

## PM8400B CPU CLOCK SPEED & VOLTAGE SETTINGS

### JP3, JP5 & JP9 CPU Clock Speed Jumpers

CPU TYPE	PR#	CPU CLOCK					CLK MULTIPLIER			DUAL VOLTAGE		
		MHz	JP3A	JP3B	JP3C	CLOCK	JP5A	JP5B	VALUE	JP9A	JP9B	TYPE
INTEL® PENTIUM® P54C		75	2-3	2-3	2-3	50MHz	1-2	1-2	1.5X	2-3	2-3	P54C
		90	2-3	2-3	1-2	60MHz	1-2	1-2	1.5X	2-3	2-3	P54C
		100	2-3	1-2	2-3	66MHz	1-2	1-2	1.5X	2-3	2-3	P54C
		120	2-3	2-3	1-2	60MHz	2-3	1-2	2.0X	2-3	2-3	P54C
		133	2-3	1-2	2-3	66MHz	2-3	1-2	2.0X	2-3	2-3	P54C
		150	2-3	2-3	1-2	60MHz	2-3	2-3	2.5X	2-3	2-3	P54C
		166	2-3	1-2	2-3	66MHz	2-3	2-3	2.5X	2-3	2-3	P54C
		180	2-3	2-3	1-2	60MHz	1-2	2-3	3.0X	2-3	2-3	P54C
	200	2-3	1-2	2-3	66MHz	1-2	2-3	3.0X	2-3	2-3	P54C	
INTEL® PENTIUM® MMX™ P55C		166	2-3	1-2	2-3	66MHz	2-3	2-3	2.5X	1-2	1-2	P55C
		200	2-3	1-2	2-3	66MHz	1-2	2-3	3.0X	1-2	1-2	P55C
		233	2-3	1-2	2-3	66MHz	1-2	1-2	3.5X <sup>1</sup>	1-2	1-2	P55C
CYRIX® IBM® 6x86	PR120+	100	2-3	2-3	2-3	50MHz	2-3	1-2	2.0X	2-3	2-3	P54C
	PR133+	110	1-2	2-3	2-3	55MHz	2-3	1-2	2.0X	2-3	2-3	P54C
	PR150+	120	2-3	2-3	1-2	60MHz	2-3	1-2	2.0X	2-3	2-3	P54C
	PR166+	133	2-3	1-2	2-3	66MHz	2-3	1-2	2.0X	2-3	2-3	P54C
	PR200+	150	1-2	2-3	1-2	75MHz	2-3	1-2	2.0X	2-3	2-3	P54C
CYRIX® IBM® 6x86L	PR166+L	133	2-3	1-2	2-3	66MHz	2-3	1-2	2.0X	1-2	1-2	P55C
	PR200+L	150	1-2	2-3	1-2	75MHz	2-3	1-2	2.0X	1-2	1-2	P55C
CYRIX® IBM® 6x86MX	PR166	150	2-3	2-3	1-2	60MHz	2-3	2-3	2.5X	1-2	1-2	P55C
	PR200	166	2-3	1-2	2-3	66MHz	2-3	2-3	2.5X	1-2	1-2	P55C
	PR233	188	1-2	2-3	1-2	75MHz	2-3	2-3	2.5X	1-2	1-2	P55C
AMD™ K5	PR75	75	2-3	2-3	2-3	50MHz	1-2	1-2	1.5X	2-3	2-3	P54C
	PR100	100	2-3	1-2	2-3	66MHz	1-2	1-2	1.5X	2-3	2-3	P54C
	PR120	90	2-3	2-3	1-2	60MHz	1-2	1-2	1.5X	2-3	2-3	P54C
	PR133	100	2-3	1-2	2-3	66MHz	1-2	1-2	1.5X	2-3	2-3	P54C
	PR150	150	2-3	2-3	1-2	60MHz	2-3	2-3	2.5X	2-3	2-3	P54C
	PR166	166	2-3	1-2	2-3	66MHz	2-3	2-3	2.5X	2-3	2-3	P54C
AMD™ K6	PR2-166	166	2-3	1-2	2-3	66MHz	2-3	2-3	2.5X	1-2	1-2	P55C
	PR2-200	200	2-3	1-2	2-3	66MHz	1-2	2-3	3.0X	1-2	1-2	P55C
	PR2-233	233	2-3	1-2	2-3	66MHz	1-2	1-2	3.5X <sup>1</sup>	1-2	1-2	P55C

<sup>1</sup> TO GET A 3.5X MULTIPLIER FOR THE INTEL & AMD 233MHZ PROCESSORS YOU WILL NEED TO SET THE JUMPER SETTINGS TO 1.5X; THE SYSTEM BOARD WILL AUTOMATICALLY SET THE CLOCK MULTIPLIER TO 3.5X FOR THOSE PROCESSORS WHEN SET TO 1.5X

### JP6 CPU Voltage Regulator Output Jumpers

JP6A	JP6B	JP6C	JP6D	DESCRIPTION
SHORT	OPEN	OPEN	OPEN	3.5 Volts (P54C, 6x86, K5)
OPEN	SHORT	OPEN	OPEN	3.2 Volts (K6 PR2-233)
OPEN	OPEN	SHORT	OPEN	2.9 Volts (K6 PR2-166 & 200, 6x86L, M2)
OPEN	OPEN	OPEN	SHORT	2.8 Volts (P55C)
OPEN	OPEN	OPEN	OPEN	2.5 Volts

## PM8400B SPECIFICATIONS

### • CPUs SUPPORTED\*

Intel® Pentium® P54C (75MHz to 200MHz)  
 Intel® Pentium® MMX™ P55C (166MHz to 233MHz)  
 Cyrix®/IBM® 6x86MX (PR166 to PR233)  
 Cyrix®/IBM® 6x86L (PR166+ to PR200+)  
 Cyrix®/IBM® 6x86 (PR120+ to PR200+)  
 AMD™ K6 (PR2-166 to PR2-233)  
 AMD™ K5 (PR75 to PR166)  
 High Performance VXPRO™ Chipset  
 Supports 3.5, 3.2, 2.9, 2.8 & 2.5 volt CPUs with built-in switching voltage regulator

### • MEMORY

Up to 384MB of main memory in 4 (2 banks) auto banking 72-pin SIMM slots for Fast Page Mode or EDO DRAM, and 2 168-pin DIMM sockets for SDRAM, Fast Page Mode DRAM, or EDO DRAM modules.

### • CACHE

On-Board 512KB Pipeline Burst Cache

### • ENHANCED IDE CONTROLLER

Two PCI EIDE Interfaces for up to four EIDE devices in two channels. Individually supports PIO Mode 0 to 4 for all four devices - all four devices may have different PIO modes and performance will be optimized for each device

### • BUS ARCHITECTURE

Four 32-bit PCI Local Bus Slots with Master Mode  
 Three 16-bit ISA Bus Slots

### • ON-BOARD I/O CONTROLLER

On-Board Interfaces for High Speed Multi-I/Os  
 Two 16550 Fast Serial Ports  
 One SPP, EPP & ECP Mode Capable Parallel Port  
 One High Speed Floppy Drive Connector  
 One PS/2-type Mouse Header.

### • POWER MANAGEMENT FEATURES

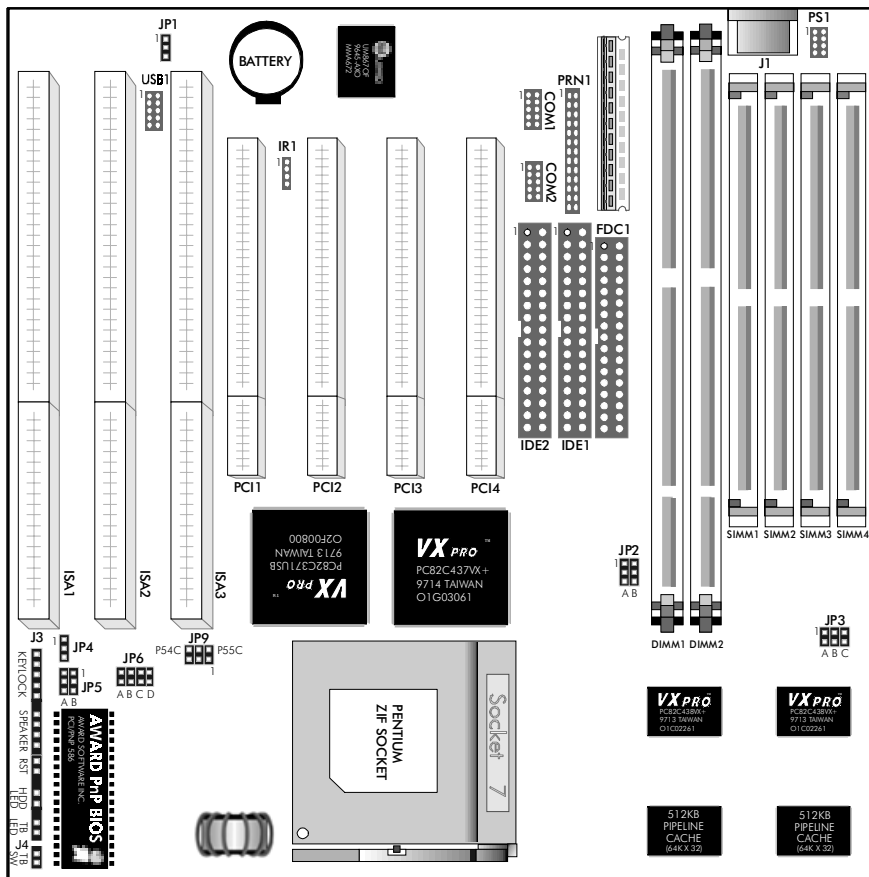
SMM/SMI Power Management with APM Software Interface - monitor CPU and I/O status with fully user configurable parameters in BIOS

### • BIOS FEATURES

Award "Plug and Play" Flash ROM for easy BIOS upgrades  
 Built-in NCR810 SCSI BIOS Firmware

\* PROCESSORS TESTED AT MANUAL'S RELEASE

## PM8400B BOARD DIAGRAM



## PM8400B QUICK INSTALLATION GUIDE

- (1) **SET JP3, JP5, JP6 & JP9 TO CONFIGURE YOUR BOARD FOR YOUR CPU** It's fairly easy to forget a jumper or two, so before you power on your system, make sure to check & double check your settings so that you don't prematurely burn out your CPU.
- (2) **INSERT THE CPU INTO THE ZIF SOCKET** Just align the dotted corner of your CPU with the corner of the ZIF socket that looks like its missing a pinhole and pull down gently on the handle.
- (3) **SET JP2 AND INSTALL YOUR MEMORY INTO THE CORRESPONDING SIMM OR DIMM SOCKETS**
- (4) **INSTALL THE MOTHERBOARD ONTO THE SYSTEM CHASSIS MAKING SURE THAT IT IS PROPERLY GROUNDED AND MOUNTED** Take time to do this properly as it makes the installation of your cards and cables easier.
- (5) **CONNECT YOUR HARD DRIVE(S), FLOPPY DRIVE(S), KEYBOARD, PERIPHERAL CARDS, AND I/O CABLES TO THE BOARD** Be sure your cables and cards are properly oriented and plugged in firmly.
- (6) **CONNECT YOUR CASE LED & SWITCH CABLES TO THE BOARD**
- (7) **CONNECT THE POWER SUPPLY CABLES TO THE BOARD AND TURN ON THE MACHINE**
- (8) **GO INTO BIOS AND SETUP YOUR PERIPHERALS AND SYSTEM CONFIGURATION** Press <del> during memory check phase of POST to enter the BIOS.
- (9) **CLOSE YOUR CASE ONCE YOUR COMPUTER AND YOUR OS IS WORKING FINE** Bootup your OS and see if the board and all your peripherals are recognized and working.

## PM8400B BOARD HEADER PINOUTS AND JUMPER SETTINGS

### J3 - Keylock & Power LED

PIN	DESCRIPTION
1	LED Output
2	N.C.
3	Ground
4	Keylock
5	Ground

### J3 - Speaker Connector

PIN	DESCRIPTION
1	DATA Out
2	N.C.
3	Ground
4	+5V

### J3 - Reset Switch Jumper

JUMPER	DESCRIPTION
OPEN	Normal Mode
SHORT	System Reset

### J3 - Hard Drive LED

PIN	DESCRIPTION
1	+5V
2	GROUND

### J3 - Turbo LED

PIN	DESCRIPTION
1	Anode (+)
2	Ground

### J4 - Turbo Switch

PIN	DESCRIPTION
1	Anode (+)
2	Ground

### JP1 - CMOS Battery Jumper

JUMPER	DESCRIPTION
1 - 2	Normal Mode (default)
2 - 3	Clear CMOS

### JP4 - Flash ROM Voltage Jumper

JUMPER	DESCRIPTION
1 - 2	12 Volt Flash Programming (default)
2 - 3	5 Volt Flash Programming

### PS1 - PS/2 Mouse Connector

PIN	DESCRIPTION
1	Mouse Clock
2	Ground
3	N.C.
4	Mouse Data
5	N.C.
6	N.C.
7	N.C.
8	+5VDC

### J2 - Power Supply Connector

PIN	DESCRIPTION
1	Power Good
2	+5VDC
3	+12VDC
4	-12VDC
5	Ground
6	Ground
7	Ground
8	Ground
9	-5VDC
10	+5VDC
11	+5VDC
12	+5VDC

### USB1 - 2 Channel USB Connector

PIN	DESCRIPTION
1,2	+5VDC
3,4	USB DATA (-)
5,6	USB DATA (+)
7,8	Ground
9,10	Ground

### JP2 DIMM Module Voltage Selector

JP2A	JP2B	DESCRIPTION
2 - 3	2 - 3	For SDRAM DIMM modules (3.3 V)
1 - 2	1 - 2	For EDO DRAM/Fast Page Mode DIMM Modules (5V)

### IR1 - Infrared Connector

PIN	DESCRIPTION
1	IR In
2	Ground
3	IR Out
4	+5VCC