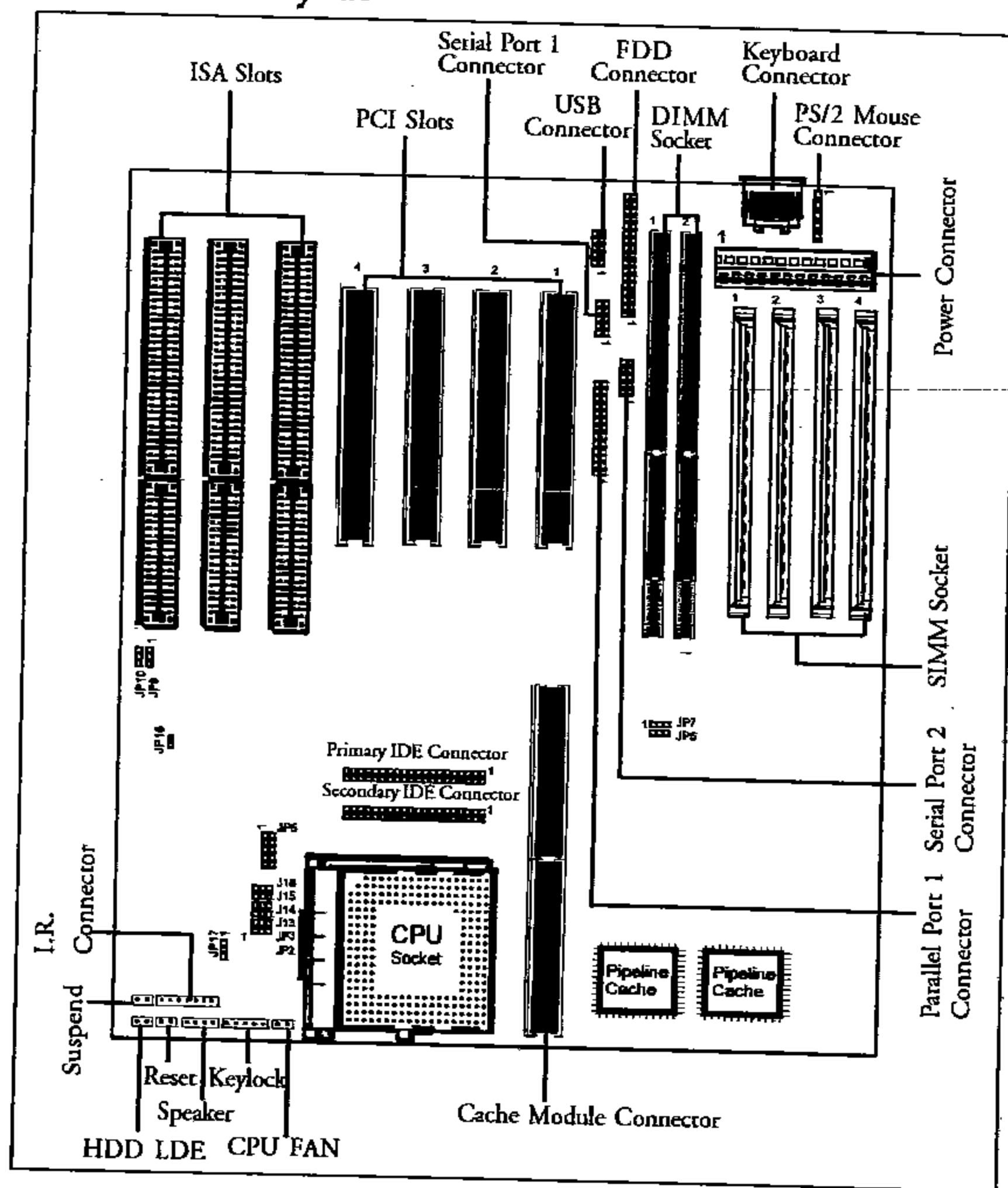


Hardware Setup

Your computer system is a high-performance computer system board that supports Pentium® CPUs running at 75,90,100,120,133,150,166,180,200MHz, Cyrix™ 6x86 CPUs (up to P200+) and AMD™ K5 processors (up to PR166). The motherboard allows flexible cache upgrade with the introduction of a COAST connector for expansion purposes. The motherboard offers floppy drive interface IDE interface for HDD and CD-ROM drive, two serial ports and an ECP/EPP parallel port. In addition to the hardware features, Windows 95 ready Plug and Play and Advanced Power Management (APM) are supported.

Motherboard Layout



Technical Reference Booklet

Jumper Settings

This chapter explains how to configure the motherboard's hardware. After you have installed 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.

CPU Clock

CPU Clock	JP6	JP7	PCI CLOCK
50MHz	2-3	2-3	25 MHz
55MHz	2-3	1-2	27.5MHz
60MHz	1-2	2-3	30 MHz
66MHz	1-2	1-2	33 MHz

	JP2	JP3	JP6	JP7
Intel Pentium-75	1-2	1-2	2-3	2-3
Intel Pentium-90	1-2	1-2	1-2	2-3
Intel Pentium-100 / 233 / K6 233	1-2	1-2	1-2	1-2
Intel Pentium-120	1-2	2-3	1-2	2-3
Intel Pentium-133	1-2	2-3	1-2	1-2
Intel Pentium-150	2-3	2-3	1-2	2-3
Intel Pentium-166 / K6 166	2-3	2-3	1-2	1-2
Intel Pentium-180	2-3	1-2	1-2	2-3
Intel Pentium-200 / K6 200	2-3	1-2	1-2	1-2
Cyrix 6x86-P120+ 100MHz	1-2	2-3	2-3	2-3
Cyrix 6x86-P133+ 110MHz	1-2	2-3	2-3	1-2
Cyrix 6x86-P150+ 120MHz	1-2	2-3	1-2	2-3
Cyrix 6x86-P166+ 133MHz	1-2	2-3	1-2	1-2
Cyrix 6x86-P200+ 150MHz	1-2	1-2	2-3	2-3
AMD K5-PR75 75MHz	1-2	1-2	2-3	2-3
AMD K5-PR90 90MHz	1-2	1-2	1-2	2-3
AMD K5-PR100 100MHz	1-2	1-2	1-2	1-2
AMD K5-PR120 90MHz	1-2	1-2	1-2	2-3
AMD K5-PR133 100MHz	1-2	1-2	1-2	1-2
AMD K5-PR150 120MHz	1-2	2-3	1-2	2-3
* AMD K5-PR166 133MHz	2-3	2-3	1-2	1-2

Flash voltage Select

Flash model	JP10
5V flash (SST/Winbond/ATMEL)	1-2
12V flash (Intel/MX)	2-3

Flash type Select (write-protection)

Flash model	JP9
SST/Winbond /ATMEL /MX	1-2
Intel	2-3

CMOS RAM Clear

	Normal	Clear
JP16	Open	Closed

In the following tables, AMD K5 CPUs are classified by their chip marking. Example of CPU marking: "AMD-K5-PR100ABQ"

The AMD marking mentioned below refers to the 2nd character (B in the example) after P-rating (PR100 in the example).

CPU Core-voltage select

Voltage	JP5	CPU Example
2.50V	1-2	AMD K5 ("K" marking)
2.70V	3-4	AMD K5 ("J" marking)
2.93V	5-6	Intel P55C or AMD K5 ("H" marking)
3.38V(VRE)	7-8	AMD K5 ("C" or "F" marking)
3.52V(STD)	9-10	Intel P54C or AMD K5 ("B" marking or Cyrix 6x86)

CPU Bus-voltage select

Voltage	JP17	CPU Examples
3.52V (VRE)	1-2	P55C
3.38V (STD)	2-3	AMD K5 ("H", "J", "K" marking)

For Intel P54C, Cyrix 6x86 and AMD K5 ("B", "C", "F" marking), JP17 is NOT used. Just leave JP17 at 1-2.

Power source selection for the CPU Bus section

CPU type	J13, J14, J15, J16
Intel P54C	2-3
Intel P55C	1-2
Cyrix 6x86	2-3
AMD K5 ("B", "C", "F" marking)	2-3
AMD K5 ("H", "J", "K" marking)	1-2

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.

CN2- PS/2 Keyboard Connector (optional)

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

CN1-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

J3 - Keyboard & Power LED Connector

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

J12 - 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

JP14 - IDE LED

Pin	Description	Pin	Description
1	+Anode	2	-Cathode

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.

J6, J7 - 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.

J10 - IR Connector

Pin	Description	Pin	Description
1	IR IN	5	IR MODE
2	GND	6	Vcc
3	OR OUT	7	GND
4	Vcc		

J11 - Speaker Connector

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

J19 - Reset Swith Connectors

Pin	Description	Pin	Description
1	GND	2	Reset

J2 - PS/2 Mouse Connector

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

Cache configurations

On-board Cache	Cache module connector	Total cache size
None	256KB module	256KB
None	512KB module	512KB
256KB	None	256KB
512KB	None	512KB
256KB	256KB module	512KB

Memory Configuration

Table 1 and 2 show the possible memory combinations. The motherboard will support both Fast Page DRAM or EDO DRAM SIMMs and SDRAM DIMMs

Table 1 (SIMM configurations)

SIMM1 (Bank 0)	SIMM2 (Bank 0)	SIMM3 (Bank 1)	SIMM4 (Bank 1)	Total
Empty	Empty	4MB	4MB	8MB
Empty	Empty	8MB	8MB	16MB
Empty	Empty	16MB	16MB	32MB
Empty	Empty	32MB	32MB	64MB
4MB	4MB	Empty	Empty	8MB
4MB	4MB	4MB	4MB	16MB
4MB	4MB	8MB	8MB	24MB
4MB	4MB	16MB	16MB	40MB
4MB	4MB	32MB	32MB	72MB
8MB	8MB	Empty	Empty	16MB
8MB	8MB	4MB	4MB	24MB
8MB	8MB	8MB	8MB	32MB
8MB	8MB	16MB	16MB	48MB
8MB	8MB	32MB	32MB	80MB
16MB	16MB	Empty	Empty	32MB
16MB	16MB	4MB	4MB	40MB
16MB	16MB	8MB	8MB	48MB
16MB	16MB	16MB	16MB	64MB
16MB	16MB	32MB	32MB	96MB
32MB	32MB	Empty	Empty	64MB
32MB	32MB	4MB	4MB	72MB
32MB	32MB	8MB	8MB	80MB
32MB	32MB	16MB	16MB	96MB
32MB	32MB	32MB	32MB	128MB

Table 2 (DIMM configurations)

DIMM1	DIMM2	Total
8MB	None	8MB
8MB	8MB	16MB
8MB	16MB	24MB
8MB	32MB	40MB
None	8MB	8MB
16MB	8MB	24MB
32MB	8MB	40MB
16MB	None	16MB
16MB	16MB	32MB
16MB	32MB	48MB
None	16MB	16MB
32MB	16MB	48MB
32MB	None	32MB
32MB	32MB	64MB
None	32MB	32MB

Notice:

1. Don't mix the Fast Page DRAM and EDO DRAM 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.

2. Never populate the DIMM sockets and the SIMM sockets at the same time.

BIOS SETUP

Main Menu

Once you enter the Award BIOS CMOS Setup Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup functions and two exit choices. Use the arrow keys to select among the items and press <Enter> to accept and enter the sub-menu.

ROM PC/ISA BIOS (2A59F008) CMOS SETUP UTILITY AWARD SOFTWARE, INC.	
STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION SETUP	HDD LOW LEVEL FORMAT
LOAD BIOS DEFAULTS	SAVE & EXIT SETUP
LOAD SETUP DEFAULTS	EXIT WITHOUT SAVING
Esc : Quit	↓ ↑ → ← : Select Item
F10 : Save & Exit Setup	(Shift) F2 : Change Color
Time, Date, Hard Disk Type	

Note that a brief description of each highlighted selection appears at the bottom of the screen.

Setup Items

The main menu includes the following main setup categories. Recall that some systems may not include all entries.

Standard CMOS Setup

This setup page includes all the items of Award special enhanced

BIOS Features Setup

This setup page includes all the items of Award special enhanced features.

Super / User Password Setting

Change, set, or disable password. It allows you to limit access to the system Password and Setup or just to Setup.

Chipset Features Setup

This setup page includes all the items of chipset special features.

Power Management Setup

This entry only appears if your system supports Power Management, "Green PC", standards.

PNP / PCI Configuration Setup

This entry appears if your system supports PNP / PCI.