

The **AZZA** 810T Mainboard Series



Cover

[Click Here](#)

Table Of Contents

[Click Here](#)

Introduction

[Click Here](#)

Hardware Installation

[Click Here](#)

BIOS Management

[Click Here](#)



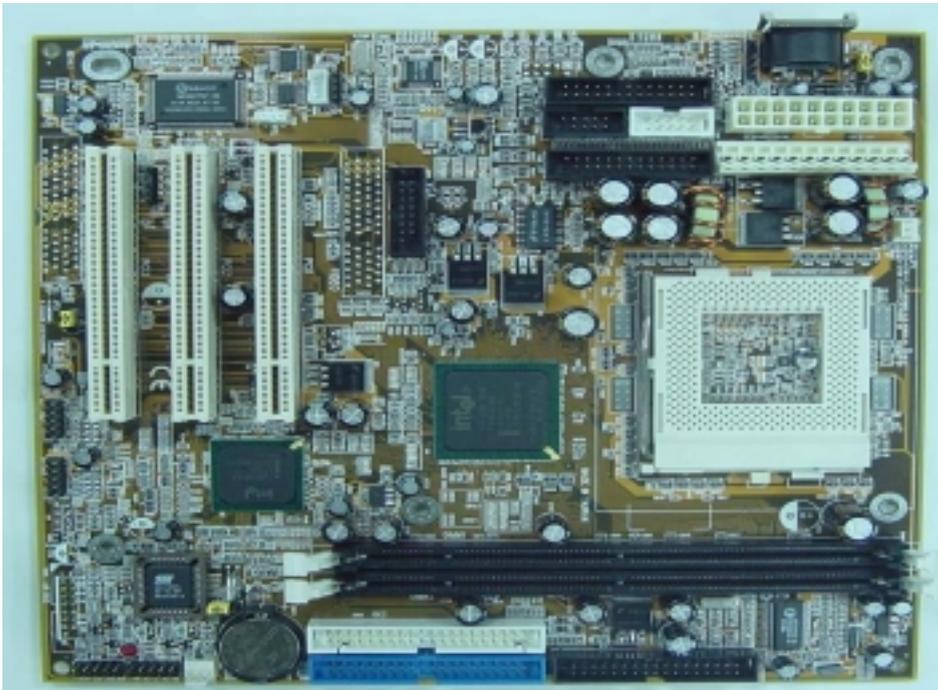
*Create High Quality
Service and Technology*



8102T USER'S MANUAL

Socket 370 AT Mainboard

8102T
810E2T



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Package Checklist

This package contains the following items:

- Mainboard Users manual
- One IDE cable support ATA/33, ATA/66 or ATA/100 IDE drives
- One 34-pin floppy disk drive cable
- One Driver Utility CD
- One COM Port 1 and 2 Cable with bracket
- One print port and PS/2 Cable with bracket
- One Game and Audio Cable with bracket
- One VGA Cable with bracket.

If any of these items are missing or damaged, please contact your dealer or sales representative for assistance.

Technical Support

If you require additional information, assistance during installation, please contact your dealer. Your dealer will be able to provide the latest information. If you need additional help, please visit our web site for technical support or e-mail to us.



Table Of Contents

Chapter 1:- Introduction *Page 5*

1.1. Overview	5
1.1.1. Mainboard Series	6
1.1.2. Mainboard Dimensions	6
1.1.3. Environmental Limitations	6
1.2. Features and Specifications	6
1.3. System Intelligence	9

Chapter 2:- Hardware Installation *Page 10*

2.1. Installation Checklist	10
2.2. Installation Steps.....	11
2.3. CPU, Memory and Expansion Slots.....	13
2.3.1. Installation of Processor (CPU)	13
2.3.2. Memory Modules	13
2.3.3. PCI Slots	14
2.4. Internal Connectors	14
2.4.1. AT Keyboard Connector.....	14
2.4.2. PS/2 Mouse Connector	15
2.4.3. Serial Port Connectors: COM1 and COM2.....	15
2.4.4. Parallel Port Connector: LPT1	15
2.4.5. USB Connectors: USB1, USB2, USB3 and USB4.....	15
2.4.6. Floppy Disk Drive (FDD)	16
2.4.7. Primary and Secondary IDE Connectors	16
2.4.8. Standard Infrared Connector	16
2.4.9. CPU and Chassis Fan Connectors	17
2.4.10. AT Power Supply Connector.....	17
2.4.11. ATX Power Supply Connector.....	17
2.4.12. WOL (Wake-On-LAN) Connector	18
2.4.13. Audio/Game Port Connector.....	18
2.4.14. VGA Connector	18
2.4.15. CD Audio In Connector	19
2.4.16. AIR Bus Connector	19
2.4.17. Front Audio Connector.....	19
2.5. System Panel Buttons and LED Connectors	20
2.5.1. PW: Power On/Off and External Suspend Switch Connector.....	20
2.5.2. TL: Turbo LED Connector	21
2.5.3. HL: IDE HDD LED Connector	21
2.5.4. RS: Reset Button Connector	21
2.6. Speaker, Power LED and Key-Lock Connector	21
2.6.1. Speaker Connector.....	21
2.6.2. Front Panel LED and Key-Lock Connector	21

Table Of Contents

2.7. Jumper Settings.....	22
2.7.1. JP 1: OnNow Function	22
2.7.2. JP 2: Clear CMOS	23
2.7.3. JP 3: Clear Keyboard Password.....	23

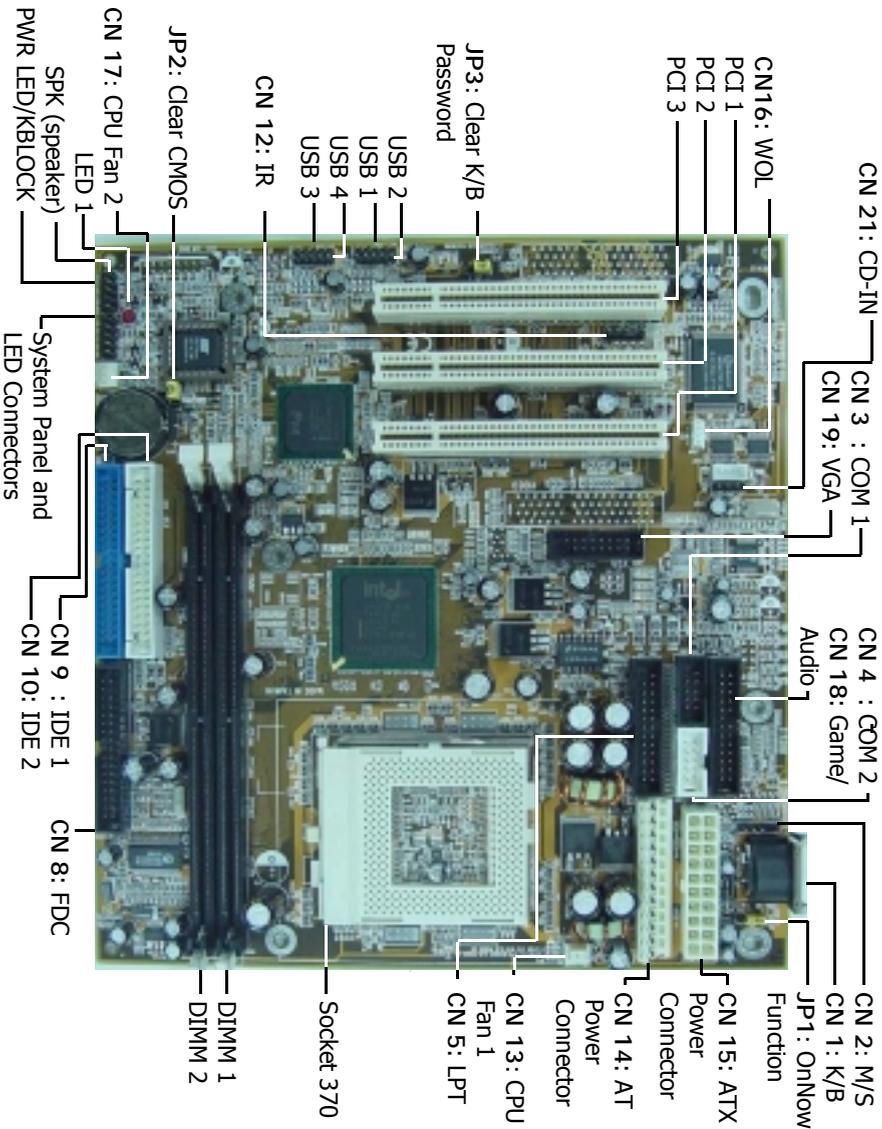
Chapter 3:- Managing The PC BIOS *Page 24*

3.1. AWARD BIOS CMOS Setup Utility	24
3.2. Main Menu	25
3.3. Standard CMOS Setup.....	26
3.4. ADVANCED BIOS FEATURES	28
3.5. ADVANCED CHIPSET FEATURES	31
3.6. INTEGRATED PERIPHERALS	33
3.7. Power Management Setup.....	37
3.8. PNP/PCI Configuration.....	40
3.9. Frequency/Voltage Control	42
3.10. Load Optimized Defaults.....	43
3.11. Set Supervisor Password.....	43
3.12. Set User Password	44
3.13. SAVE & EXIT SETUP/EXIT WITHOUT SAVING	45

Introduction

Chapter 1 - Introduction

1.1 MAINBOARD LAYOUT



Introduction

1.1.1. Mainboard Series

The 810 mainboard series has two models. They are:

1. 8102T
2. 810E2T

1.1.2. Mainboard Dimensions

Width & Length:	222 mm x 210 mm.	8.27 inches x 8.74 inches
Height:	1 1/2 inches	
PCB Thickness:	1.6 mm	
Weight:	18 ounces.	

1.1.3. Environmental Limitations

Operating Temperature:	10°C to 40°C . (50°Fto 104°F)	
Required Airflow:	50 linear feet per minute across CPU.	
Storage Temperature:	- 40°C to 70°C. (- 40°F to 158°F)	
Humidity:	0 to 90% non-condensing.	
Altitude:	0 to 10,000 feet	

1.2 Features and Specifications

Processor

Supports Intel® Socket 370 0.25 μ Celeron, 0.18 μ Celeron, 0.18 μ Pentium III or VIA Cyrix C3

Chipset

Intel FW82810 (for 8102T) or Intel FW82810E (for 810E2T) and FW82801BA

Super I/O

Winbond W83627SF

CPU Switching Voltage Regulator

Equipped with a switching voltage regulator that automatically detects +1.30V to +3.50V DC power supply.

System Memory

- 8MB to 512MB of 3.3V SDRAM memory.
- Two 168-pin DIMM sockets.
- Supports PC-100 SDRAM DIMM and PC-133 SDRAM DIMM.

Introduction

Expansion Slots

Three dedicated PCI slots, and one (optional) CNR (Communication Network Riser) slot. The CNR slot provides the opportunity to install a flexible and cost reduced method of implementing LAN, home networking, DSL, USB, wireless, audio and modem subsystems widely used in today's "connected PCs".

Onboard Audio Features

- Supports Microsoft ® DirectSound/DirectSound 3D.
- AC97 supported full duplex, independent sample rate converter for audio recording and playback.

Front Audio Port (Optional)

For use with a Front Utility Panel that connects Ear Phone, Microphone and Audio-in. For more details, please consult your dealer.

Word Size

Data Path: 8-bit, 16-bit, 32-bit, 64-bit.

Address Path: 32-bit.

FRONT SIDE BUS FREQUENCY

Supports 66 MHz, 100 MHz and 133 MHz FSB. Refer to the following table:

	CPU	SDRAM		CPU	SDRAM
8102T	66 MHz	100 MHz	810E2T	66 MHz	100 MHz
	100 MHz	100 MHz		100 MHz	100 MHz
	133 MHz	133 MHz		133 MHz	100 MHz

BIOS

- Award BIOS, Windows ® 95/98 Plug and Play compatible.
- Supports SCSI sequential boot-up.
- Flash EPROM for easy BIOS upgrades (2 Mbit).
- Supports DMI 2.0 function.

Desktop Management Interface (DMI)

The mainboard comes with a DMI 2.0 built into the BIOS. The DMI utility in the BIOS will automatically record different system configuration information and store this information in the DMI pool, which is a part of the system board's Plug and Play BIOS. DMI, along with the appropriately networked software, is designed for easy inventory, maintenance and simplified troubleshooting of computer systems.

Introduction

WOL (Wake-On-Lan) Port (optional)

One WOL connector supports Wake-On-LAN functionality.

USB Ports

The mainboard is equipped with four internal USB connectors. USB allows data exchange between your computer and a wide range of simultaneously accessible external Plug and Play peripherals. (Cable set for two connectors are optional and is sold separately).

IrDA Interface (optional)

The mainboard is equipped with an IR and CIR IrDA connector for wireless connectivity between your computer and peripheral devices. It supports peripheral devices that meet the HPSIR or ASKIR standard.

Connectors

- One connector for SIR and one connector for CIR IrDA interface.
- One floppy drive interface supports up to two 2.88MB floppy drives.
- One ATX and one AT power supply connector.
- One CPU and one chassis fan connector.
- One CD audio-in connector.
- One Front Audio Connector supports a Front Utility Panel.
- Two NS16C550A-compatible DB-9 serial port connectors (UARTs).
- One SPP/ECP/EPP DB-25 parallel port.
- One internal PS/2 mouse port connector.
- One AT keyboard port.
- One Audio/Game connector.
- One VGA connector.

PCI Bus Master IDE Controller

- Two PCI IDE interfaces support up to four IDE devices.
- Support ATA/33, ATA/66 and ATA100 hard disk drives.
- PIO Mode 3 and Mode 4 Enhanced IDE (data transfer rate up to 16.6MB/sec.).
- Bus mastering reduces CPU utilization during disk transfer.
- Supports ATAPI CD-ROM, LS-120 and ZIP

Introduction

1.3 Intelligence

Dual Function Power Button

Depending on the setting in the Soft-Off By Power-Button field of the Power Management Setup, this switch allows the system to enter the Soft-Off or Suspend mode.

External Modem Ring-on (optional)

The Modem Ring-on feature allows the system that is in the Suspend mode or Soft Power Off mode to wake-up/power-on to respond to incoming calls. This feature supports external modem only.

RTC Timer to Power-on the System

The RTC installed on the system board allows your system to automatically power-on on the set date and time.

Wake-On-LAN Ready (optional)

The Wake-On-LAN function allows the network to remotely wake up a Soft Power Down (Soft-Off) PC. Your LAN card must support the remote wakeup function. The 5VSB power source of your power supply must be at least 720mA.

ACPI Ready

The mainboard is designed to meet the ACPI (Advanced Configuration and Power Interface) specification. ACPI has energy saving features supporting OS Direct Power Management (OSPM) for round the clock PC operation.

Hardware Installation

Chapter 2 - Hardware

2.1. Installation Check List

The following is a checklist of all the expansion slots, jumpers and connectors that should be configured on your mainboard before you can run your pc.

Installation Checklist

Expansion Slots and Sockets

CPU Slot	Socket 370 supports Celeron, Pentium III and Cyrix C3.
DIMM Slots	Two 168 pin slots that support upto 512 MB SDRAM.
PCI Slots	Three 32 bit PCI Slots.

Jumpers

JP1	OnNow Function	Only on ATX Power
JP2	Clear CMOS Data	
JP3	Clear Keyboard Password	Only on ATX Power

Internal Connectors

CN1	AT Keyboard Connector	K/B
CN2	PS/2 Mouse	M/S
CN3	Serial Port 1	COM1
CN4	Serial Port 2	COM2
CN5	Parallel Port	LPT
CN6	Universal Serial Bus 1	USB1
CN7	Universal Serial Bus 2	USB2
CN8	Floppy Disk Drive	FDC
CN9	Primary IDE	IDE1
CN10	Secondary IDE	IDE2
CN13	CPU Fan 1	CPU Fan1
CN14	AT Power	AT
CN15	ATX Power	ATX
CN17	CPU Fan 2/Chassis Fan	CPU Fan2
CN18	Audio/Game Port	Audio/Game
CN19	VGA Video Port	VGA
CN21	CD-In without housing	CD-In
CN30	Universal Serial Bus 3	USB3
CN31	Universal Serial Bus 4	USB4

Hardware Installation

Installation Checklist (Continued)

System Panel Buttons and LED Connectors

PW	Power On/Off and Suspend Switch Connector.
TL	Turbo LED
HL	HDD LED Connector
RS	Reset Button LED Connector

Speaker, Power LED and Keyboard Lock Connector

PWR-LED	Power LED
SPK	Speaker Connector
KBLOCK	Keyboard Lock Connector

Optional Connectors

CN12	Infrared Connector	IR
CN16	Wake-On-LAN Connector	WOL
CN25	AIR BUS Interface	AIRBUS
CN39	Front Audio Interface	Front AUDIO

A Diagram of the Expansion Slots, Jumpers and Connectors can be seen on the following page

2.2. Installation Steps

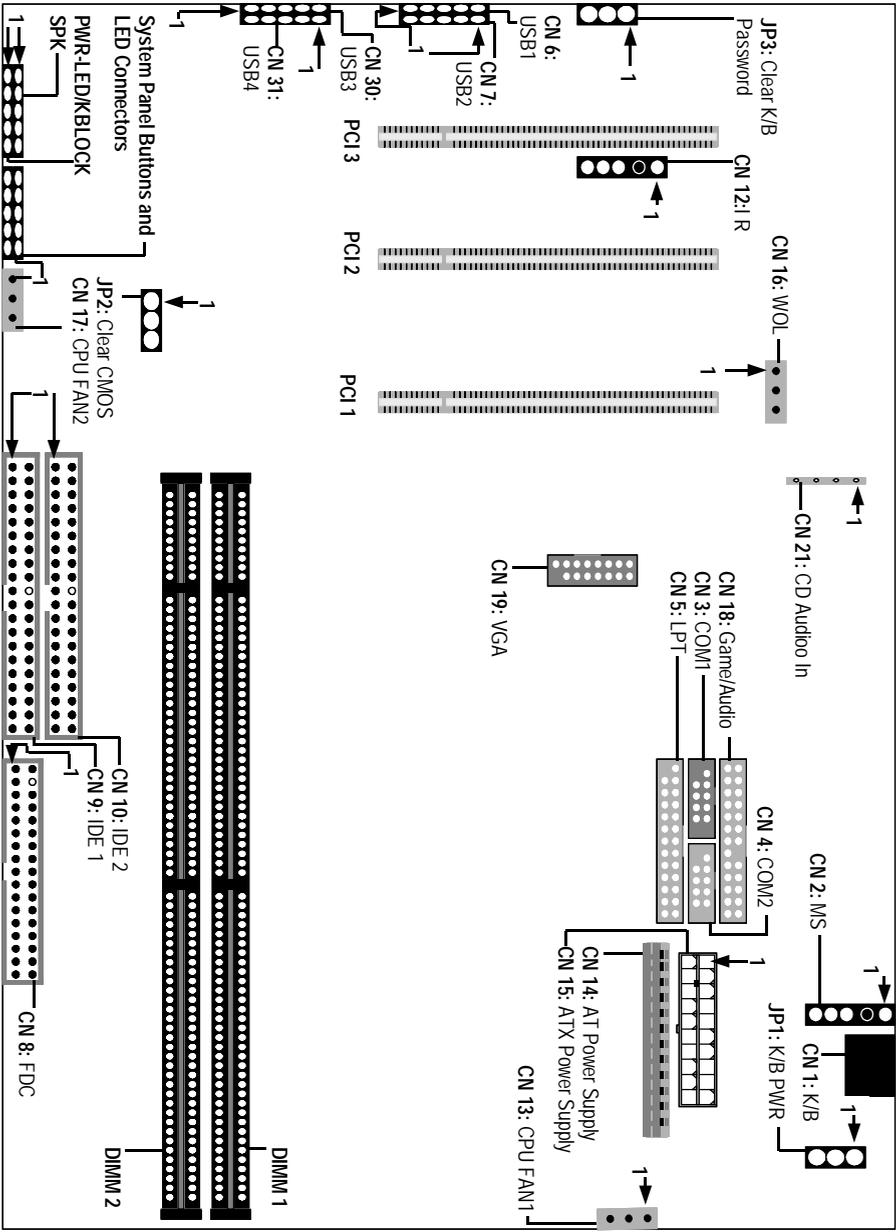
You need to complete the following installation steps before you can use your PC.

- Check and Set the Mainboard Settings.
- Install the Central Processing Unit (CPU).
- Install the Memory Modules.
- Install the Expansion Cards.
- Connect the Ribbon Cables, Panel Wires and the Power Supply.
- Setup the system BIOS

Before you start installing your mainboard we strongly recommend that you use a grounded anti-static mat. We further recommend that you attach an anti-static wristband, which is grounded at the same location as the mat, to your wrist.

Hardware Installation

Expansion Cards, Connectors and Jumpers For The 8102T/810E2T



Hardware Installation

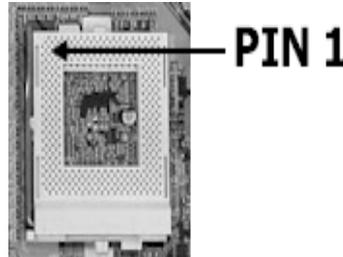
2.3. CPU, Memory and Expansion Slots

2.3.1 Installation of Processor (CPU)

Before you install the processor, make sure that you have an approved Heat Sink with Cooling Fan. Without proper heat sink with cooling fan will damage the processor and mainboard.

To install your processor, please do the following:

1. Locate a small dot marked on top of the CPU. The marking indicate Pin 1 of the CPU.
2. Locate the Socket Pin 1 marking on the mainboard.
3. Push the lever sideway and lift it upwards to 90-degree angle. Insert the CPU into the Socket. Please make sure that the CPU Pin 1 is insert to the socket Pin 1 location.
4. Snap back the lever into place.
5. Install an approved heat sink with cooling fan for proper heat dissipation. Falling to install a heat sink with cooling fan may cause overheating and burnout your CPU.

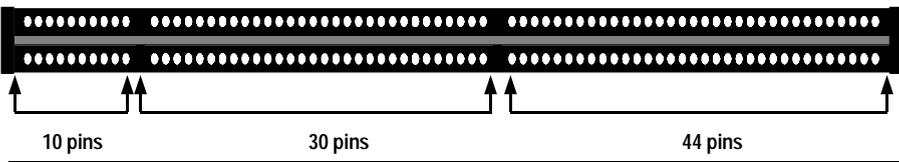


Caution! Be careful not to scrape the mainboard when mounting a clamp-style processor fan to prevent damage to the mainboard.

2.3.2. Memory Modules

These mainboards all have two 168-pin SDR DIMM slots and are able to support a maximum memory (SDRAM) of 512 MB. The SDR DIMM slots are located on the right hand side of the board. To install the DIMM's into these slots, make sure the white lever at each side of the slot has been pulled down to an angle of approximately 45°. Make sure that the DIMM is in the correct orientation. Place the DIMM on the slot and push down firmly. The white levers will come back up and lock the module in place.

Top View of a 168 pin DIMM Slot



Hardware Installation

NOTE: "Out Of Memory" Error Message

If you have installed more than 512 MB of RAM and are running Microsoft Windows Millennium Edition, Windows 98 Second Edition, Windows 98 or Windows 95 you may experience memory problems. Two symptoms of these problems are being unable to run an MS-DOS session while you are running Windows or the computer may stop responding while Windows is starting.

There are three possible solutions to this problem:

- 1) Reduce the amount of memory Vcache uses to 512 MB or less by altering the MaxFileCache setting in the System.ini file.
- 2) Use the System Configuration Utility to reduce the amount of memory Windows uses to 512 MB or less.
- 3) Reduce the memory installed on your computer to 512 MB or less.

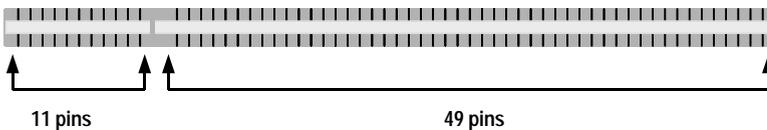
This problem can also occur if you are using an Advanced Graphic Port (AGP) video adapter.

2.3.3. PCI Slots

These boards come with three PCI slots. They are located on the left hand side of the board. Both PCI and PCI expansion cards may require IRQ's. This mainboard complies with Plug and Play (PnP) specifications. Whenever a PnP compliant card is added the system will automatically be configured and the IRQ's will be assigned automatically.

When you are inserting your PCI card make sure that the pins are correctly aligned. When the pins are properly aligned with the hole's in the slot, push down gently.

Top View of a PCI Slot



2.4. Internal Connectors

2.4.1 AT Keyboard Connector

Connector: CN 1
Type: AT Keyboard Connector

This mainboard comes with a single AT keyboard connector.

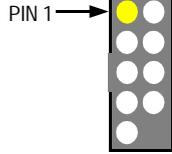
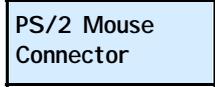
Hardware Installation

2.4.2 PS/2 Mouse Connector

Connector: CN2
Type: 5 pin

This mainboard comes with a single PS/2 mouse connector. Use the ribbon cable that has been provided to connect your mouse.

- 1 ● Mouse Data
- 2 ● No Connection
- 3 ● Ground
- 4 ● +5V DC
- 5 ● Mouse Clock



2.4.3 Serial Port Connectors: COM1 and COM2

Connector: CN3 (COM1) / CN4 (COM2)
Type: 9 pin

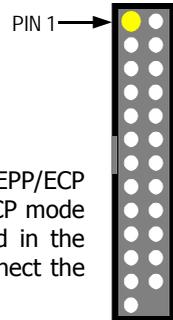


Two serial ports are available for mouse and other devices. (I/O addresses used are 3F8H/2F8H/3E8H/2E8H and IRQ3/IRQ4, selected by the CMOS Setup Utility). Use the ribbon cable that has been provided to connect the serial ports.

2.4.4 Parallel Port Connector: LPT1

Connector: CN5
Type: 25 pin

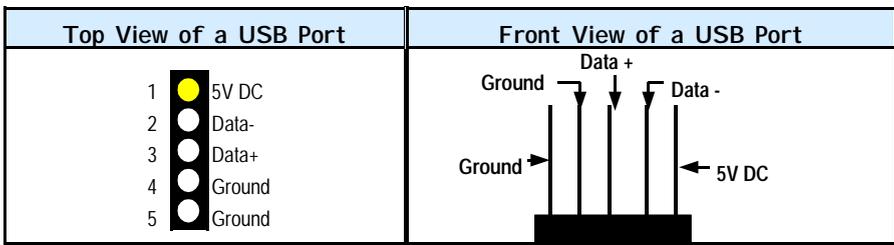
This parallel port can be used with printers that support SPP/EPP/ECP modes. IRQ7 or IRQ5 can be selected for use by this port. The ECP mode will use either DMA 3 or DMA 1. These options can be selected in the BIOS Utility. Use the ribbon cable that has been provided to connect the parallel port.



2.4.5. USB Connectors: USB1, USB2 USB3 and USB4

Connector: CN 6 (USB1)/ CN 7 (USB2)/ CN 30 (USB 3)/CN 31 (USB 4)
Type: 5 pin

This mainboard comes with 4 USB ports. Ribbon cable for these four connectors are optional. These connectors allow you to connect 4 USB devices to the mainboard.



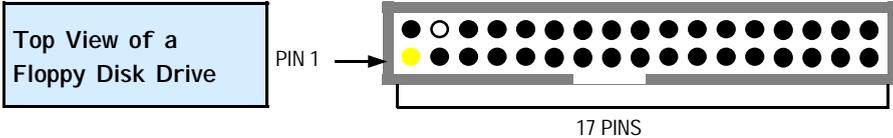
Hardware Installation

Hardware Installation

2.4.6. Floppy Disk Drive (FDC)

Connector: CN 8
 Type: 34 pin block

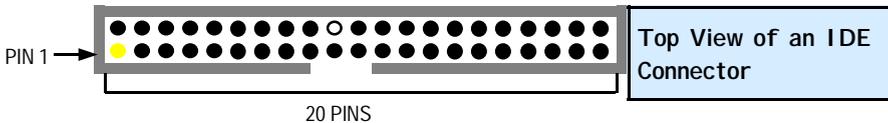
The FDC connector can support two Floppy drives. It is located at the front of the mainboard. To connect, use the ribbon-cable that has been provided. Make sure that the red strip is connected to PIN 1 of the connector.



2.4.7. Primary and Secondary IDE connectors

Connector: CN 9 (primary)/ CN 10 (secondary)
 Type: 40 pin blocks

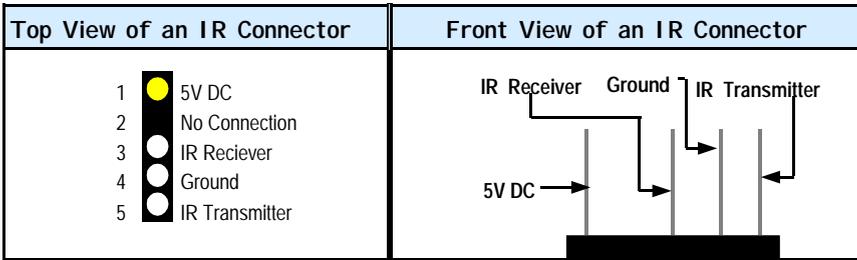
The 810T mainboards all have two IDE connectors: a primary and secondary. Each IDE connector can support two IDE drives. These mainboards can therefore support up to four IDE devices each. If you install two hard drives, you need to configure the second drive to slave mode in the BIOS setup. Please refer to your hard drive manual for the appropriate jumper settings.



2.4.8. Standard Infrared Connector (Optional)

Connector: CN 12
 Type: 5 pin

The SIR connector supports an optional wireless transmitting and receiving module. You must configure UART 2 to select whether UART 2 is directed for use with COM 2 or IrDA.

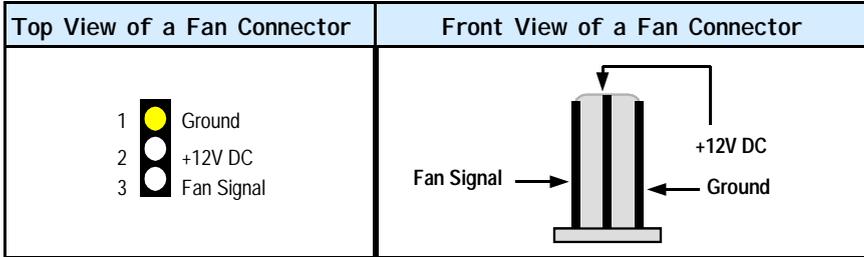


Hardware Installation

2.4.9. CPU Fan and Chassis Fan Connector

Connector: CN 13 (CPU Fan 1)/CN 17 (Chassis Fan)
Type: 3 pin

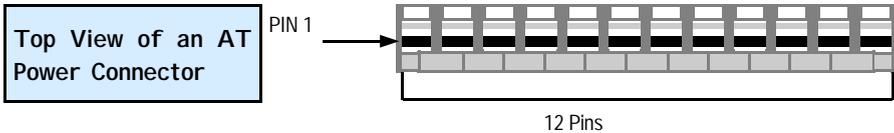
The cooling fans must be connected to their respective power connectors.



2.4.10. AT Power Supply Connector

Connector: CN 14
Type: 12 pin block

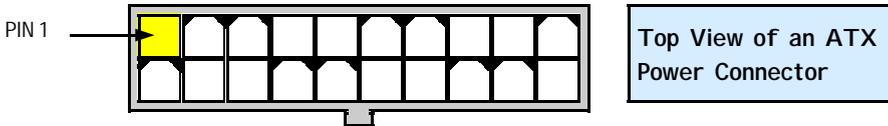
This must be connected to an AT power supply. The plug from the power supply can only be inserted in one orientation. Make sure the pins are correctly aligned. Find the correct orientation and push the plug down firmly.



2.4.11. ATX Power Supply Connector

Connector: CN 15
Type: 20 pin block

This must be connected to an ATX power supply. The plug from the power supply can only be inserted in one orientation. Make sure the pins are correctly aligned. Find the correct orientation and push the plug down firmly.



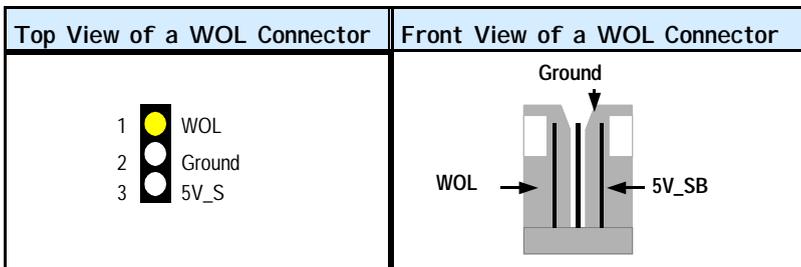
Hardware Installation

2.4.12. WOL (Wake On LAN) Connector(Optional)

Connector: CN 16 (WOL)
Type: 3 pin

The WOL connector must be connected to a LAN card that has Wake-On-LAN (WOL) output. This connector powers up the system when a wakeup packet or signal is received through the LAN card.

In order to use the WOL LAN card or the modem to trigger the power on the PC system, the switching power supply must have the ability to provide a driving current of at least 720 mA and be connected to a "5V standby" voltage.

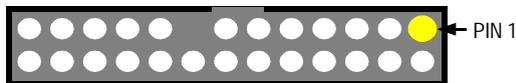


2.4.13. Audio/Game Port Connector

Connector: CN 18
Type: 25 pin

The Game/Audio port connector is a dual purpose connector. It can either be used to connect a joystick to the computer for game participation, or it can be used to attach an external MIDI device. All these motherboards have 3D audio interfaces onboard.

Top View of a Game/Audio Connector

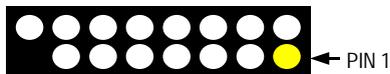


2.4.14. VGA Connector

Connector: CN 19
Type: 15 pin male.

Connect your VGA monitor adapter to this connector.

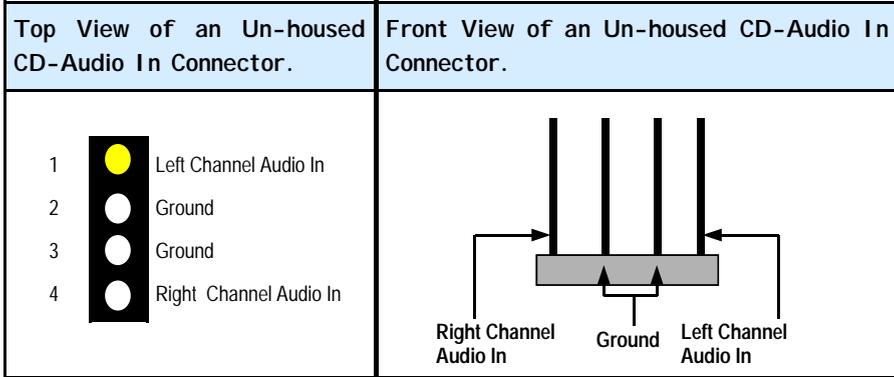
Top View of a VGA Connector



Hardware Installation

2.4.15. CD Audio-in Connector

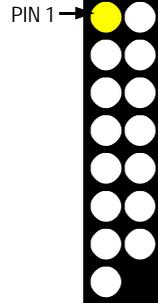
Connector: CN 21 (un-housed)
 Type: 4 pin



2.4.16. AIR Bus Connector (Optional)

Connector: CN 25
 Type: 15 pin

AIR Bus is a revolutionary technological development. It is used in conjunction with Portable BIOS. This helps the user to update BIOS data, recover lost BIOS data (due to incomplete updates or Virus corruption) as well as a BIOS replacement, i.e. a second BIOS.



2.4.17. Front Audio Connector (Optional)

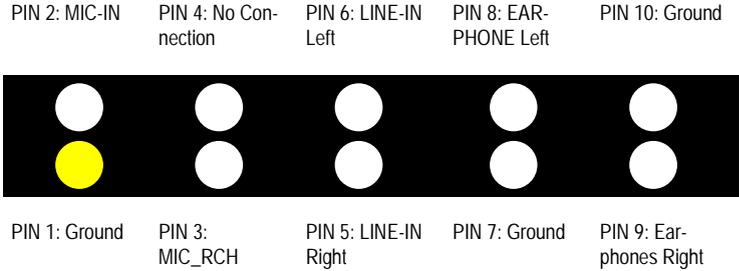
Connector: CN 39
 Type: 10 pin



The front audio connector is an innovative development. This connector is designed to be used with a Front-Utility Panel. The utility panel was developed so that a user is able to bring the speaker out, microphone in and line in connectors to the front of their PC. This makes things like plugging in speakers and ear-phones much less troublesome. A diagram is on the next page.

Hardware Installation

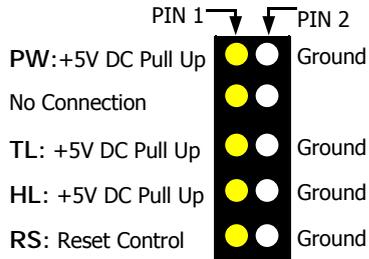
Top View of the Front Audio Connector



2.5. System Panel Buttons and LED Connectors

The following System Panel Buttons and LED Connectors can be found at the front of the mainboard on the left hand side.

PW= Power On/Off and Suspend Switch Connector
 TL = Turbo Light LED
 HL = HDD LED Connector
 RS = Reset Button LED Connector



Top View of the System Panel and LED Connectors

2.5.1 PW: Power On / Off and External Suspend Switch Connector

Note: This connector can only be used with an ATX power supply

The Power On/Off connector has two functions. It can be the Power Switch or Suspend Switch of your PC system. You can either choose "Delay 4 Sec or Instant OFF" (Please refer to the Award BIOS setup instructions in Chapter 3).

Option 1: If you choose "Delay 4 Sec." In the BIOS CMOS Setup, the function of "PW" will be:

- When the system power is "OFF", press this switch, the system will power on.
- When system power is "ON", you can select two different modes: -

Mode 1: Press and hold the Power ON button for less than 4 seconds and then release it. The system will be turned into Suspend mode (turned into the GREEN mode) When the system is in the Suspend mode:-

- Press the Power on button (less than 4 seconds), the system will return to Full-ON mode.
- Press and hold the Power On Button for more than 4 seconds, the system will be powered off.

Hardware Installation

Mode 2: Press and hold the Power ON button for more than 4 seconds, the system will be completely powered off.

Option 2: If you choose "Instant OFF." In the BIOS CMOS Setup, the power switch will operate like a normal ON / OFF Power button.

2.5.2. TL: Turbo LED

When you push the Turbo button on the front of your Chassis, this LED will come on.

2.5.3. HL: IDE HDD LED Connector

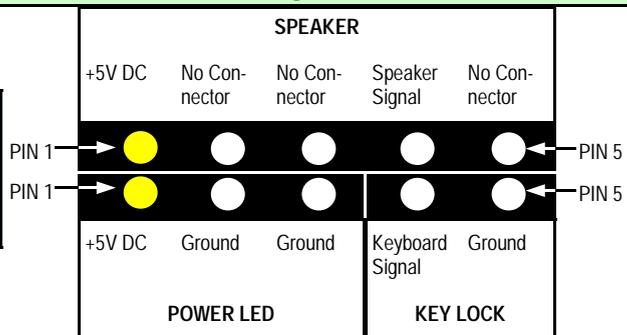
Any read and write activity by the HDD will turn this LED on.

2.5.4. RS: Reset Button Connector

If you connect this connector, you will be able to reset your computer by pressing the reset button at the front of the chassis.

2.6. Speaker, Power LED and Key-Lock Connector

Top View of the Speaker, Power LED and Key-Lock Connector



2.6.1. Speaker Connector

Connect your chassis speaker to this five pin connector. It allows you to hear systems beeps and warnings sound.

2.6.2. Front Panel Power LED and Key-Lock Connector

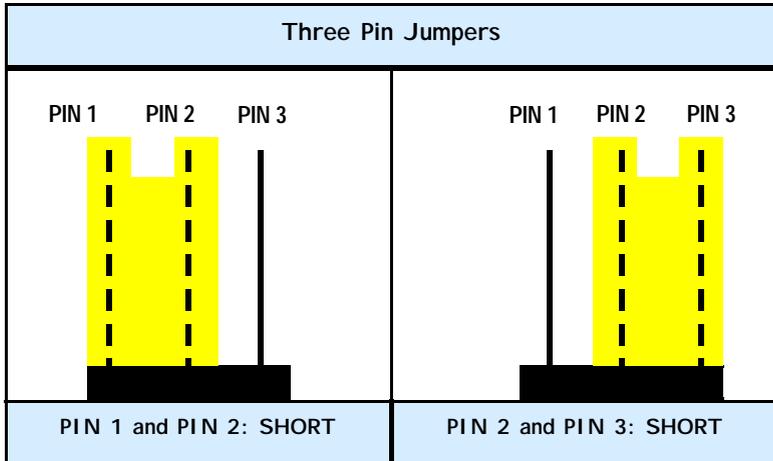
Connect your chassis Power LED connector to pins 1-3. If your chassis has a Key-Lock connector, attach the connector to pin 4 and 5.

Hardware Installation

2.7. Jumper Settings

Jumpers are built on the mainboard to allow the user flexibility to configure the mainboard settings to meet their specific requirements. The 810T mainboard series come with three jumpers. All the jumpers have three 3-pins.

When there is a jumper cap inserted on pins 1 and 2 we say PIN 1 and PIN 2 are SHORT. When the jumper cap is inserted on pin 2 and 3, we say PIN 2 and PIN 3 are SHORT (see the diagram below).



2.7.1. JP1: OnNow Function

Default: PIN 1 and PIN 2 Short (Disabled)

Short: PIN 1— PIN 2 OnNow Function Disabled

Short: PIN 2— PIN 3 OnNow Function Enabled

Note: This connector can only be used with an ATX power supply

The Keyboard and PS/2 Mouse OnNow function is built into the mainboard. You may use Keyboard and Mouse clicks to power up your system. If your keyboard or mouse is not compatible with the new OnNow function use JP1 to disable it.

Hardware Installation

2.7.2. JP2: Clear CMOS

Default: PIN 1 and PIN 2 Short (Normal)

Short: PIN 1— PIN 2 Normal
Short: PIN 2— PIN 3 Clear CMOS Data

If you have made an improper setting in the BIOS setup and your computer is not functioning, or if you have forgotten your password, you can use this jumper, JP2, to clear the CMOS memory and to reconfigure your system.

To clear the CMOS, please follow these instructions:

1. Turn the system power "OFF" and unplug your computer.
2. Insert the jumper cap on Pin 2 and Pin 3 for 3 ~ 5 seconds.
3. Pull out the jumper cap and replace it on Pin 1 and Pin 2.
4. Turn your PC on and run the BIOS setup program.

2.7.3. JP3: Clear Keyboard Password

Note: This connector can only be used with an ATX power supply

Default: PIN 1 and PIN 2 Short (Normal)

Short: PIN 1— PIN 2 Normal
Short: PIN 2— PIN 3 Clear Keyboard Password.

If you select a Keyboard password in the CMOS Setup and then you forget it you will not be able to start your system. If you have forgotten the password you can use JP3 to clear the password. To do this follow these instructions.

To clear the Keyboard Password, please follow these instructions:

1. Turn the system power "OFF" and unplug your computer.
2. Insert the jumper cap (of JP3) on Pin 2 and Pin 3 for 3 ~ 5 seconds.
3. Pull out the jumper cap and replace it on Pin 1 and Pin 2.
4. Turn your PC on and run the BIOS setup program.

BIOS Setup

Chapter 3 - Managing the PC BIOS

3.1. Award BIOS CMOS Setup Utility

The EEPROM on the mainboard stores the AWARD BIOS CMOS Setup Utility to allow you to configure your system. Anytime, you wish to configure your system BIOS, you need to run BIOS CMOS Setup Utility (for example, you may wish to set the Security Password System or changing your Power Management Setting).

Entering Setup

Each time when you start your computer, the system provides you with the opportunity to run the BIOS CMOS Setup Utility. Immediately when you turn on your system, press the <Delete> button to call up the BIOS CMOS Setup Utility.

The BIOS CMOS Setup Utility will not activate if your computer finishes the POST (Power-On-Self-Test) stage. You need to restart the system again to call up the BIOS CMOS Setup Utility. To restart the system, either you can power off, press the reset button on your chassis or simultaneously press the <Ctrl> + <Alt> + <Delete> button. The system will restart and you need to press the <Delete> immediately to call up the BIOS CMOS Setup Utility.

Control Keys

At the bottom of the utility, you will notice a legend bar. The keys in the legend bar allow you to navigate through the various setup menus. The table below lists the control keys with their corresponding functions: -

Up Arrow	Move to previous item.
Down Arrow	Move to next item.
Left Arrow	Move to item on the left.
Right Arrow	Move to item on the right.
Enter	Select the desired item.
F1	Display the help screen for the selected feature.
Esc key	Exit to the previous screen.
PgUp(-)/PgDn(+)	Modify or change the content of the highlighted item.
F5	Restore the previous CMOS value (only the current page setup will be restored)
F7	Loads the optimized default values from BIOS default table, (only the current page setup will be loaded).
F10	Save changes to CMOS and exit setup.

BIOS Setup

3.3. STANDARD CMOS SETUP

CMOS Setup Utility - Copyright (C) 1984 - 2001 Award Software.
Standard CMOS Setup

Date (mm : dd : yy) : Tue, July 24 2001	Item Help
Time (hh : mm : ss) : 14 : 52 : 45	Menu Level ▶
▶ IDE Primary Master [Maxtor 2049H4]	Change the day, month, year and century
▶ IDE Primary Slave [None]	
▶ IDE Secondary [None]	
▶ IDE Secondary [None]	
Drive A [1.44, 3.5 in.]	
Drive B [None]	
Video [EGA/VGA]	
Halt On [All]	
Base Memory [640K]	
Extended Memory [15360K]	
Total Memory [16384K]	

Date (mm : dd : yy)

Sets your system to the date that you specific (usually the current date). The format is month, day, and year.

Time (hh : mm : ss)

Sets your system to the time you specific (usually the current time). The format is hour, minute, second. The time format is based on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

IDE Primary/Secondary Master/Slave

The mainboard supports four IDE Hard Drives. These fields allow you to set your Hard Drive parameters.

If you select Auto, it will automatically detect HDD type. Please ensure that the specifications of your hard disk drive match the drive table. If you select User Type, you will be asked to enter information related to the items shown in the table on the following page.

BIOS Setup

CYLS.	Number of cylinders
HEADS	Number of heads
PRECOMP	Write precomp
LANDZONE	Landing zone
SECTORS	Number of sectors

The information should be provided in the documentation from your hard disk vendor or the system manufacturer. If a hard disk has not been installed select **NONE** and press <Enter>.

Drive A /B:

Select the correct specifications for the diskette drive(s) installed in the computer.

None	No diskette drive installed
360K, 5.25 in	5-1/4 inch PC-type standard drive; 360 kilobyte capacity
1.2M, 5.25 in	5-1/4 inch AT-type high-density drive; 1.2 MBcapacity
720K, 3.5 in	3-1/2 inch single-sided drive; 720 kilobyte capacity
1.44M, 3.5 in	3-1/2 inch double-sided drive; 1.44 MB capacity
2.88M,3.5in	3-1/2 inch double-sided drive; 2.88 MB capacity

Floppy 3 Mode Support

If you have installed a 3.5 inch high capacity floppy disk drive you need to enable this option. If you have not installed one of these drives use the default setting.

Video:

Select the type of primary video subsystem in your computer. The BIOS CMOS Setup Utility will detect the correct video type automatically.

E G A / VGA	Enhanced Graphics Adapter/Video Graphics Array. For EGA, VGA, SEGA, SVGA or PGA monitor adapters
CGA 40	Color Graphics Adapter, power up in 40 column mode
CGA 80	Color Graphics Adapter, power up in 80 column mode
MONO	Monochrome adapter

Halt On

This field allows you to decide which type of errors you want to halt the system when detected during Power On Self Test.

Base Memory / Extended Memory / Total Memory

This field displays the amount of memory detected by the system during boot up. This is a display only field and you don't have to make changes to this field.

BIOS Setup

- Base Memory : Indicates the memory installed below the conventional 1MB space.
- Extended Memory : Indicates the memory installed above the 1MB space.
- Total Memory : Indicates the total memory installed in the PC system.

3.4. ADVANCED BIOS FEATURES

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software

Advanced BIOS Features

		Item Help
Virus Warning	[Disabled]	Menu Level ►
CPU Internal Cache	[Enabled]	
External Cache	[Enabled]	
CPU L2 Cache ECC	[Enabled]	
Processor Number	[Disabled]	
Quick Power On Self	[Enabled]	
First Boot Device	[Floppy]	
Second Boot Device	[HDD-0]	
Third Boot Device	[LS120]	
Boot Other Device	[Enabled]	
Swap Floppy Drive	[Disabled]	
Boot Up Floppy Seek	[Enabled]	
Boot Up NumLock	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
Typematic Rate (Chars/	6	
Typematic Delay (Msec)	250	
Security Option	[Setup]	
PS/2 mouse function	[Enabled]	
OS Select For DRAM >	[Non-OS2]	
HDD S.M.A.R.T Capability	[Disabled]	
Report No FDD for WIN	[No]	
C8000-CBFFF Shadow	[Disabled]	
CC000-CFFFF Shadow	[Disabled]	
D0000-D3FFF Shadow	[Disabled]	
D4000-DBFFF Shadow	[Disabled]	
D8000-DBFFF Shadow	[Disabled]	
DC000-DFFF Shadow	[Disabled]	

Allows you to choose the Virus warning feature for IDE Hard disk boot sector protection. If this function is enabled and some attempt to write data into this area, BIOS will show a warning message on screen and

BIOS Setup

Virus Warning

When enabled, you receive a warning message if a program (specifically, a virus) attempts to write to the boot sector or the partition table of the hard disk drive. You should then run an anti-virus program. Keep in mind that this feature protects only the boot sector, not the entire hard drive.

Many disk diagnostic programs that access the boot sector table can trigger the virus-warning message. If you plan to run such a program, we recommend that you first disable the virus warning.

CPU Internal Cache / External Cache

CPU Cache memory is additional memory that is much faster than conventional DRAM (system memory) which is built into the processor. If you enable this option, when the CPU requests data, the system transfers the requested data from the main DRAM into cache memory for faster access.

CPU L2 Cache ECC Checking

When you select Enabled, The ECC checking will ensure the accuracy of the data stored on the L2 cache.

Processor Number Feature

If you have installed a Pentium !!! processor on the mainboard. If Enabled this option allows the serial code inside the Pentium !!! processor to be published on certain applications.

Quick Power On Self Test

Select Enabled to reduce the amount of time required to run the power-on self-test (POST). A quick POST skips certain steps. We recommend that you normally disable quick POST. Better to find a problem during POST than lose data during your work.

First/Second/Third/Boot Other Device

These fields allow you to decide the boot sequence of your bootable devices such as Hard Drive, CD ROM...etc

Swap Floppy Drive

This field is effective only in systems with two floppy drives. Selecting Enabled assigns physical drive B to logical drive A, and physical drive A to logical drive B.

Boot Up Floppy Seek

When enabled, the BIOS tests (seeks) floppy drives to determine whether they have 40 or 80 tracks. Only 360-KB floppy drives have 40 tracks; drives with 720 KB, 1.2 MB, and 1.44 MB capacity all have 80 tracks. Because very few modern PCs have 40-track floppy drives, we recommend that you set this field to Disabled to save time.

Boot Up NumLock Status

Toggle between On or Off to controls the state of the NumLock key when the system boots. When toggled On, the numeric keypad generates numbers instead of controlling cursor operations.

Gate A20 Option

Gate A20 is a signal that gives the system access to addresses higher than A19. If you select Fast the chipset will control this signal. If you select normal a pin in the keyboard controller will control the signal.

Typematic Rate Setting

This field allows you to adjust the frequency of keyboard control signal. If you wish to increase the keyboard typematic rate and delay, select "enabled".

Typematic Rate (Chars/Sec)

Select the appropriate Character input per second.

Typematic Delay (Msec)

Allow you to adjust the timing interval between the typing.

Security Option

This field allows you to select Setup or System Security option and it needs to work along with the " Set Supervisor Password" in the main menu.

When "Setup" option is selected, you will be prompt to input your "Passwords" before you can start the BIOS CMOS Setup Utility. When you select "System" option, you will be prompt to input your password in order to load the Operation System (Window OS or Linux OS).

Forgotten Your Password

If you happen to forget your password, you can clear the password by erasing the CMOS Real Time Clock (RTC) Ram. Please refer to page 23.

BIOS Setup

PS/2 mouse function control

This mainboard has a built-in PS/2™ mouse port. If you are using the PS/2™ mouse, please leave this field as "Enabled". In case you prefer to connect a serial mouse to the serial port instead of using the PS/2™ mouse, you may choose "Disable" in this field so that the IRQ12 can be released for other devices.

OS Select For DRAM > 64MB

Select OS2 only if you are running OS/2 operating system with greater than 64 MB of RAM on your system. Otherwise, use the default setting "Non-OS2" for all other operating systems.

HDD S.M.A.R.T Capability

If your Hard Drive support the S.M.A.R.T. technology (Self Monitoring Analysis Reporting Technology) feature, you may "enable" this item to monitor and report your Hard Drive healthy status. Check with your Hard Drive Vendor for further information about SMART feature.

Note! Using this feature may decrease system performance.

Report No FDD for WIN 95

If you did not install a floppy drive select Yes. This will release IRQ6 for compatibility with Windows 95 logo certification. You should also disable the Onboard FDC Controller field in the Integrated peripherals menu.

XXXX-XXXX Shadow

This field allows you to enable or disable the shadow feature for the Video BIOS and the appropriate memory segment.



3.5 ADVANCED CHIPSET FEATURES

(The Advanced Chipset Features Menu is on the following page)

SDRAM Speed Selection

The first four fields on the screen are used to adjust the SDRAM timing. Use these fields to configure the DRAM parameter properly will give you the best performance. Improper setting on these fields will cause instability, therefore it is recommended to leave it to default setting.

System BIOS Cacheable

Select Enabled allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance.

BIOS Setup

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Advanced Chipset Features

SDRAM CAS Latency	[3]	Item Help
SDRAM Cycle Time Tras/Trc	[6/8]	Menu Level
SDRAM RAS - to - CAS Delay	[3]	
SDRAM RAS Precharge Time	[3]	
System BIOS Cacheable	[Disabled]	
Video BIOS Cacheable	[Disabled]	
Memory Hole At 15M - 16M	[Disabled]	
CPU Latency Timer	[Disabled]	
Delayed Transaction	[Enabled]	
On-Chip Video Window Size	[64MB]	

Video BIOS Cacheable

Selecting Enabled allows caching of the video BIOS ROM at C0000h to C7FFFh, resulting in better video performance.

Memory Hole At 15M-16M

In order to improve performance, certain space in memory can be reserved for ISA cards. Such memory must be mapped into the memory space below 16 MB.

CPU Latency Timer

This function controls the way in which transfers are carried out on the FSB. This function must be Enabled to maximize performance.

Delayed Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select Enabled to support compliance with PCI specification version 2.1.

On-Chip Video Window Size

This mainboard provides DVMT technology feature (Dynamic Video Memory Technology) to increase the video display performance. There is the AGP VGA interface on this mainboard to allows the AGP display to use part of the system

BIOS Setup

memory to store 3D texture mapping data to increase the video display performance. The field allows you to define the memory size which you prefer to use for the AGP Port. The memory size selectable is either "Disable" or 32MB or 64MB DVMT. When you select 64MB DVMT, it allows the maximum 64 MB memory which Windows 95/98 can use to store the 3D texture.

When you select the 64MB DVMT, you will see 1024K memory is allocated as the shared memory when you power on the PC system. When you start the Windows operation system, Windows will automatically allocate the required display share memory dynamically.

3.6 Integrated Peripherals

(The Integrated Peripherals Menu is on the following page)

On-Chip Primary / Secondary PCI IDE

These options allow you to enable / disable the onboard IDE interface.

IDE Primary/Secondary Master/Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

IDE Primary/Secondary Master/Slave UDMA

Ultra DMA implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA, select Auto to enable BIOS support.

USB Controller

This field allows you to enable or disable the onboard USB controller.

USB Keyboard Support

If you are using the Legacy OS (such as MS-DOS) and you're installing a USB keyboard, please select "Enable" in this field. For PnP O/S like Windows 98, Windows 2000, Windows ME ... etc, you should select the default setting.

Init Display First

When you have both onboard AGP and PCI VGA card installed in your system, you can use this field to decide the display loading priority during system startup.

BIOS Setup

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Integrated Peripherals

		Item Help
On-Chip Primary PCI IDE	[Enabled]	
On-Chip Secondary PCI IDE	[Enabled]	
IDE Primary Master PIO	[Auto]	Menu Level ►
IDE Primary Slave PIO	[Auto]	
IDE Secondary Master PIO	[Auto]	
IDE Secondary Slave PIO	[Auto]	
IDE Primary Master UDMA	[Auto]	
IDE Primary Slave UDMA	[Auto]	
IDE Secondary Master UDMA	[Auto]	
IDE Secondary Slave UDMA	[Auto]	
USB Controller	[Enabled]	
USB Keyboard Support	[Disabled]	
Init Display first	[PCI Slot]	
AC97 Audio	[Auto]	
AC97 Modem	[Auto]	
IDE HDD Block Mode	[Enabled]	
POWER ON Function	[BUTTON ONLY]	
X KB Power ON Password	Enter	
X Hot Key Power ON	Ctrl-F1	
Onboard FDC Controller	[Enabled]	
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2F8/IRQ3]	
UART Mode Select	[Normal]	
X Rx/D , Tx/D Active	Hi , Lo	
X IR Transmission Delay	Enabled	
X UR2 Duplex Mode	Half	
X Use IR Pins	IR-Rx2Tx2	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	
X EPP Mode Select	EPP 1.7	
X ECP Mode Use DMA	3	
Game Port Address	[201]	
Midi Port Address	[330]	
Midi Port IRQ	[10]	

BIOS Setup

AC97 Audio

There is the Audio interface built in the system chipset. You can use this field to configure the onboard Audio interface or disable the audio interface.

AC97 Modem

Set this field to "Auto" if you installed a CNR Modem card.

IDE HDD Block Mode

This selection allows your hard disk controller to select the block mode to transfer data to and from your hard disk drive (HDD).

Enabled	IDE controller uses block mode.
Disabled	IDE controller uses standard mode.

POWER ON Function

The Power ON function allows you to select different ways to power on your PC system.

KB Power ON Password

When you select KB Power ON Password to power ON the PC system in the previous selection field, you may enter your personal password in this field. When finished, you may use the password to power on your PC system. (if you forgotten the password, you can refer to page 28 for details to clear the password)

Hot Key Power ON

When you select Hot Key Power ON to power ON the PC system in the previous selection field, you may select a set of "Hot Key" in this field. When finished, you may use the combination of hot key to power on your PC system.

Onboard FDC Controller

This should be enabled if your system has a floppy disk drive (FDD) installed on the system board and you wish to use it. If you add a higher performance controller, you should disable this feature.

Onboard Serial Port 1/Port 2

This item allows you to determine which I/O address you want the onboard serial port 1 and 2 controller to access.

BIOS Setup

UART Mode Select

This field allows you to determine the mode of the UART port.

RxD, TxD Active

This item allows you to determine the active of RxD, TxD

IR Transmission delay

This item allows you to enable/disable IR transmission delay.

UR2 Duplex Mode

This item allows you to select the IR half or full duplex function.

Use IR Pins

This item allows you to select IR transmission routes, one is RxD2m, TxD2 (COM Port 2) and the other is IR-Rx2Tx2 (CN12).

Onboard Parallel Port

This field allows you to select the address for the physical parallel (printer) port.

Parallel Port Mode

This field allows you to select an operating mode for the onboard parallel (printer) port. Select Normal, Compatible or SPP.

EPP Mode Select

This field allows you to select the EPP: EPP 1.7 or EPP 1.9

ECP Mode Use DMA

The Parallel port on the mainboard support ECP/EPP, ECP, EPP/SPP and SPP modes. When you select ECP mode, you may specify the DMA# for the parallel port for proper function.

Game Port Address

This field allows you to select the I/O address for the onboard Game port.

Midi Port Address

This field allows you to select the I/O address for the onboard Midi port.

Midi Port IRQ

This field allows you to select the IRQ# for the onboard Midi port.

BIOS Setup

3.7 Power Management Setup

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Power Management Setup

		Item Help
ACPI Function	[Enabled]	
ACPI Suspend Type	[S1 (POS)]	
Power Management	[User Define]	Menu Level ►
Video Off Method	[Blank]	
Video Off In Suspend	[Yes]	
Suspend Type	[Stop Grant]	
Modem Use IRQ	[3]	
Suspend Mode	[Disabled]	
HDD Power Down	[Disabled]	
Soft-Off by PWR-BTTN	[Instant –	
Wake-Up by PCI card	[Disabled]	
Power On by Ring/LAN	[Disabled]	
Resume by Alarm	[Disabled]	
X Date (of Month) Alarm	0	
X Time (hh : mm : ss)	0 0 0	
*** Reload Global Timer Events		
Primary IDE 0	[Disabled]	
Primary IDE 1	[Disabled]	
Secondary IDE 0	[Disabled]	
Secondary IDE 1	[Disabled]	
FDD, COM, LPT Port	[Disabled]	
PCI PIRO [A-D]#	[Disabled]	

ACPI function

If you wish to use the ACPI function, you have to use an operating system, like Windows 98, that supports ACPI. During Windows 98 installation, you will have to provide specific parameters (please refer to Windows 98 manual for the parameters).

When the ACPI function is installed in your PC system successfully, you will find the ACPI function in the power management icon. The PW switch defined by the ACPI is different to the BIOS setup and it always has the higher priority than what was defined in the system BIOS.

BIOS Setup

According to what was defined by the ACPI in Windows 98, the PW switch can be either the "Standby switch" or "shutdown switch". When "Standby switch" is selected, the first click on the PW switch will have the PC system turn into standby mode. If you want to "wake up" the PC system, you will have to use the devices (such as keyboard, mouse .. etc) which is specified in the Windows 98 ACPI function to trigger the PC system so that it will be back to full-on mode (For more detail of ACPI function, please refer to Windows 98 user's manual for more detail information).

ACPI Suspend Type

This field allows you to select the mode of suspend state as follows:

S1 (POS): Power On Suspend.

Power Management

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

1. Doze Mode
2. Standby Mode
3. Suspend Mode
4. HDD Power Down

Disable (default)	No power management. Disables all four modes
Min. Power Saving	Minimum power management. Doze Mode = 1 hr. Standby Mode = 1 hr., Suspend Mode = 1 hr., and HDD Power Down = 15 min.
Max. Power Saving	Maximum power management -- ONLY AVAILABLE FOR SL CPU. Doze Mode = 1 min., Standby Mode = 1 min., Suspend Mode = 1 min., and HDD Power Down = 1 min.
User Defined	Allows you to set each mode individually. When enabled, each range is from 1 min. to 1 hr. except for HDD Power Down which range from 1 min. to 15 min.

Video Off Method

When you are using the Green Monitor with your PC system, there are three modes selectable in this field for power energy saving. Please refer to the table on the following page.

BIOS Setup

V/H SYNC+Blank	This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.
Blank Screen	This option only writes blanks to the video buffer.
DPMS	Initial display power management signaling.

Video Off In Suspend

When you select Yes, the screen display will be disabled (no display on the screen) when the PC system is in the suspend mode.

Suspend Type

This field allows to select the suspend type, you can choose the CPU Stop Grand Suspend or the PwrOn Suspend.

Modem Use IRQ (optional)

This mainboard has the ACPI feature designed on the board and it will "wakeup" automatically when it detects incoming modem Ring-in signal (only available with external modem connected to your PC system. You need to input the desire IRQ value of the com port used.

! COM 1 uses IRQ4, and COM 2 uses IRQ3.

Suspend Mode

This field allows you to choose the time interval which PC system will turn into suspend mode.

HDD Power Down

When enabled and after the set time of system inactivity, the hard disk drive will be powered down while all other devices remain active.

Soft-Off by PWR-BTTN

This field allows user to define the feature of the "PW" connector (it is used to connect the power button). The setting can be either "Delay 4 Sec." or "Instant-Off". Please refer to page 21 for details of the different function descriptions

Wake-Up by PCI card

When "Enabled", any signal by the PCI devices will wake up the system in standby mode.

BIOS Setup

Power On by Ring / LAN

When "Enabled", you can use the Modem Ring signal or the LAN wake up signal to power on the PC system.

CPU Thermal-Throttling

This field allows you to select the CPU throttle rate. When CPU temperature is too high, the onboard hardware monitoring will tell the CPU to reduce to the throttling speed to protect the CPU. The choice available for the CPU throttling rate are: 12.5%, 25.0%, 37.5%, 50.0%, 62.5%, 75.0%, 87.5%. This function will not work when the "CPU Warning Temperature" is Disabled.

Resume by Alarm

When "Enabled", you can use the following two selection fields - "Date (of Month) Alarm" and "Time (hh:mm:ss) Alarm" to select the alarm date and time. You can use these two fields to set the date and time which you want to resume the system from Sleep or Suspend mode. The "Time" must be set in a 24-hour format.

**** Reload Global Timer Events ****

When "Enabled", an event occurring on each device listed below restarts the global time for Standby mode.

- Primary IDE 0
- Primary IDE 1
- Secondary IDE 0
- Secondary IDE 1
- FDD, COM, LPT Port
- PCI PIRQ [A-D]

3.8 PNP/PCI CONFIGURATION

(The PNP/PCI Configuration Menu is on the following page)



PNP OS Installed

If your OS like windows 98 supports PNP, then select "Yes".

Reset Configuration Data

This field should leave as Disabled. If you have installed a new add-on card and the system reconfiguration has caused serious conflict that the operating system can not boot, then you should Select Enabled in order to reset Extended System Configuration Data (ESCD).

BIOS Setup

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PnP/PCI Configuration

PNP OS Installed	[No]	Item Help
Reset Configuration	[Disabled]	Menu Level ▶
Resources Controlled	[Auto (ESCD)]	Default is Disabled. Select Enabled to Reset Extended System Configuration Data
X IRQ Resources	Press Enter	
X DMA Resources	Press Enter	
X Memory Resources	Press Enter	
PCI/VGA Palette	[Disabled]	
Assign IRQ For VGA	[Enabled]	
Assign IRQ For USB	[Enabled]	

Resources Controlled by

The Award Plug and Play BIOS has the capacity to automatically configure the boot and Plug and Play compatible devices along with a Plug and Play operating system such as Windows 95. If you set this field to "manual", you may manually select specific resources in each of the sub menu.

IRQ/DMA/Memory Resources

When resources are controlled manually, you need to assign interrupt and DMA type for the devices.

PCI/VGA Palette Snoop

Some display cards are non-standard VGA card (such as graphics accelerator or MPEG Card) which may not display color properly on your screen. If you encounter problem, select "Enable" may correct this problem. Leave it "Disabled" as the default setting if you are using the normal display card.

Assign IRQ For VGA / USB

If you have VGA card installed that require IRQ signal, or you have the USB device connected to the onboard USB port, then select "Enabled" in this field. Otherwise, you may select "Disabled" so that the related IRQ will be released for other devices.

BIOS Setup

3.9 Frequency/Voltage Control

CMOS Setup Utility - Copyright (C) 1984 - 2000 Award Software

Frequency/Voltage Control

Auto Detect DIMM/PCI Clk	[Disabled]	Item Help
Spread Spectrum	[Disabled]	Menu Level
CPU Host /SDRAM Clock	[66]	
CPU Clock Ratio	[X 3]	

Auto Detect DIMM/PCI Clk

When "Enabled", it will auto detect the devices presences on DIMM and PCI slots. When there is no device presented on some of the PCI slots or DIMM connectors, the clock on the related DIMM connectors and PCI slots will be disabled to reduce the Electro-Magnetic Interference (EMI).

Spread Spectrum

When Spread Spectrum is enabled, the EMI radiation on this mainboard will be reduced.

CPU Clock Ratio:

This field allows you to select the CPU clock ratio. Most CPU clock ratios are fixed inside the CPU by the manufacturers that prohibit you to make any changes. In this case, the setting in this field will make no change to the CPU clock ratio since it is locked and automatically determined by the CPU.

If you happen to over-clock the FSB and you PC system fail to start. You need to clear the CMOS data (see detail regarding clearing CMOS Data on page 23). If the PC system still fails to start, then you have to remove the battery for 1 minute to clear the CMOS Data.

BIOS Setup

3.10 Load Optimized Defaults

CMOS Setup Utility – Copyright (C) 1984 - 2000 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving

ESC : Quit

↑↓→←: Select Item

F10 : Save & Exit Setup

(Shift)F2 : Change Color

Time, Date, Hard Disk Type ...

In case that you don't know how to use the Award BIOS CMOS Setup Utility to select the settings, you may use this field to load the optimized defaults which are defined in the system BIOS. The Optimized Default values are recommended by our engineer to give a series of parameters for ensuring the best reliability.

If you are not familiar with the setup procedure or if you made some changes in the CMOS setting and found that the PC system becomes unstable, you should try to load the optimized default value first and then re-configure step by step again.

3.11 SET SUPERVISOR PASSWORD

CMOS Setup Utility – Copyright (C) 1984 - 2000 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving

ESC : Quit

↑↓→← : Select Item

F10 : Save & Exit Setup

(Shift)F2 : Change Color

Time, Date, Hard Disk Type ...

BIOS

BIOS Setup

The "SUPERVISOR PASSWORD" is for you to control unauthorized access to your BIOS CMOS Setup or Booting into the your PC system. The Supervisor Password option is used together with the Security Option in section.

When "Setup" is selected in Security Option:

If you want to change the BIOS setting, you will have to key-in the Supervisor Password so that you can start the BIOS CMOS Setup Utility and change the system setting.

When "System" is selected in Security Option:

When turn on the PC system, it will request you to enter the Password in order to boot up your system. Without the correct password, the PC system will stop and the operation system will not be loaded.

3.12 SET USER PASSWORD

CMOS Setup Utility – Copyright (C) 1984 - 2001 Award Software

Standard CMOS Features	Frequency / Voltage Control
Advanced BIOS Features	Load Optimized Defaults
Advanced Chipset Features	Set Supervisor Password
Integrated Peripherals	Set User Password
Power Management Setup	Save & Exit Setup
PNP/PCI Configuration	Exit Without Saving

ESC : Quit

↑↓→← : Select Item

F10 : Save & Exit Setup

(Shift)F2 : Change Color

Time, Date, Hard Disk Type ...

The User Password can be used to check the user's authority. However, this password entry is different from the "SUPERVISOR PASSWORD" mentioned in previous section. The User Password will have different function according to the "Supervisor Password" and the "Security Option" setup:

A. When there is a password stored in the "SUPERVISOR PASSWORD"

1. When "Setup" is selected in Security Option:

When you use the "User Password" to log into the BIOS setup program, you can only select "User Password", "SAVE & EXIT SETUP" and "EXIT WITHOUT SAVING" from the main menu. (Using Supervisor Password to log into the PC system, you will have the complete right to access all BIOS settings.)

