

## Hardware Setup

This chapter explains how to configure the motherboard's hardware. After you install the motherboard, you can set jumpers, install memory on the motherboard, and make case connections. Refer to this chapter whenever you upgrade or reconfigure your system.

## Jumper Settings

### CPU Type

	Cyrix™	Intel™ / AMD™
JP1	Closed	Closed
JP2	Open	Closed

### DRAM Type Select

	Open	66MHz DRAM Refresh rate
JP5	Closed	60MHz DRAM Refresh rate

### CPU Clock

	JP6	JP7	JP14
50MHz	Closed	Closed	Open
60MHz	Closed	Open	Closed
66MHz	Open	Closed	Closed
55MHz	Open	Open	Closed

	JP3	JP4	JP6	JP7	JP14
Intel Pentium-75	1-2	1-2	Closed	Closed	Open
Intel Pentium-90	1-2	1-2	Closed	Open	Closed
Intel Pentium-100/233	1-2	1-2	Open	Closed	Closed
Intel Pentium-120	2-3	1-2	Closed	Open	Closed
Intel Pentium-133	2-3	1-2	Open	Closed	Closed
Intel Pentium-150	2-3	2-3	Closed	Open	Closed
Intel Pentium-166	2-3	2-3	Open	Closed	Closed
Intel Pentium-180	1-2	2-3	Closed	Open	Closed
Intel Pentium-200	1-2	2-3	Open	Closed	Closed
Cyrix 6x86-P120+ 100MHz	2-3	1-2	Closed	Closed	Open
Cyrix 6x86-P133+ 110MHz	2-3	1-2	Open	Open	Closed
Cyrix 6x86-P150+ 120MHz	2-3	1-2	Closed	Open	Closed
Cyrix 6x86-P166+ 133MHz	2-3	1-2	Open	Closed	Closed
AMD 5K86-P75(AMD-SSA/5-66)	2-3	1-2	Open	Closed	Closed
AMD 5K86-P75(AMD-SSA/5-75)	1-2	1-2	Closed	Closed	Open
AMD5K86-P90(AMD-SSA/5-90)	1-2	1-2	Closed	Open	Closed

### Second Level Cache Configuration

	Cache Size	Setting
JP8	512KB	Closed
	256KB	Open

### Flash BIOS Type Select

	JP16
	ROM
1-2	5V Flash
2-3	12V Flash

### CPU Core-voltage select (For Multi-voltage version only)

	JP100
2.50V	Open
2.70V	1-2
2.88V	3-4
3.38V	5-6
3.53	7-8

Please refer the printing on the motherboard.

### CPU Bus-voltage select (For Multi-voltage version only)

	JP101
3.52V	Open
3.38V	Closed

### Power source selection for the CPU Bus section (For Multi-voltage version only)

	JP102, JP103, JP104, JP105
Intel P54C	1-2
Intel P55C	2-3
Cyrix 6x86	1-2
AMD 5k86 (SSA/5)	1-2
AMD 5k86 (dual voltage)	2-3

### CPU Voltage Select (Fir Two voltage version only)

	JP21
	Voltage
1-2	3.3V
2-3	3.5V

### CMOS Data Clear

	Close	Clear
JP18	Open*	Normal

## Connectors

Once you have fastened the motherboard into the system case, the next step is to connect the internal cables. The motherboard connectors have varying numbers of pins and are the points of contact between the motherboard and other parts of the computer.

### CN1 - PS/2 Keyboard Connector (optional)

Pin	Description	Pin	Description
1	Keyboard	4	+5V DC
2	NC	5	Keyboard Clock
3	Ground	6	NC

### CN2-Keyboard Connector

A standard five-pin female DIN keyboard connector is located at the rear of the board. Plug the keyboard jack into this connector.

Pin	Description	Pin	Description
1	Keyboard Clock	4	Ground
2	Keyboard Data	5	+5V DC
3	NC		

### J1 - USB Connector

Pin	Description	Pin	Description
1	USBP0-	7	USBP1+
2	GND	8	GND
3	USBP0+	9	VCC
4	GND	10	GND
5	USBP1-	11	VCC
6	GND	12	GND

### J4 - Keyboard & Power LED Connector

Pin	Description	Pin	Description
1	LED Power	4	Keyboard Inhibitor
2	NC	5	Ground
3	Ground		

**J5 - Power Supply Connector**

The motherboard requires a power supply with at least 200 Watts and a "power good" signal. PW1 has two six-pin male header connectors. Plug the dual connectors from the power directly onto the board connector while making sure the black leads are in the center.

Pin	Description	Pin	Description
12	+5V DC	6	Ground
11	+5V DC	5	Ground
10	+5V DC	4	-12V DC
9	+5V DC	3	+12V DC
8	Ground	2	+5V DC
7	Ground	1	Power Good

**J8 - IDE LED**

Pin	Description	Pin	Description
1	-Cathode	2	+Anode

**J9 - Parallel Port Connector**

Pin	Description	Pin	Description
1	STROBE-	14	Ground
2	AUTO FEED-	15	Data Bit 6
3	Data Bit 0	16	Ground
4	ERROR-	17	Data Bit 7
5	Data Bit 1	18	Ground
6	INIT -	19	ACJ-
7	Data Bit 2	20	Ground
8	SLCT IN-	21	BUSY
9	Data Bit 3	22	Ground
10	Ground	23	PE (PaperEnd)
11	Data Bit 4	24	Ground
12	Ground	25	SLCT
13	Data Bit 5	26	N.C.

**J11, J12 - Serial Ports Connectors**

Pin	Description	Pin	Description
1	RLSD	6	DSR
2	RX	7	RTS
3	TX	8	CTS
4	DTR	9	RI
5	GND	10	N.C.

**J13 - IR Connector**

Pin	Description	Pin	Description
1	VCC	6	GND
2	VCC	7	SOUT2
3	IRRX1	8	IRSL1
4	IRRX2	9	RISL2
5	GND	10	VCC

**J16 - Game Port Connector**

Pin	Description	Pin	Description
1	VCC	9	GND
2	VCC	10	JBCY-
3	JAB1	11	JACY
4	JBB1-	12	JBB2-
5	JACX	13	JAB2
6	JBCX-	14	MIDI_RXD
7	GND	15	VCC
8	MIDI_TXD	16	NC

**J19 - Speaker Connector**

Pin	Description	Pin	Description
1	Data out	3	Ground
2	NC	4	+5V

**J20 - Reset Switch Connectors**

Pin	Description	Pin	Description
1	Reset	2	Ground

**PS1 - PS/2 Mouse Connector (Optional)**

Pin	Description	Pin	Description
1	VCC	4	GND
2	N.C.	5	Mouse clock
3	Mouse Data		

## Memory Configuration

Table 1 shows the possible memory combination. The motherboard will support both Fast Page DRAM or EDO DRAM SIMMs, but they cannot be mixed within the same memory bank. If Fast Page DRAM and EDO DRAM SIMMs are installed in separate banks, each bank will be optimized for maximum performance.

SIMM 1 (Bank 0) SIMM Type (Size)	SIMM 2 (Bank 0) SIMM Type (Size)	SIMM 3 (Bank 1) SIMM Type (Size)	SIMM 4 (Bank 1) SIMM Type (Size)	Total System Memory
Empty	Empty	4 MB	4 MB	8 MB
Empty	Empty	8 MB	8 MB	16 MB
Empty	Empty	16 MB	16 MB	32 MB
Empty	Empty	32 MB	32 MB	64 MB
4 MB	4 MB	Empty	Empty	8 MB
4 MB	4 MB	4 MB	4 MB	16 MB
4 MB	4 MB	8 MB	8 MB	24 MB
4 MB	4 MB	16 MB	16 MB	40 MB
4 MB	4 MB	32 MB	32 MB	72 MB
8 MB	8 MB	Empty	Empty	16 MB
8 MB	8 MB	4 MB	4 MB	24 MB
8 MB	8 MB	8 MB	8 MB	32 MB
8 MB	8 MB	16 MB	16 MB	48 MB
8 MB	8 MB	32 MB	32 MB	80 MB
16 MB	16 MB	Empty	Empty	32 MB
16 MB	16 MB	4 MB	4 MB	40 MB
16 MB	16 MB	8 MB	8 MB	48 MB
16 MB	16 MB	16 MB	16 MB	64 MB
16 MB	16 MB	32 MB	32 MB	96 MB
32 MB	32 MB	Empty	Empty	64 MB
32 MB	32 MB	4 MB	4 MB	72 MB
32 MB	32 MB	8 MB	8 MB	80 MB
32 MB	32 MB	16 MB	16 MB	96 MB
32 MB	32 MB	32 MB	32 MB	128 MB

## Chapter 2

### AMI WINBIOS Setup

WINBIOS Setup configures system information that is stored in CMOS RAM. WINBIOS Setup has an easy-to-use graphical user interface that will be immediately recognizable to anyone who has ever used Microsoft Windows. WINBIOS Setup sets a new standard in BIOS user interfaces.

#### Starting WINBIOS Setup

As POST executes, the following appears:

Hit <DEL> if you want to run SETUP

Press <Del> to run WINBIOS Setup.

#### Using the Keyboard with WINBIOS Setup

WINBIOS Setup has a built-in keyboard driver that uses simple keystroke combinations:

Keystroke	Function
<Tab>	Move to the next window or field.
«→,←,↓,↑»	Move to the next field to the right, left, above, or below.
<Enter>	Select in the current field.
+	Increments a value.
-	Decrements a value.
<Esc>	Closes the current operation and return to previous level.
<PgUp>	Returns to the previous page.
<PgDn>	Advances to the next page.
<Home>	Returns to the beginning of the text.
<End>	Advances to the end of the text.
<Alt> <H>	Access a help window.
<Alt> <Spacebar>	Exit WINBIOS Setup.
Alphabetic keys	A to Z are used in the Virtual Keyboard, and are not case-sensitive.
Numeric keys Keypad.	0 to 9 are used in the Virtual Keyboard and Numeric