

**SIS 486 PCI**  
**MOTHER BOARD**  
**(with Enhanced IDE)**

**USER'S MANUAL**

# INTRODUCTION

## Overview

Developed from the SIS496/7 design, the SIS496/7 System Board is implemented by the SiS 85C496 and 85C497 chips. Besides the consideration of high performance and reliability, the system board is designed to Deep Green function and PCI/ISA interface and fully compatible with IBM PC AT machine on both hardware and software level.

Three PCI bus slots were built in the board supports three master PCI bus devices to provide 32 bits I/O operation, which enhances the performance of the system even on the I/O peripherals.

The maximum on-board memory size is 64M bytes which satisfies the requirements of the latest operation system, like OS/2, Unix, Novell Netware and Microsoft Windows.

## Features

- Processor support: 486SX, 486DX, P24T, SL486SX, SL486DX2, SL486DX, P24D, AMD486DXL, AMD486DXL PLUS, INTEL DX4(P24C), CYRIX 486DX, CYRIX 486DX2
- Up to 64MB of local high-speed, page-mode, DRAM memory space.
- Supports 1MB/4MB/8MB/16MB 72PINS SIMM RAM modules.
- Free-Table logic of SIMM RAM modules.
- Hidden refresh support to enhance system performance.
- Programmable AT bus clock.
- Programmable DRAM speed.
- Programmable Cache Ram speed.
- Programmable IRQ, DMA, Harddisk, Floppy and Video access for time counter of Green function.
- Programmable wait states to control the I/O recovery time on AT bus.
- Comprehensive PCI controller supports 3 master PCI Bus devices.
- Support Deep Green PC function.



JP35      1-2 : Normal  
             2-3 : Discharge RTC CMOS

**Note:** If you are power up the system for the first time or you have turn off the system for more than one month, you should leave your system on for 10 to 15 hours to completely recharge the battery.

### Cache Ram Installation:

20ns SRAM is recommended to use as external cache in the system board, and various size of external cache size can be installed:

Cache Size	JP23	JP24	JP25	JP36	JP37	BANK 0	BANK 1
128K	1-2	1-2	1-2	1-2	1-2,3-4	32K x 8	
256K	2-3	1-2	2-3	1-2	2-3,4-5	32K x 8	32K x 8
256K	2-3	1-2	1-2	2-3	1-2,3-4	64K x 8	
512K	2-3	2-3	1-2	1-2	1-2,3-4	128K x 8	
512K	2-3	2-3	2-3	1-2	2-3,4-5	64K x 8	64K x 8

The jumper of JP23, JP24, JP25, JP36 and JP37 should be set correctly according to the cache ram size installed.

### JP30, JP31, JP32 : Clock Generator Output Selection:

CPU Speed	JP30	JP31	JP32
33MHz (DX2-66)	Open	Close	Close
✓ 40MHz	Open	Open	Close
50MHz	Open	Close	Open
25MHz (DX2-50)	Open	Open	Open

JP33      1-2      : SYSTEM <= 33MHz  
             2-3      : ✓ SYSTEM > 33mhz

JP34      1-2      : ACLK and CPUCLK same phase  
             2-3\*    : ACLK delay for CPUCLK



# LAYOUT OF SYSTEM BOARD

