select the CPU Burst Mode (J1)

There are two types of CPU burst modes according to manufacturer design:

> ➤ Interleave Burst    (CPU: Intel P54C/P55C, AMD K5/K6/K6-2/K6-III, IDT X86 CPU, Rise mP6)
> ➤ Linear Mode         (CPU: Cyrix 6x86/L/MX/M  )

| | **Interleave** | **Linear** |
|---|---|---|
| **CPU Burst Mode** | **Intel® P54C/P55C AMD ™ K5/K6/K6-2/K6-III IDT X86 CPU, Rise mP6** | **Cyrix ™ 6x86/L/MX/M** |
| **J1 Setting** | When using Intel or AMD CPUs. [○ 1 / ○ 2] | When using Cyrix type of CPU. [● 1 / ● 2] |

If you are using a Cyrix ™ 6x86/L/MX/M II series CPU, set the burst mode to Linear by shorting jumper J1, and follow the following steps to select the correct Linear burst mode in BIOS:

1. During the boot-up initial sequence, press the [Delete] key to enter the BIOS setup menu.
2. Select the [CHIPSET FEATURES SETUP] section in BIOS.
3. In the [CHIPSET FEATURES SETUP] sub-menu, set the [Linear Mode] field to [Enabled].
4. Press [Esc] to return to the BIOS main menu.
5. Then choose [Save & Exit Setup] to re-boot your computer.

**Step 6.** Configure Memory

Your board comes with three DIMM sockets, providing support for up to 768MB of main memory using DIMM modules from 8MB to 256MB. For 66/75MHz host bus CPUs use 12ns or faster DIMM modules.

## *Memory Configuration Table*

| **MEMORY CONFIGURATION** | **DIMM Banks** | | |
|---|---|---|---|
| | **DIMM 1** | **DIMM 2** | **DIMM 3** |
| **RAM Type** | SDRAM | SDRAM | SDRAM |
| **Single RAM Module Size (MB)** | 8/16/32/64/128/256 | 8/16/32/64/128/256 | 8/16/32/64/128/256 |
| ***Note:* If you plan on using the onboard VGA and intend to install only one DRAM module, then this single DRAM *must be* installed in bank DIMM 1.** | | | |

***Step 7.*** Enable/Disable the Onboard Sound (JP9)

The onboard audio features of your Motherboard are controlled by jumpers JP9
Choose the available sound options among the following table:

| Sound Settings | JP9 |
|---|---|
| **Onboard Sound: Enable** | **short** |
| **Onboard Sound: Disable** | open |

## Clear CMOS Data (JP5)

In some cases the CMOS memory may contain wrong data, follow the steps below to
clear CMOS memory.

1.      Clear the CMOS memory by momentarily shorting pin 2-3 on jumper JP5. This
        jumper can be easily identified by its white colored cap.

2.      Then put the jumper back to 1-2 to allow writing new of data into the CMOS
        memory.

| CMOS Clearing | Clear CMOS Data | | Retain CMOS Data | |
|---|---|---|---|---|
| **JP5 Setting** | Short pin 2-3 for a few seconds to clear the CMOS | ⊙ ⊙–⊙ <br> 1  2  3 | Short pin 1-2 to retain new settings | ⊙–⊙ ⊙ <br> 1  2  3 |
| ***Note:*** You must unplug the ATX power cable from the ATX power connector when performing the CMOS Clear operation. | | | | |

# **3** *Quick BIOS 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, follow these steps to complete the quick BIOS setup.

### *Step 1.* Select [LOAD SETUP DEFAULT]
Select the "LOAD SETUP DEFAULT" menu and type "Y" at the prompt to load the BIOS optimal setup.

### *Step 2.* Select [STANDARD CMOS SETUP]
Set [Date/Time] and [Floppy drive type], then set [Hard Disk Type] to "Auto".

### *Step 3.* Select [SAVE & EXIT SETUP]
Press **<Enter>** to save the new configuration to the CMOS memory, and continue the boot sequence.
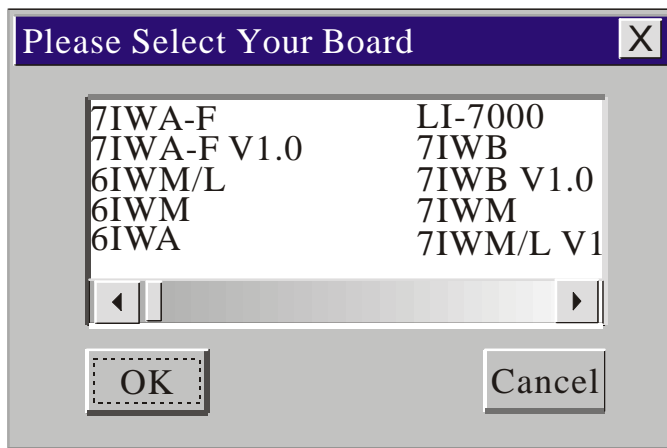
Quick BIOS Setup

# **4** *The SOYO CD*

> **The SOYO-CD will NOT autorun if you use it on an Operating System other than Windows 9x or NT.**

Your SY-SY-5SSM & SY-5SSM/5 Super 7 ™ 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.

### *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 be as shown.

If you use Windows NT, the SOYO-CD will not detect your motherboard type. In that case the following dialog will pop up, please choose your motherboard and press OK. Now the SOYO-CD Start Up Menu will be shown.

| Please Select Your Board | X |
|---|---|
| 7IWA-F            LI-7000 | |
| 7IWA-F V1.0      7IWB | |
| 6IWM/L           7IWB V1.0 | |
| 6IWM             7IWM | |
| 6IWA             7IWM/L V1 | |
| ◄ ►                      ▶ | |
| OK                Cancel | |

**(SOYO CD Start Up Program Menu)**

If you use Windows 95 or 98, the SOYO CD Start Up Program automatically detects which SOYO Motherboard you own and displays the corresponding model name.

The user's manual files included on the SOYO CD are 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 2.* Install Drivers and Utilities

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.

The SOYO CD

| driver | revision: |
|--------|-----------|
| SIS 530 VGA drivers | - |
| SIS 530 busmaster drivers | - |
| SIS system hardware monitor | - |
| ESS Windows 9x drivers (for PCI) | 4.05.00.1087 |
| ESS Windows NT drivers (for PCI) | 4.05.13 |
| ESS Soundtrack Program (for PCI) | V2.20 |

| Cancel | OK |

**(Driver Installation Menu)**

A short description of all available drivers follows:

➢ **SiS 530 VGA drivers**

The SiS VGA driver for windows 95/98 must be installed to make use of your on board VGA function. (For WinNT read the instructions in back of the Manual)

➢ **SiS 530 busmaster drivers**

The SiS Busmaster drivers for Windows 95/98 will speed up your harddisk. Only install ONE type of busmaster driver and first uninstall your previous busmaster drivers before installing a new version. (For Windows NT read the instructions in the back of the Manual)

➢ **SIS System Hardware Monitor**

Install this utility to monitor the hardware status of your system

➢ **ESS Windows drivers for 9x and NT (For PCI)**

These are the Windows drivers for the onboard soundchip. Make sure to first install these drivers before installing the ESS Soundtrack program.

➢ **ESS Soundtrack Program (for PCI)**

With this application program the user can make use of the on board sound chip. Before installing the ESS Soundtrack Program, you MUST first install the ESS drivers for Windows 9x or NT.

Select which driver you want to install and click *OK,* or click *Cancel* to return to the main menu. When the installation program of a driver starts running the SOYO-CD will exit. After finishing the installation, restart the SOYO-CD and install the next driver.

*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.*

The SOYO CD

***Step 3.*** 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.

*)*

The SOYO CD

# **5** *SiS VGA Driver Installation*

## *Introduction*

Your SY-5SSM V1.1 or SY-5SSM/5 V1.1 Motherboard is equipped with the SiS 530 chipset that offers extended graphics and text modes capabilities. To make use the advanced features of the SiS 530 chipset, you will need to install software drivers and application programs included on the CD-ROM.

This section describes how to perform the SiS VGA driver installation for **Microsoft Windows NT** environment. The Windows 95/98 drivers can be installed automatically through the SOYO CD. Refer to page 16. For other application programs, and if you are using an operating system other than WinNT, please refer to the *SiS VGA Driver Installation* section in *SY-5SSM V1.1 or SY-5SSM/5 V1.1 Motherboard User's Guide and Technical Reference* online manual included on the CD-ROM.

## *Windows NT Drivers*

### *Driver Files*

The enclosed SiS 530 Windows NT drivers files are:
◆ **SiS530.INF**
◆ **SiS530P.SYS**
◆ **SiS530V.Dll**

All the 16-color, 256-color, 32K/64K-color, and 16M-color drivers are available.

### *Installation*
1. Click [Start] menu and select [Control Pane] from Settings group.
2. Select [Display] icon.
3. Select [Settings] index in the display properties sheet.
4. Select [Change Display Type] button.
5. Select [Change ...] button in [Adapter Type] group.
6. Select [Have Disk] button.
7. Place CD-ROM disk into the CD drive.
8. When the [Install from Disk] dialog box appears, type the directory storing the drivers and click [OK]. The directory in the CD-ROM is at
   **D:\DRIV-COM\SI530VGA\WINNT40.**

9.    The [Select Device] dialog box will appear, showing the driver. Click on [OK] and the driver will be installed.

10.   Select [Close] or [Apply] button from display properties sheet.

11.   A message will appear stating you must restart the Windows NT system, select [Yes] to restart.

12.   After restarting, Windows NT will run on 640x480x256 color, 75NI.

## *Selecting Resolution, Color Depth and Refresh Rate*

1.    Click [Start] menu and select Control Panel from Settings group.

2.    Select Display icon.

3.    Select Settings.

4.    Select Color Palette to change between 16 colors, 256 colors, Hi color, and True color.

5.    To select desktop resolution size, go to the Desktop area and use the slide bar to change resolution from 640x480, 800x600, 1024x768, and 1280x1024.

6.    Select Display Modes.

7.    Select value in Refresh rate list box to change the screen refresh rate.
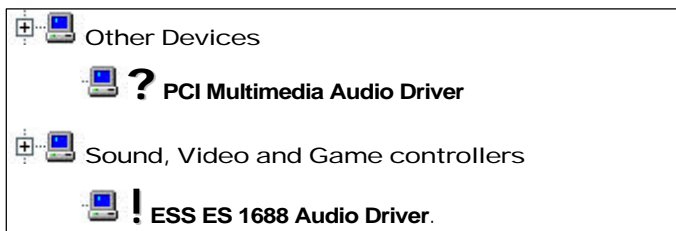
8.    Click [OK] or [Apply].

SiS VGA
Driver
Installation

# **6** *ESS™ Audio Driver Installation*

## *Windows® 95/98 Sound-Driver Installation*

This section describes how to perform the ESS ™ audio driver installation in **Windows®**
**95/98** environment. The Windows NT drivers can be installed automatically through the
SOYO CD. Refer to page 16.

After first installing Windows® 95/98, follow these steps:

1.    From the desktop, click [Start] menu and select [Control Panel] from [Settings]
      group.

2.    Select the [System] icon.

3.    Select the [Device Manager] tab; use the scroll bar to locate the following devices
      and, if these entries exist, remove them:

      ┌─────────────────────────────────────────────────────────┐
      │ ⊞ 🖳 Other Devices                                         │
      │         🖳 **?** **PCI Multimedia Audio Driver**             │
      │ ⊞ 🖳 Sound, Video and Game controllers                     │
      │         🖳 **!** **ESS ES 1688 Audio Driver**.              │
      └─────────────────────────────────────────────────────────┘

      *Note:* To remove a device, highlight the item you want to take out from your system
      and press the [Remove] button.

4.    Then, click [Refresh].

5.    Insert the SOYO CD into the CD-ROM drive.

6.    When the *"Update Driver Wizard"* appears, click [Next].

7.    The installation wizard will prompt you on the location of the new audio driver you
      want to install. Click [Other Location].

8.    Click the [Browse] button.

9.    Select the *"D:\DRIV-ALL\ESS-PCI\Win9x"* path, and click [OK].

10.   Now let Windows® 95/98 automatically copy the .inf driver files and configure the
      ESS sound chip.

This completes the Windows® 95/98 installation. The program will continue to load and
when it is complete, you should hear the Windows® 95/98 start-up wave file.

# Quick Trouble shoot tips

## Video (no display) related issues

**I built a new computer system using a Soyo board and nothing happens when turning it on, no video and no beeps from the PC speaker. What is happening and how can it be fixed?**
No screen and no beeps mean that your CPU and motherboard do not work at all. It could be that the CPU is not seated correctly or that a component on the M/B is grounded (shorted) with the case. Also make sure to check the voltage setting switch (110V/220V) on the back of the power supply. To isolate the problem do the following:

1.   Press and hold down on the "Ins" (insert) key while turning on the computer until you get video. If you do not get video then,

2.   Double-check jumpers setting on you motherboard and remove all add-on cards, unplug all hard-disk and floppy-disk drive cables and see if you can hear some beeps. If you still do not get any beeps, then try putting the motherboard on the table (to isolate it from the case) with the CPU and speaker only, and give it one more try.

**I hear a series of beeps and I do not get anything from my monitor. What could be wrong?**
The following lists some basic beep codes and their possible meanings:

- • One long beep and 3 very short beeps - The video card is not detected by the motherboard. Please re-seat your video card. If you are using an AGP card, please push your AGP card down real hard. You may have to push VERY hard without the AGP card mounting screw. Make sure not to insert the card the other way around.

- • Continuous beeps – One or more of the memory modules is not seated correctly in its socket.

**My PCI VGA card works fine with my system, but when I put in a new AGP card, it does not give me any video. Is my AGP slot bad?**
This is a common problem with AGP video cards. The reason is that your AGP card did not get seated into the AGP slot fully and firmly. Please push your AGP card down into the socket real hard, it should snap twice. You may have to unscrew

the AGP card to allow the card to go further down. Do take care not to damage the card by using too much force.

**I get distorted video my AGP card right after I save my bios. Why is that?**
The cause is likely that your AGP card is not running at the correct bus speed. To fix this, please clear the CMOS via JP5 and if it still does not work, please upgrade your motherboard bios to the latest version.

## BIOS Issues

**Where can I find the BIOS revision of my mainboard?**
It will be displayed on the up-left corner on the screen during boot-up. It will show as your board type followed by the revision number, such as 5EH_2CA1 (meaning revision 2CA1 for the SY-5EH board) or 6BA+ IV_2AA2 which means SY-6BA+ IV motherboard with 2AA2 bios.

**Where can I find the latest BIOS of my motherboard?**
Please go to the technical support page of one of the SOYO websites (Taiwan: www.soyo.com.tw), and look up your motherboard to find the latest BIOS revision.

## Hard disk, floppy drive, CD-ROM etc

**When I boot up my new computer I got "floppy boot failure" and the LED on the floppy stays on**
Make sure the red wire of floppy ribbon cable goes to Pin1 on the floppy drive side (don't trust the "key lock" or "notch") and use the end-connector of the cable (don't use middle one).

## Modem issues

**I get an "I/O Conflict" message when I turn on my system and I can not get my modem to work**
What you need to do is to disable 'COM2' (or UART2 or serial port 2) in the bios under integrated peripheral setup.

**I have installed my modem drivers several times and I still cannot get my modem to work. Why?**
If you are sure that the modem driver has been installed correctly, then you need to install the south bridge driver from the SOYO CD, this is because Windows does not properly recognize relatively new chipsets.

## Audio Issues

**I do not get any sound from my sound card. What could be wrong?**

Please make sure the speaker is connected to the speaker out port on your sound card.

**In Device Manager, I keep getting yellow exclamation signs on my sound port even though I have installed my sound driver several times and I could not get my sound card to work. What is wrong?**

It is likely that you did not have the correct driver installed. If you are sure that the correct sound driver has been installed, then please install the 'south bridge' driver for the motherboard.

**The sound is working in my system, but when I play CD music from the CD-ROM, I do not get any sound. What is wrong?**

This is because the 3-wire audio cable from the CD-ROM to the sound card is not connected or it is loose.

**The sound from my sound card is distorted when Windows starts. What is wrong?**

First, if you are using an ISA sound card, please make sure the IRQ needed for the sound card is set to 'Legacy ISA' in the bios. In other words, if your ISA sound card takes IRQ5, then set IRQ5 to 'Legacy ISA'. Next, install the 'south bridge' driver for the motherboard.

**The sound and everything else works fine except that the recorder and microphone do not work. What is wrong?**

This is because the recorder and microphone in the Windows are not enabled. Please go to sound properties and enable them.

**Lock up (freeze)**

**When I boot up my system, everything works fine. It sees my CPU and memory, detects my hard drive, floppy drive and CD-ROM but locks up at "Verify DMI pool data... ", and it won't go any further. What should I do?**

Please clear the CMOS via JP5 then choose 'load setup default' in the bios and save the bios and exit. Next, unplug all other add-on cards except the video card and floppy drive controller, and see if it can boot from floppy. Then put back the peripherals one by one to identify which one causes the lockup. If you are running a Cyrix CPU, make sure the 'linear burst function' is enabled in the bios.

**I can not get my board to run properly.**

Please make sure you have the latest bios and driver from the SOYO web site at: http://www.soyo.com

## SY-5SSM & SY-5SSM/5 V1.1 *Quick Start Guide*

**How to contact us:**
- If you are interested in our products, please contact the SOYO sales department in the region you live.
- If you require Technical Assistance, please contact our Technical Support in the region you live.

SOYO prefers Email as communication medium, remember to *always add to the email the country that you live in*.

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