

## 4.2 其它设置

### CMOS 放电

	<b>JP29</b>
CMOS 保护	1-2 *
CMOS 清除	2-3

### 电池选择

	<b>JP21</b>
主板电源	1-2 *
外部电源	2-3

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## CHAPTER 1 GENERAL SPECIFICATION

### 3.6 外接电池接口(P8)

PIN	信号名称
1	+3.6Vdc
2	N.C.
3	地
4	地

### 3.7 电源连线 (P14)

PIN	信号名称
1	电源正常
2	+5Vdc
3	+12Vdc
4	-12V dc
5	地
6	地
7	地
8	地
9	-5Vdc
10	+5Vdc
11	+5Vdc
12	+5Vdc

#### Processor:

- ◆ Processor Type  
Intel Pentium CPU, AMD K5 CPU, Cyrix 6x86 CPU and future upgraded CPU
- ◆ External CPU clock  
50/60/66 Mhz

#### Chipset:

- ◆ Motherboard chipset  
Opti Viper-M PCI/ISA Pentium motherboard chipset
- ◆ Super I/O chipset  
Advanced super I/O chipset

#### Cache Architecture:

- ◆ Internal Cache  
8KB/16KB data cache  
8KB/16KB code cache
- ◆ External Cache  
On-board 256KB Sync. Pipeline Burst SRAM

#### Memory Subsystem:

- ◆ DRAM SIMM sockets  
4 x 72 pin 4MB / 8MB / 16MB / 32MB DRAM modules
- ◆ Max. Memory Size  
128MB
- ◆ DRAM Type  
Fast Page Mode or EDO DRAM supported

#### Input/Output Subsystem

- ◆ PCI bus slots  
2 x 32-bit PCI Bus slots (2 masters)
- ◆ ISA bus slots  
3 x 16-bit ISA slots
- ◆ Shared bus slots  
1 x 32 bit PCI bus slot (master) or 1 x 16-bit ISA slot
- ◆ I/O bus speed  
Up to 33MHz (PCI bus)

#### Integrated IDE, Super I/O Subsystem

- ◆ IDE support  
Chipset built-in PCI IDE support up to 4 IDE Drives
- ◆ On board I/O  
One Floppy Port supporting 2 floppy drives of 360K / 720K / 1.2M / 1.44M / 2.88M capacity.  
Two serial ports (16550 Fast UART compatibles)  
One parallel Port (Standard, ECP, EPP)

## CHAPTER 2 INSTALLATION & UPGRADE

### 2.1 CPU Installation

The CPU is composed of pins that can easily be bent during installation, causing permanent damage to the processor. It is therefore very important that you make sure the pins are straight before installing the CPU onto the SPGA socket located on RHINO 8 (refer to layout for exact location). To properly align the CPU with the socket, align pin 1 of the CPU (with a notch at the corner) with pin 1 of the CPU socket as demonstrated below.

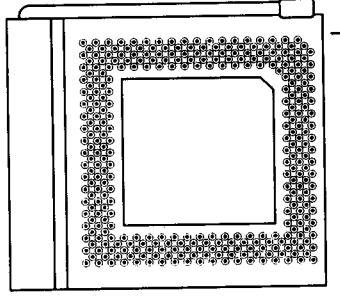


Figure 1 Socket 7 for Pentium CPU

### 2.2 Fast Page mode / EDO DRAM Installation

There are two memory banks located on the RHINO 8 motherboard, marked Bank 1 & Bank 2. They are counted starting from right to left consecutively. Start to install the SIMM modules (IN PAIRS) from the right hand side first. Depending on how your memory is configured, you may not need to use all the memory banks. Either X32 or X36 of 72 pins SIMM can be installed.

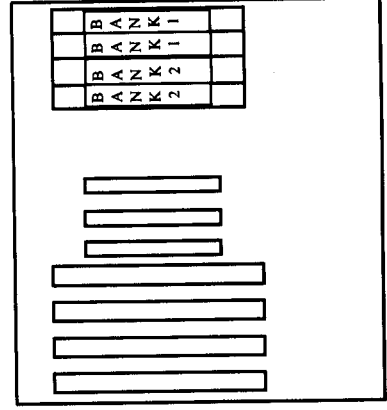


Figure 2 SIMM Sockets Location

## 2. 安装及修改

### 2.1 系统元件图

接口标识	功能
P1	连接复位开关
P2	连接Turbo LED
P4	连接扬声器
P5	连接锁定装置
P6	连接IDE LED
P8	连接外部电源
P9	连接第一IDE
P10	连接第二IDE
P11	连接软驱
P12	连接打印口
P14	连接电源
P15	连接串口1
P17	连接串口2
KB1	连接键盘

### 2.2 系统速度控制:

系统速度可以通过键盘. 使用减号 (-) 或加号 (+) 来控制. 按 <Control> + <alt> + <-> 减低速度, 按 <control> + <alt> + <+> 增加速度.

### 2.3 CMOS复位:

如果系统设置不正确, 可能会导致系统失灵. 如果出现这种情况, 先关电源, 再将跳线JP29跳至2-3, 这样CMOS的状态寄存器会清除. 等待至少5秒钟, 以保证CMOS中的内容被清除. 然后将跳线跳回1-2并通电. BIOS会发现CMOS状态寄存器被复位并认为设置信息错误, 并提示你更改设置信息.

## 1. 综述

### 处理器:

- ◆ 处理器类型:  
Intel 奔腾 CPU, AMD K5 以及 Cyrix 6x86 CPU
- ◆ CPU 外部时钟:  
50/60/66MHz

### 芯片:

- ◆ 主板芯片:  
Opti Viper-M PCI/ISA 奔腾主板芯片
- ◆ I/O 芯片:  
超级 I/O 芯片

### 高速缓存:

- ◆ 内部缓存:  
8KB/16KB 数据缓存,  
8KB/16KB 代码缓存
- ◆ 外部缓存:  
256KB Sync. Pipelined  
Burst SRAM

### 存储器子系统:

- ◆ DRAM SIMM 插槽:  
4 x 72 脚 4MB/ 8MB/ 16MB/ 32MB  
DRAM 模块
- ◆ 最大存储容量:  
128MB
- ◆ DRAM 类型:  
快速页模式或EDO DRAM

### 输入/输出子系统:

- ◆ PCI 总线插槽:  
2个32-BIT PCI 总线插槽
- ◆ ISA 总线插槽:  
3个16-BIT ISA 总线插槽
- ◆ 共享插槽:  
1个32-BIT PCI 或 16-BIT ISA 插槽
- ◆ I/O 总线速度:  
PCI 总线速度可高达33MHZ

### 集成IDE, 超级I/O子系统:

- ◆ IDE 接口:  
2个可提供多达4个 IDE 磁碟机的  
内设PCI IDE 接口
- ◆ I/O 接口:  
一个可支持两个软驱(360K/ 720K/  
1.2M/ 1.44M/ 2.88M) 的软驱接口,  
两个串口, 一个并口

## 2.5 System Component Map

Jumper Connectors	Function
P1	Reset
P2	Turbo LED
P4	Speaker
P5	Keylock
P6	IDE LED
P8	External Battery
P9	Primary IDE
P10	Secondary IDE
P11	Floppy Drive
P12	Printer Port
P14	Power Connector
P15	Serial Port 1
P17	Serial Port 2
KBI	Keyboard Connector

#### 4.1.4 CMOS discharge

	JP29
Normal CMOS	1-2 *
Clear CMOS	2-3

#### 4.1.5 Battery select

	JP21
On-board Battery	1-2 *
External Battery	2-3

### 3.2 CONNECTORS PINOUT

#### 3.2.1 Reset Connector (P1)

Pin	Signal Name
1	Reset
2	Ground

#### 3.2.2 Turbo LED Connector (P2)

Pin	Signal Name
1	Pull_Up_150
2	LED_Turbo-

#### 3.2.3 Speaker Connector (P4)

Pin	Signal Name
1	Speaker Data_Out
2	N.C.
3	Ground
4	+5Vdc

#### 3.2.4 Keylock Connector (P5)

Pin	Signal Name
1	+5V
2	Mechanical Key
3	Ground
4	Keyboard Inhibit
5	Ground