

6A815EPD

User's Manual Version 1.3

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Introduction

System Overview

This manual was written to help you start using this product as quickly and smoothly as possible. Inside, you will find the answers to solve most problems. In order for this reference material to be of greatest use, refer to the “expanded table of contents” to find relevant topics.

This board provides a total PC solution by incorporating the System , I/O , and PCI IDE. The mainboard is designed for Intel PIII/Celeron/Coppermine processors in either single or dual CPU operation. The mainboard is designed for Intel PIII/Celeron/Coppermine processors in either single or dual CPU processors with CNR Bus, PCI Local Bus, and AGP Bus to support upgrades to your system performance. It is ideal for multi-tasking and fully supports MS-DOS, Windows, Windows NT , Windows ME, Windows 2000 , Novell, OS/2, Windows95/98 , UNIX , Windows 98SE , SCO UNIX etc.

This manual also explains how to install the mainboard for operation, and how to setup your CMOS configuration with the BIOS setup program.

1. Motherboard Description

1.1 Features

1.1.1 Hardware

CPU

- Dual Socket 370 for Intel PIII C&D-Step Processor.
- Singal Intel FC-PGA/PPGA Celeron Processors
300MHz~800MHz or higher processor with 66/100MHz
FSB.
- Singal Intel FC-PGA/FC-PGA2 Pentium III C&D-Step
Processors 500MHz or higher processor with 100/133MHz
FSB.
- VIA Cyrix III Processor with 100/133MHz FSB.

Chipset

- North Bridge System Chipset : Intel 815EP support 66/
100/133 FSB.
- South Bridge System Chipset : Intel ICH2.

Biggest memory capacity

6A815EPD is equipped with three DIMM socket to support (8MB to 512MB) 168 pin 3.3v SDRAM SPD (Special Presence Detect).
Maximum memory up to 512MB.

AGP for fast VGA solution

- AGP specification compliant.
- AGP 66 MHz 3.3v for 4X device support.

Bus Slot

- Provides five 32 bit PCI slots.
- Provide one AGP slot and one CNR slot.

On-Board IDE

- An IDE controller on the ICH2 chipset provides IDE HDD/CD-ROM with PIO, Bus Master and Ultra DMA 33/66/100 operation modes.
- Can connect up to four IDE devices.

On-Board Peripherals

- 1 floppy port supports 2 FDD with 360K,720K,1.2M, 1.44M and 2.88M byte.
- 2 serial ports (COM1+COM2(10 pin)).
- 4 USB ports.
- 1 parallel port supports SPP/EPP/ECP mode.

Audio (Option)

- ICH2 chip integrated.
- AC'97 CODEC on board .

BIOS

- The mainboard BIOS provides “Plug & Play” BIOS which detects the peripheral devices and expansion cards of the board automatically.
- The mainboard provides a Desktop Management Interface (DMI) function which records your mainboard specifications.
- BIOS support CD-ROM, SCSI, LAN BOOT, Temperature sensor, Wake on modem, LAN, Alarm Bus CLK setup with BIOS.

Hardware Monitor Function

- CPU Fan Speed Monitor.
- System and CPU Temperature Monitor.
- System Voltage Monitor.

Smart Panel

- Supports BIOS Port 80H POST Code output to debug LED.

WOL (Wake On LAN) & WOM (Wake On MODEM)

Supports system power up from LAN ring up and Modem ring up.

Support Ring on by modem/Alarm on

Support System power up from Modem ring up or timer of System. Required enabled in Ring on by modem and Alarm on in BIOS.

Intel Accelerated Hub Architecture :

Features a dedicated high speed hub link between the ICH2 and GMCH with a bandwidth of 266MB/sec-twice the maximum bandwidth of the PCI bus.

CNR Support :

One Communication and Networking Riser(CNR) slots provide interface to support very affordable multichannel audio, V.90 analog modem, Home PNA, 10/100 Ethernet networking,USB hub, as well as future technologies such as XDSL .

RAID Chip :

The motherboard provide onboard RAID function. If you would like more information about function of RAID, please refer to Fully Setup CD Driver.

On-board ATA/100 IDE RAID (IDE3/IDE4 only)

-Supports data striping (RAID 0) and mirroring (RAID 1). Provides dramatic increase in drive performance and/or fault tolerant options. Offers performance customization and data rebuilds from the BIOS menu. Mirroring supports automatic background rebuilds. Fault tolerance can be restored automatically without rebooting.

-Supports up to four IDE drives which capacities are more than 8.4GB on the two IDE RAID connectors while still supporting four IDE devices on the motherboard. The burst data transfer rates can up to 100MB/s from ATA/100 drives to boast overall system performance.

-Supports IDE Bus Master operation allows multi-tasking during disk drives transfer which increase CPU efficiency, then the CPU is free to process task during IDE data transfer through PCI bus interface to/from system memory.

1.1.2 Software

BIOS

- AWARD legal BIOS.
- Supports APM 1.2.
- Supports USB Function.
- Supports ACPI.

Operation System

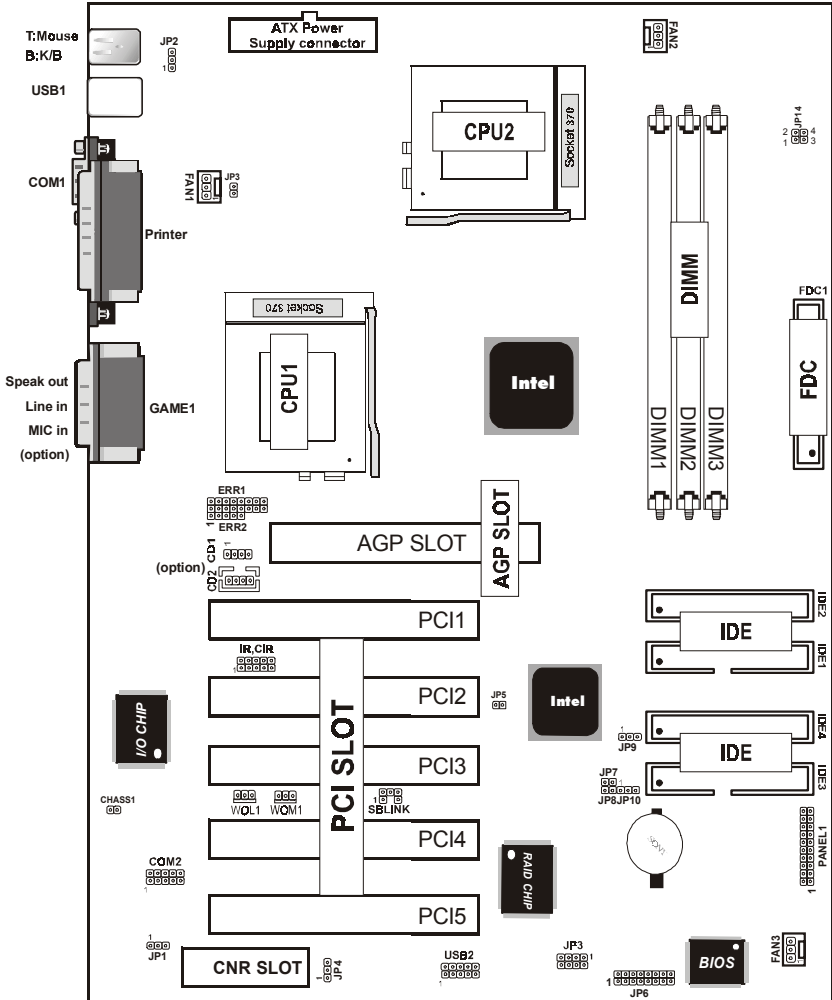
-Offers the highest performance for MS-DOS, Windows, Windows NT, Windows ME, Windows 2000, Novell, OS/2, Windows95/98, Windows 98SE, UNIX, Linux SCO UNIX etc.

1.1.3 Attachments

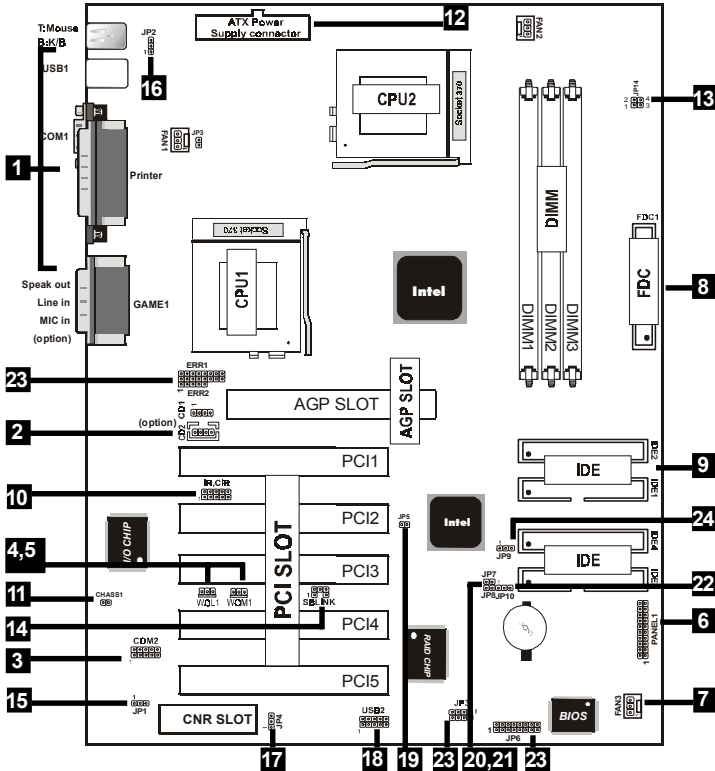
- HDD UDMA66/100 Cable.
- FDD Cable.
- Flash Memory Written for BIOS Update.
- COM2 Cable.
- Fully Setup CD Driver built in Utility(Ghost, Anitivirus, Adobe Acrobat).
- This manual.

1.2 Motherboard Installation

1.2.1 Layout of Motherboard

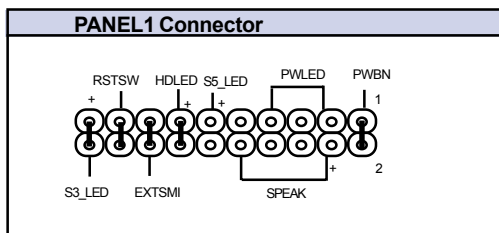


1.3 Motherboard Connectors



- | | |
|---|----------------------------|
| 1. Back Panel I/O Connectors | 2. CD Audio-In Connector |
| 3. Front COM2 Connector | 4. Wake-On MODEM Connector |
| 4.5. Wake-On-LAN Connector | 6. Front Panel Connector |
| 7. Fan Connectors (Fan1/2/3) | 8. Floppy Connector |
| 9. IDE Connectors | 10. IR, CIR Connector |
| 11. Chassis Connector (CHASS1) | 12. ATX Power Connector |
| 13. CPU Clock Setting (JP14) | 14. SB-LINK Connector |
| 15. Watch Dog (JP1) | 16. KB/MS Power on (JP2) |
| 17. Wake on 2nd USB Port (JP4) | 18. Front USB2 Connector |
| 19. SB-LINK Setting (JP5) | 20. Timeout Reboot (JP7) |
| 21. CPU Safe Mode (JP8) | 22. System Speaker (JP10) |
| 23. For Smart Panel (JP6/JP3/ERR2) (option) | |
| 24. CMOS Function Setting (JP9) | |

1.3.1 Front Panel Connector(PANEL1)



Speaker Connector (SPEAK)

An offboard speaker can be installed onto the motherboard as a manufacturing option. An offboard speaker can be connected to the motherboard at the front panel connector. The speaker (onboard or offboard) provides error beep code information during the Power Self-Test when the computer cannot use the video interface. The speaker is not connected to the audio subsystem and does not receive output from the audio subsystem.

Hard Drive LED Connector (HDLED)

This connector supplies power to the cabinet IDE activity LED. Read and write activity by devices connected to the Primary or Secondary IDE connectors will cause the LED to light up.

SMI Suspend Switch Lead (EXTSMI)

This allows the user to manually place the system into a suspend mode of Green mode. System activity will be instantly decreased to save electricity and expand the life of certain components when the system is not in use. This 2-pin connector (see the figure) connects to the case-mounted suspend switch. If you do not have a switch for the connector, you may use the “Turbo Switch” instead since it does not have a function. SMI is activated when it detects a short. It may require one or two pushes depending on the position of the switch. Wake-up can be controlled by settings in the BIOS but the keyboard will always allow wake-up (the SMI Suspend Switch Lead cannot wake-up the system). If you want to use this connector, the "Suspend Switch" in the Power Management Setup of the BIOS SOFTWARE section should be on the default setting of Enable.

ATX Power Switch (PWBN)

The system power is controlled by a momentary switch connected to this lead. Pushing the button once will switch the system ON. The system power LED lights when the system's power is on .

Power LED Lead (PWLED)

The system Power LED lights when the system power is on.

S5_LED Lead (S5_LED)

The system S5_LED lights when the system suspend is on the S5 modle.

S3_LED Lead (S3_LED)

The system S3_LED lights when the system suspend is on the S3 modle.

Reset Switch Lead (RSTSW)

The connector can be connected to a momentary SPST type switch that is normally open. When the switch is closed,the motherboard resets and runs the POST.

1.3.2 Floppy Disk Connector(FDC1)

This connector supports the provided floppy drive ribbon cable. After connecting the single end to the board, connect the two plug on the other end to the floppy drives.

1.3.3 Hard Disk Connectors(IDE1/IDE2/IDE3/IDE4)

These connectors support the provided IDE hard disk ribbon cable. After connecting the single end to the board, connect the two plugs at the other end to your hard disk .

If you install two hard disks, you must configure the second drive to Slave mode by setting its jumper settings. BIOS now supports SCSI device or IDE CD-ROM boot up (see "HDD Sequence SCSI/IDE First" & "Boot Sequence" in the BIOS Features Setup of the BIOS SOFTWARE) (Pin 20 is removed to prevent inserting in the wrong orientation when using ribbon cables with pin 20 plugged) .

1.3.4 ATX 20-pin Power Connector(PW1)

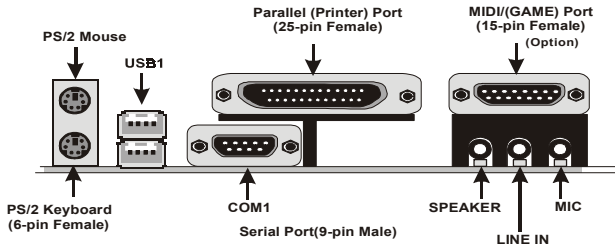
This connector supports the power button on-board. Using the ATX power supply, functions such as Modem Ring Wake-Up and Soft Power Off are supported on this motherboard . This power connector supports instant power-on functionality, which means that the system will boot up instantly when the power connector is inserted on the board.

Pin	Signal	Pin	Signal
1	3.3V	11	3.3V
2	3.3V	12	-12V
3	GND	13	GND
4	5V	14	PS-ON
5	GND	15	GND
6	5V	16	GND
7	GND	17	GND
8	PW-OK	18	-5V
9	5V_SB	19	5V
10	12V	20	5V

1.3.5 Infrared Connector: (IR/CIR)

After the IrDA interface is configured, files can be transferred from or to portable devices such as laptops, PDAS, and printers using application software.

1.4 Back Panel Connectors



1.4.1 PS/2 Mouse /Keyboard CONN.

The motherboard provides a standard PS/2 mouse / Keyboard mini DIN connector for attaching a PS/2 mouse. You can plug a PS/2 mouse / Keyboard directly into this connector.

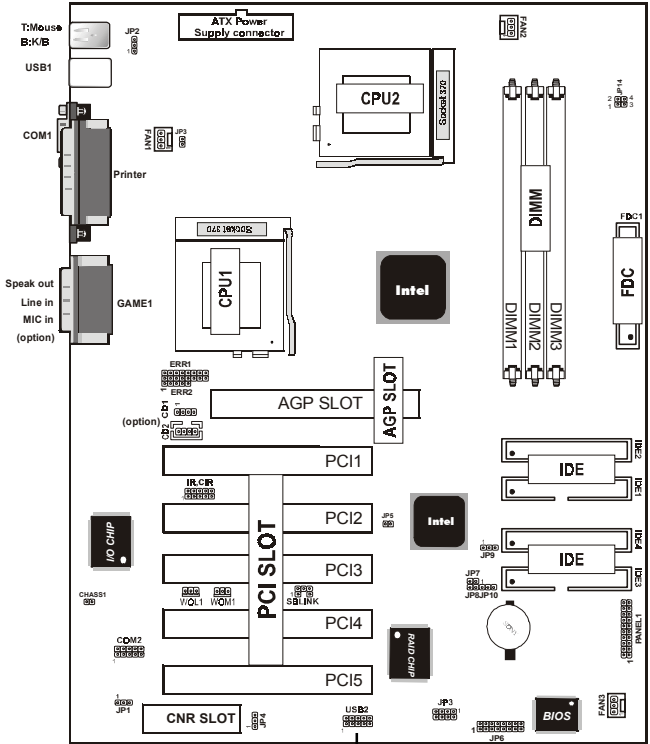
1.4.2 USB Connectors: USB1/2

The motherboard provides a OHCI(Open Host Controller Interface)Universal Serial Bus Roots for attaching USB devices such as a keyboard, mouse and other USB devices. You can plug the USB devices directly into this connector.

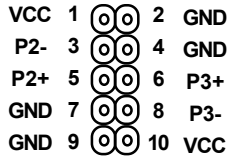


Pin	Signal
1	+5v
2	USBP0-(USBP1-)
3	USBP0+(USBP1+)
4	GND

Front Two USB Connectors: USB2



USB2



1.5 Serial and Parallel Interface Ports

This system comes equipped with two serial ports and one parallel port. Both types of interface ports will be explained in this chapter.

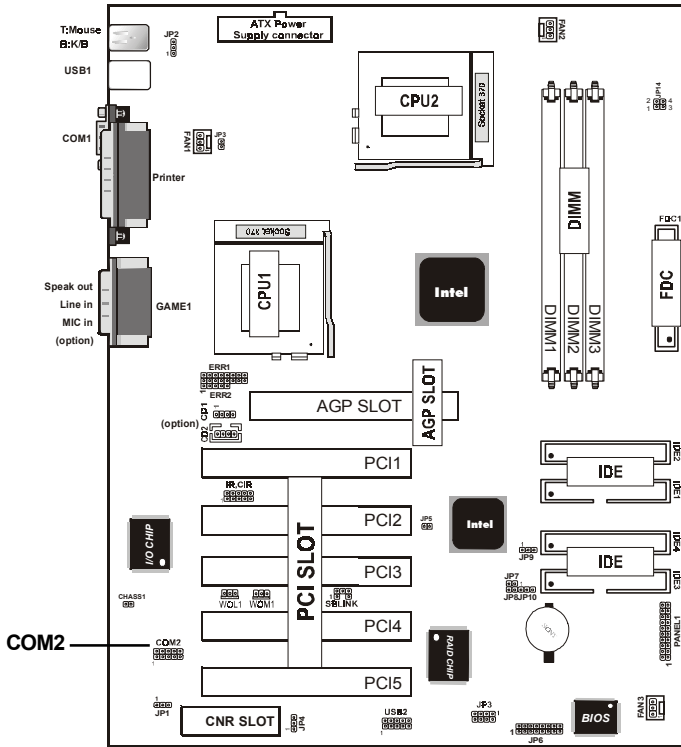
The Serial Interfaces: COM1/COM2

The serial interface port is sometimes referred to as an RS-232 port or an asynchronous communication port. Mice, printers, modems and other peripheral devices can be connected to a serial port. The serial port can also be used to connect your computer system. If you wish to transfer the contents of your hard disk to another system it can be accomplished by using each machine's serial port.



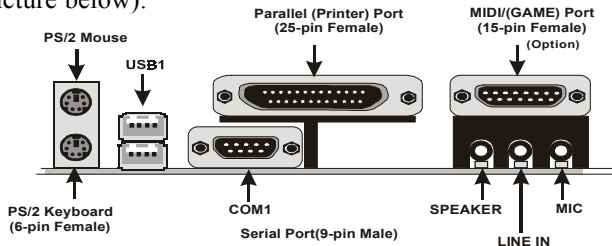
The serial port on this system has one 9-pin connector. Some older computer systems and peripherals used to be equipped with only a 25-pin connector. Should you need to connect your 9-pin serial port to an older 25-pin serial port, you can purchase a 9-to-25 pin adapter.

Signal	DB9 Pin	DB25 Pin
DCD	1	8
RX	2	3
TX	3	2
DTR	4	20
GND	5	7
DSR	6	6
RTS	7	4
CTS	8	5
RI	9	22



Parallel Interface Port

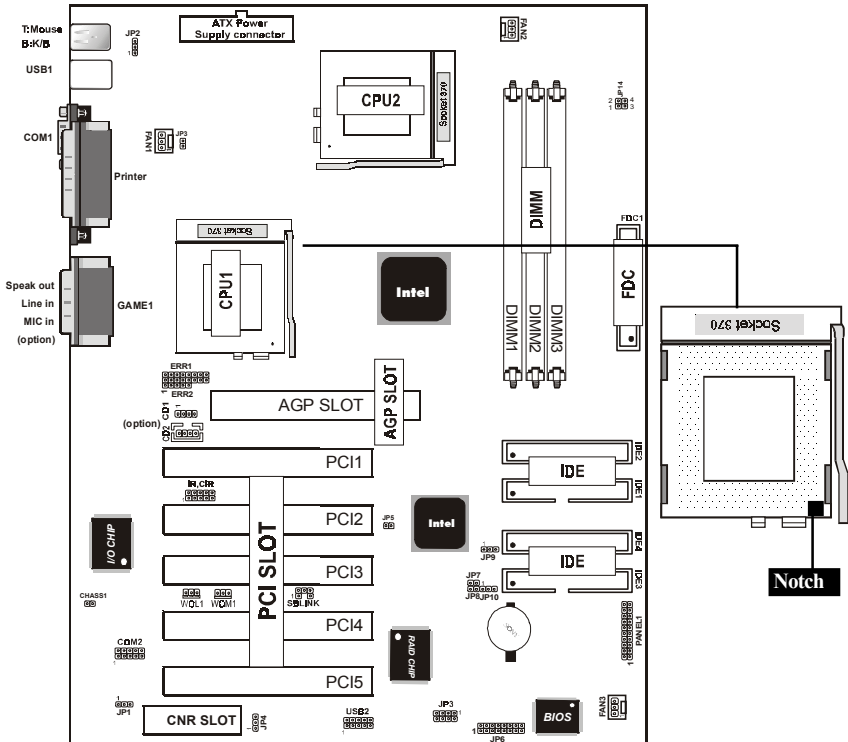
Unlike serial ports, parallel interface ports have been standardized and should not present any difficulty interfacing peripherals to your system. Sometimes called a Centronics port, the parallel port is almost exclusively used with printers. The parallel port on your system has a 25-pin, DB 25 connector(see picture below).



1.6 CPU Installation

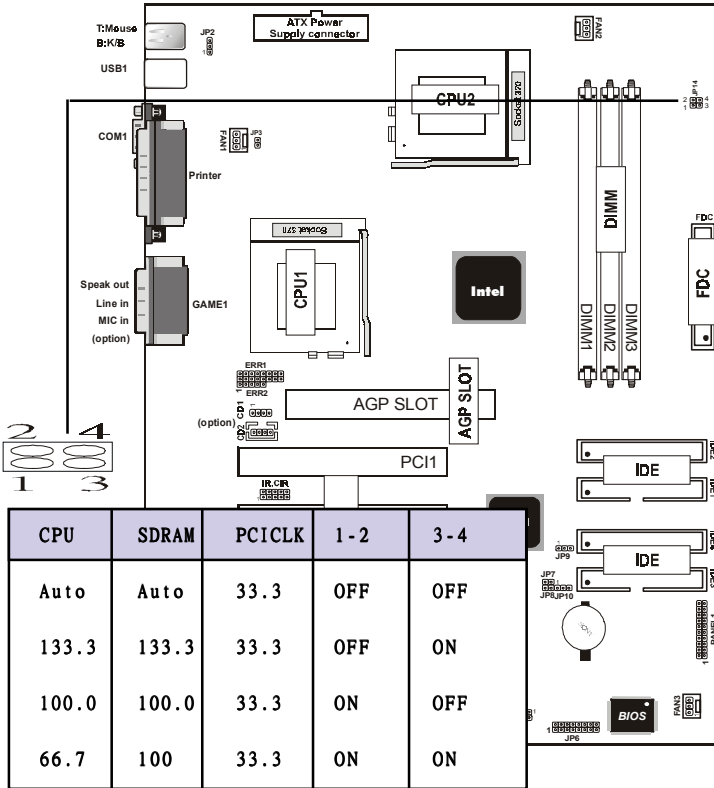
1.6.1 CPU Installation Procedure: Socket 370

1. Pull the lever sideways away from the socket then raise the lever to a 90-degree angle.
2. Locate Pin 1 in the socket and look for the white dot or cut edge in the CPU. Match Pin 1 with the white dot/cut edge then insert the CPU.
3. Press the lever down to complete the installation.
4. **Make sure the spec of the heatsink is good enough.**
5. **2 same frequency of CPU recommended if you want to install dual CPU.**
6. **Please make sure your CPU is able to support dual CPU.**



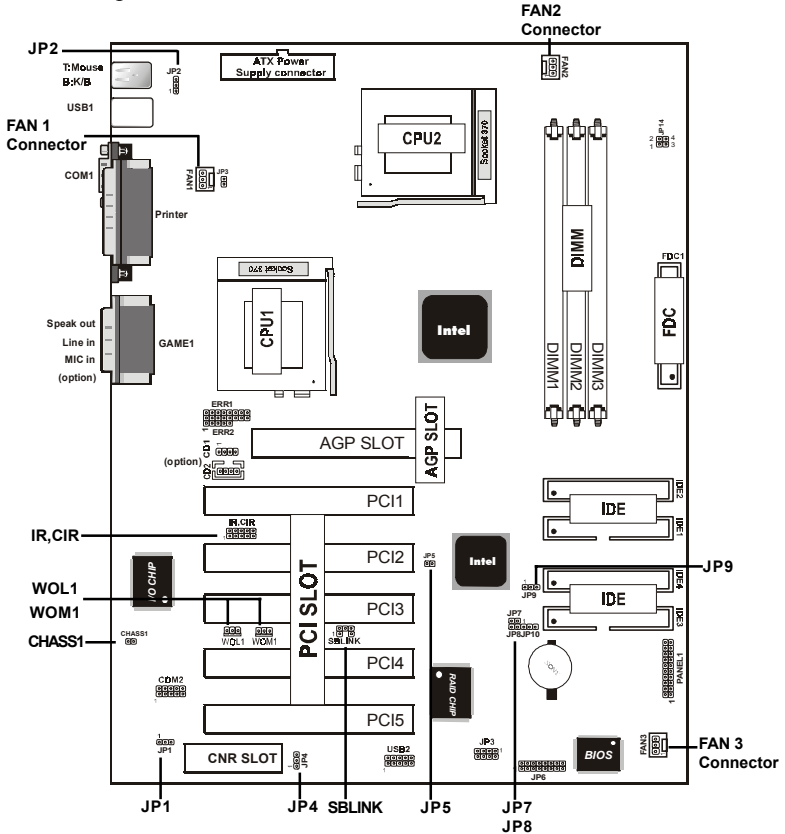
1.6.2 CPU Clock Frequency Setting: JP14

Overclocking is operating a CPU/Processor beyond its specified frequency. JP14 jumper is used for overclocking.



1.7 Jumper Setting


A jumper has two or more pins that can be covered by a plastic jumper cap, allowing you to select different system options.



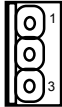
1.7.1 CPU/System Fan Connector: Fan1/2/3

Pin	Assignment
1	Ground
2	+12VDC
3	Signal

1.7.2 Wake-On Modem Header: WOM1

Pin	Assignment
 1	5V_SB
2	Ground
3	Signal

1.7.3 Wake-On LAN Header: WOL1

Pin	Assignment
 1	5V_SB
2	Ground
3	Signal

1.7.4 Watch DOG: JP1

Pin	Assignment
1-2	Disabled (Default)
2-3	Enabled

1.7.5 CMOS Function Setting: JP9

Pin	Assignment
1-2	Normal (Default)
2-3	Clear CMOS

NOTE:

(Please follow the procedure below to clear CMOS data.)
 (1)Remove the AC power line.(2)JP9(2-3)Closed.(3)Wait five seconds.(4)JP9(1-2) Closed.(5)AC Power on.(6)Reset your desired password or clear CMOS data.

1.7.6 KB/MS PWR-ON: JP2



The JP2 Jumper is for setting keyboard power. This function is provided by keyboard and PS/2 mouse Wake-up function.

Pin	Assignment
1-2	Disabled
2-3	Enabled (Default)



1.7.7 Wake on 2nd USB Port: JP4

Pin	Assignment
1-2	Disabled
2-3	Enabled



1.7.8 SB-LINK Setting: JP5

Pin	Assignment
	Top Swap Override
	Normal

1.7.9 Timeout Reboot: JP7

Pin	Assignment
	No Reboot on Timeout
	Reboot on Timeout

1.7.10 CPU Safe Mode: JP8

Pin	Assignment
ON 	Force CPU to Safe Mode
OFF 	Normal Use Register

1.7.11 Chassic Connector: CHASSIC1

Pin	Assignment
1	CHASI
2	GND

1.7.12 IrDA Connectors: IR/CIR

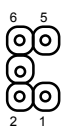
Pin IR	Assignment
1	+5V
2	
3	IRRX1
4	GND
5	IRTX

Pin CIR	Assignment
1	
2	CIRRX
3	5VSB
4	

1.7.13 SBLINK Connector

The motherboard provides one infrared SB-LINK feature connector for support PCI sound cards.

Pin	Assignment
1	GNT#
2	GND
3	KEY
4	REQ#
5	GND
6	SERIRQ



1.8 DRAM Installation

1.8.1 DIMM

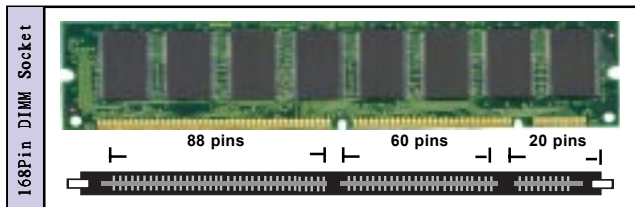
DRAM Access Time: 3.3V Unbuffered SDRAM/ PC66/
PC100 and PC133 Type required.

DRAM Type: 8MB, 16MB, 32MB, 64MB, 128MB,
256MB DIMM Module.(168 pin)

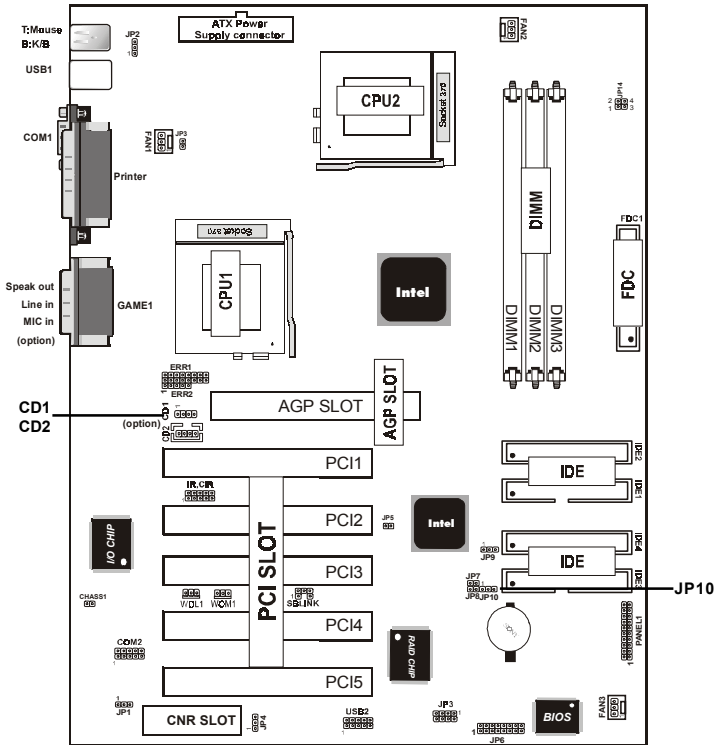
Bank	Memory module
DIMM 1	16MB, 32MB, 64MB, 128MB, 256MB
(Bank 0-1)	168 pin, 3.3v SDRAM
DIMM 2	16MB, 32MB, 64MB, 128MB, 256MB
(Bank 2-3)	168 pin, 3.3v SDRAM
DIMM 3	16MB, 32MB, 64MB, 128MB, 256MB
(Bank 4-5)	168 pin, 3.3v SDRAM
	Total System Memory(Max 512MB)

1.8.2 How to install a DIMM Module

1. The DIMM socket has a “Plastic Safety Tab” and the DIMM memory module has an asymmetrical notch”, so the DIMM memory module can only fit into the slot in one direction.
2. Push the tabs out. Insert the DIMM memory modules into the socket at a 90-degree angle then push down vertically so that it will fit into place.
3. The Mounting Holes and plastic tabs should fit over the edge and hold the DIMM memory modules in place.



1.9 Audio Subsystem



1.9.1 CD Audio-In Connectors: CD1/CD2 (option)

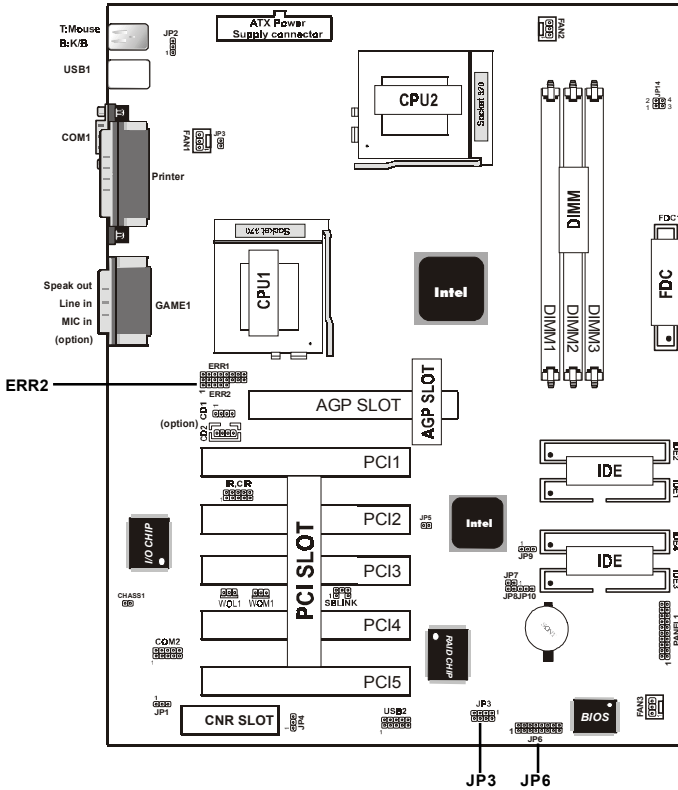
Pin CD1	Assignment
1	CD-L
2	GND
3	GND
4	CD-R

Pin CD2	Assignment
1	GND
2	CD-L
3	GND
4	CD-R

1.9.2 System Speaker: JP10

Pin	Assignment
1-2	PC Speaker
2-3	AC CODEC

1.10 Smart Panel Onboard Connector (option)



Note:

The motherboard provides the pin leads for Smart Panel. If you want POST Error Code or Smart Panel function, please refer to Smart Panel (SPA815EPD) manual.

1.10.1 Port 80 Debug Function: ERR2 (option)

Pin	Signal	Pin	Signal
1	ERD4	2	ERD0
3	ERD5	4	ERD1
5	ERD6	6	ERD2
7	ERD7	8	ERD3
9	GND	10	GND

1.10.2 Second BIOS Connector: JP6 (option)

Pin	Signal	Pin	Signal
1	VCC	2	NC
3	PCIRST#	4	PCLK_FWH
5	CAD_FWH0	6	P66DTCT
7	CAD_FWH1	8	S66DTCT
9	GND	10	GND
11	CAD_FWH2	12	HINIT#
13	CAD_FWH3	14	FWH_ID0T
15	CAD_FWH4	16	VCC

1.10.3 GPIO Port Connector: JP3 (option)

Pin	Signal	Pin	Signal
1	5VSB	2	SLP_S3
3	GP27	4	5VSB(R)
5	GP28	6	SLP_S5
7	GP21	8	5VSB(R)

2. BIOS Setup

Introduction

This chapter discusses the Award Setup program built into the ROM BIOS. The Setup program allows the user to modify the basic system configuration. This special information is then stored in battery-backed RAM so that it retains the setup information when the power is turned off.

The Award BIOS installed in your computer system's ROM (Read Only Memory) is a custom version of an industry standard BIOS. This means that it supports Intel Celeron/Coppermine PIII Processor. The BIOS provides critical low-level support for standard devices such as disk drives and serial and parallel ports.

The rest of this manual is intended to guide you through the process of configuring your system using Setup.

Plug and Play Support

This AWARD BIOS supports the Plug and Play Version 1.0A specification. ESCD(Extended System Configuration Data)write is supported.

EPA Green PC Support

This AWARD BIOS supports Version 1.03 of the EPA Green PC specification.

PCI Bus Support

This AWARD BIOS also supports Version 2.1 of the Intel PCI (Peripheral Component Interconnect)local bus specification.

APM Support

This AWARD BIOS supports Version 1.1&1.2 of the Advanced Power Management(APM) specification. Power management features are implemented via the System Management Interrupt(SMI). Sleep and Suspend power management modes are supported. Power to the hard disk drives and video monitors can be managed by this AWARD BIOS.

DRAM Support

SDRAM (Synchronous DRAM) are supported.

Support CPU

This AWARD BIOS supports the Intel Celeron/Coppermine PIII Processor.

Using Setup

In general, you use the arrow keys to highlight items, press <Enter> to select, use the <PgUp> and <PgDn> keys to change entries, press <F1> for help and press <Esc> to quit. The following table provides more detail about how to navigate in the Setup program by using the keyboard.

Note:

(BIOS version 1.0 is for reference only. If there is a change in BIOS version, please use the actual version on the BIOS.)

Keystroke	Function
Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item on the left(menu bar)
Right arrow	Move to the item on the right(menu bar)
Esc	Main Menu: Quit without saving changes Submenus: Exit Current page to the next higher level menu
Move Enter	Move to item you desired
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
+Key	Increase the numeric value or make changes
-Key	Decrease the numeric value or make changes
Esc Key	Main menu-Quit and not save changes into CMOS Status Page Setup Menu and option Page Setup Menu-Exit Current page and return to Main Menu
F1 Key	General help on Setup navigation keys.
F5 Key	Load previous values from CMOS
F6 Key	Load the fail-safe defaults from BIOS default table
F7 Key	Load the optimized defaults
F10 Key	Save all the CMOS changes and exit

2.1 Main Menu

Once you enter AWARD BIOS CMOS Set up Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup function. Use the arrow keys to select among the items and press<Enter> to accept and enter the sub-menu.

“WARNING”

The information about BIOS defaults on manual (Figure 1,2,3,4,5,6,7,8,9,10,11,12,13,14)is just for reference, please refer to the BIOS installed on the board for updated information.

© Figure 1. Main Menu

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Standard CMOS Features	Frequency/Voltage Control
Advanced BIOS Features	Load Fail-Safe Defaults
Advanced Chipset Features	Load Optimized Defaults
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PNP/PCI Configuration	Save & Exit Setup
PC Health Status	Exit Without Saving
Esc : Quit F9 : Menu in BIOS ←→↑↓: Select Item	
F10 : Save & Exit Setup	
Time , Date , Hard Disk Type ...	

Standard CMOS Features

This setup page includes all the items in standard compatible BIOS.

Advanced BIOS Features

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

Advanced Chipset Features

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

Integrated Peripherals

This selection page includes all the items of the IDE hard drive and Programmed Input/Output features.

Power Management Setup

This setup page includes all the items of the power management features.

PnP/PCI Configuration

This setup page includes the user defined or default IRQ Setting.

PC Health Status

This page shows the hardware Monitor information of the system.

Frequency / Voltage Control

This setup page controls the CPU's clock and frequency ratio.

Load Fail-Safe Defaults

Use this menu to load the BIOS default values for the minimal/stable performance for your system to operate.

Load Optimized Defaults

These settings are more likely to configure a workable computer when something is wrong. If you cannot boot the computer successfully, select the BIOS Setup options and try to diagnose the problem after the computer boots. These settings do not provide optional performance.

Set Supervisor Password

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

Set User Password

You can specify both a User and a Supervisor password. When you select either password option, you are prompted for a 1-6 character password. Enter the password and then retype the password when prompted.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

2.2 Standard CMOS Features

This item in the Standard CMOS Setup Menu is divided into 10 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

© Figure 2. Standard CMOS Features

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

Date(mm:dd:yy)	Tue,Jun 6 2000	Item Help
Time (hh:mm:ss)	11:26:10	
IDE Primary Master	None	Menu Level
IDE Primary Slave	None	Change the day, month,year and century.
IDE Secondary Master	None	
IDE Secondary Master	None	
Drive A	1.44M,3.5 in	
Drive B	None	
Video	EGA/VGA	
Halt On	All,But Keyboard	
Base Memory	640K	
Extended Memory	65472K	
Total	1024K	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
F1:General Help F5:Previous Values F6:Fail-Safe Defaults
F7:Optimized Defaults

Main Menu Selections

This table shows the selections that you can make on the Main Menu.

Item	Options	Description
Date	Month DD YYYY	Set the system,date. Note that the 'Day' automatically changes when you set the data.
IDE Primary Master	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Primary Slave	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Secondary Master	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
IDE Secondary Slave	Options are in its sub menu.	Press<Enter> to enter the sub menu of detailed.
Drive A Drive B	None 360K,5.25in 1.2M,5.25in 720K,3.5in 1.44M,3.5in 2.88M,3.5in	Select the type of floppy disk drive installed in your system.
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video device.

Item	Options	Description
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/Key	Select the situation in which you want the BIOS to stop the POST process and notify.
Base Memory	N/A	Displays the amount of conventional memory detected during boot up.
Extended Memory	N/A	Displays the amount of conventional memory detected during boot up.
Total Memory	N/A	Displays the total memory available in the system.

2.3 Advanced BIOS Features

© Figure 3. Advanced BIOS Features

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Advanced BIOS Features

Virus Warning	Disabled	Item Help
CPU Internal Cache	Enabled	Menu Level
External Cache	Enabled	
CPU L2 Cache ECC Checking	Enabled	Allows you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempts to write data into this area, BIOS will show a warning message on screen and alarm beep
Processor Number Feature	Enabled	
Quick Power On Self Test	Enabled	
First Boot Device	Floppy	
Second Boot Device	HDD-0	
Third Boot Device	LS120	
Fourth Other Device	Disabled	
Swap Floppy Drive	Disabled	
Boot Up Floppy Seek	Enabled	
Boot Up NumLock Status	On	
Boot Up System Speed	High	
Gate A20 Option	Fast	
Typematic Rate Setting	Disabled	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	Setup	
MPS Version Control For OS	1.4	
OS Select For DRAM >64MB	Non-OS2	
Report No FDD For WIN 95	No	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
 F1:General Help F5:Previous Values F6:Fail-Safe Defaults
 F7:Optimized Defaults

Virus Warning

This option allows you to choose the VIRUS Warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempts to write data into this area, BIOS will show a warning message on screen and alarm beep.

The Choices: Disabled(default), Enabled.

CPU Internal Cache

These two categories speed up memory access. However, it depends on CPU/chipset design.

Enabled(default) Enabled cache.

Disabled Disabled cache.

Boot Up Floppy Seek

Seek disk drives during boot up. Disabled speeds boot-up.

The Choices: **Enabled**(default), Disabled.

Boot Up NumLock Status

Select power on state for Numlock.

On(default) Numpad is number keys.

Off Numpad is arrow keys.

Boot Up System Speed

The Choices: **High**(default), Low.

Gate A20 Option

Select if chipset or keyboard controller should control Gate A20.

Normal A pin in the keyboard controller controls Gate A20.

Fast(default) Lets chipset control Gate A20.

Typematic Rate Setting

Enabled Enabled this option to adjust the keystroke repeat rate.

Disabled(default) Disabled.

Typematic Rate (Char/Sec)

Range between 6(**default**) and 30 characters per second.

This option controls the speed of repeating keystrokes.

Typematic Delay (Msec)

This option sets the time interval for displaying the first and the second characters.

The Choices: **250**(**default**), 500, 750, 1000

Security Option

This category allows you to limit access to the system and Setup, or just to Setup.

System

The system will not boot and access to Setup will be denied if the correct password is not entered in prompt.

Setup(default)

The system will boot, but access to Setup will be denied if the correct password is not entered in prompt.

MPS Version Control For OS

The Choices: 1.4(default), 1.1

OS Select For DRAM >64MB

Select the operating system that is running with greater than 64MB of RAM on the system.

The Choices: Non-OS2(default), OS2

Report No FDD For Window 95**No(default)**

Assign IRQ6 For FDD.

Yes

FDD Detect IRQ6 Automatically.

2.4 Advanced Chipset Features

This section allows you to configure the system based on the specific features of the installed chipset. This chipset manages bus speeds and access to system memory resources, such as DRAM and external cache. It also coordinates communications of the PCI bus. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide the best operating conditions for your system. The only time you might consider making any changes would be if you discovered that data was lost while using your system.

© Figure 4. Advanced Chipset Features

CMOS Setup Utility-Copyright(C) 1984-2001 Award Software
Advanced Chipset Features

SDRAM CAS Latency/Time	3	Item Help
SDRAM Cycle Time Tras/Trc	7/9	
SDRAM RAS -to- CAS Delay	3	Menu Level
SDRAM RAS Precharge Time	3	
System BIOS Cacheable	Disabled	
Video BIOS Cacheable	Disabled	
Memory Hole At 15M-16M	Disabled	
CPU Latency Timer	Enabled	
Delayed Transaction	Enabled	
AGP Graphic Aperture Size	64MB	
Display Cache Frequency	100MHz	
On-Chip Video Window Size	64MB	
Onboard Display Cache Setting		
Initial Display Cache	Enabled	
CAS# Latency	3	
Paging Mode Control	Open	
RAS-to-CAS Override	by CAS# LT	
RAS# Timing	Fast	
RAS# Precharge Timing	Fast	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
F1:General Help F5:Previous Values F6:Fail-Safe Defaults
F7:Optimized Defaults

SDRAM CAS latency Time

3(default)	Slower SDRAM DIMM Module.
2	Fastest SDRAM DIMM Module.

SDRAM Cycle Time Tras/Trc

Auto	
7/9(default)	Set SDRAM Tras/Trc Cycle time in 7/9 SCLKs.
5/7	Set SDRAM Tras/Trc Cycle time in 5/7 SCLKs.

SDRAM RAS -to- CAS Delay

3(default)	Set SDRAM RAS -to- CAS delay 3 SCLKs.
2	Set SDRAM RAS -to- CAS delay 2 SCLKs.

SDRAM RAS Precharge Time

3(default)	Set SDRAM RAS Precharge Time to 3.
2	Set SDRAM RAS Precharge Time to 2.

System BIOS Cacheable

When enabled, the access to the system BIOS ROM address at F0000H-FFFFFFH is cached.

The Choices: Disabled(default), Enabled.

Video BIOS Cacheable

Enabled	Enabled Video BIOS Cacheable.
Disabled(default)	Disabled Video BIOS Cacheable.

Memory Hole At 15-16M

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

The Choices: Disabled(default), Enabled.

CPU Latency Timer

Enabled(default)

Enabled.

Disabled

Disabled.

Delayed Transaction

Enabled(default)

Slow speed ISA device in system.

Disabled

Disabled.

AGP Graphics Aperture Size

64MB(default)

AGP Graphics Aperture Size is 64 MB.

32MB

AGP Graphics Aperture Size is 32 MB.

Display Cache Frequency

The Choices: 100MHz(default), 133MHz.

On-Chip Video Window Size

64MB(default)

Set Graphics Aperture Size to 64 MB.

32MB

Set Graphics Aperture Size to 32 MB.

Initial Display Cache

The Choices: Enabled(default), Disabled.

CAS# Latency

The Choices: 3(default), 2.

Paging Mode Control

The Choices: Open(default), Close.

RAS-to-CAS Override

The Choices: by CAS# LT(default), Override.

RAS# Timing

The Choices: Fast(default), Slow.

RAS# Precharge Timing

The Choices: Fast(default), Slow.

2.5 Integrated Peripherals

© Figure 5. Integrated Peripherals

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Integrated Peripherals

On-Chip Primary PCI IDE	Enabled	Item Help
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	
KB Power On Password	Enter	
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	
RxD,TxD Active	Hi,Lo	
IR Transmission Delay	Enabled	
UR2 Duplex Mode	Half	
Use IR Pins	IR/Rx2Tx2	
Onboard Parallel Port	378/IRQ7	
Parallel Port Mode	SPP	
EPP Mode Type	EPP1.7	
ECP Mode Use DMA	3	
PWRON After PWR-Fail	OFF	
Game Port Address	201	
Midi Port Address	330	
Midi Port IRQ	10	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
 F1:General Help F5:Previous Values F6:Fail-Safe Defaults
 F7:Optimized Defaults

On-Chip Primary PCI IDE

Enabled(default)	Enabled onboard 1st channel IDE port.
Disabled	Disabled onboard 1st channel IDE port.

On-Chip Secondary PCI IDE

Enabled(default)	Enabled onboard 2nd channel IDE port.
Disabled	Disabled onboard 2nd channel IDE port.

IDE Primary Master PIO(for onboard IDE 1st channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

IDE Primary Slave PIO(for onboard IDE 2nd channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

IDE Secondary Master PIO(for onboard IDE 1st channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

IDE Secondary Slave PIO(for onboard IDE 2nd channel)

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Mode 0~4	Manually set the IDE Accessing mode.

IDE Primary Master UDMA

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disabled.

IDE Primary Slave UDMA

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disabled.

IDE Secondary Master UDMA

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disabled.

IDE Secondary Slave UDMA

Auto(default)	BIOS will automatically detect the IDE HDD Accessing mode.
Disabled	Disabled.

USB Controller

Enabled(default)	Enabled USB Controller.
Disabled	Disabled USB Controller.

USB Keyboard Support

Enabled	Enabled USB Keyboard Support.
Disabled(default)	Disabled USB Keyboard Support.

Init Display First

PCI Slot(default)	Set Init Display First to PCI Slot.
Onboard AGP	Set Init Display First to onboard AGP.

AC 97 Audio (option)**Auto(default)**

BIOS will automatically detect onboard Audio.

Disabled

Disabled.

AC 97 Modem**Auto(default)**

BIOS will automatically detect onboard Modem.

Disabled

Disabled.

IDE HDD Block Mode**Enabled(default)**

Enabled.

Disabled

Disabled.

Power On Function**Password**

Enter from 1 to 7 characters to set the Keyboard Power On Password.

Hot Key

Hot Key.

Mouse Left

Mouse Left.

Mouse Right

Mouse Right.

Any Key

Any Key.

Button Only(default)

Button Only.

Keyboard 98

If your keyboard has an Owner key button, you can press the key to power on your system.

KB Power On Password**Enter**

Enter from 1 to 7 characters to set the keyboard Power On Password.

Hot Key Power On**Ctrl-F1(default)**

First you must choose the Power On by Hot Key function then Enter from 1 to 8 characters to set the Hot Key Power On your system.

Ctrl-F2**Ctrl-F3****Ctrl-F4****Ctrl-F5****Ctrl-F6****Ctrl-F7****Ctrl-F8**

Onboard FDC Controller

Enabled(default)	Enabled onboard FDC Controller.
Disabled	Disabled onboard FDC Controller.

Onboard Serial Port1

Select an address and corresponding interrupt for the first and second serial ports.

The Choices: **3F8/IRQ4**(default), Auto, (2F8/IRQ3), (3E8/IRQ4), (2E8/IRQ3), Disabled.

Onboard Serial Port 2

Auto	BIOS will automatically setup the Serial Port 2 address.
3F8/IRQ4	Enabled onboard Serial Port 2 and address is 3F8.
2F8/IRQ3(default)	Enabled onboard Serial Port 2 and address is 2F8.
3E8/IRQ4	Enabled onboard Serial Port 2 and address is 3E8.
2E8/IRQ3	Enabled onboard Serial Port 2 and address is 2E8.
Disabled	Disabled.

UART Mode Select

This item allows you to select which Infra Red(IR) function of the onboard I/O chip you wish to use.

The Choices: **Normal**(default), IrDA, SCR, ASKIR.

UR2 Duplex Mode

This item allows you to select which Infra Red(IR) function of the onboard I/O chip you wish to use.

The Choices: Half (default), Full.

Onboard Parallel Port

This item allows you to select the I/O address with which to access the onboard parallel port controller.

Disabled.

378/IRQ7.(default)

278/IRQ5.

3BC/IRQ7.

Parallel Port Mode

SPP(default)

Using Parallel port as Standard Parallel Port.

EPP

Using Parallel port as Enhanced Parallel Port.

ECP

Using Parallel port as Extended Capabilities Port.

ECP+EPP

Using Parallel port as ECP+EPP mode.

PWRON After PWR-Fail

The Choices: OFF(default), ON, Former-Sts.

Game Port Address (option)

201(default)

Set onboard game port to 201.

209

Set onboard game port to 209.

Disabled

Disabled.

Midi Port Address (option)

300

Set Midi Port address to 300.

330(default)

Set Midi Port address to 330.

Midi Port IRQ (option)

10(default)

Set Midi Port IRQ to 10.

5

Set Midi Port IRQ to 5.

2.6 Power Management Setup

The Power Management Setup allows you to configure your system to most effectively save energy while operating in a manner consistent with your own style of computer use.

© Figure 6. Power Management Setup

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

Power Management Setup

ACPI Function	Enabled	Item Help
ACPI Suspend Type	S1(POS)	
Power Management	User Define	Menu Level
Video Off Method	DPMS	
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-Off	
Wake Up by PCI Card	Disabled	
Power On by Ring	Enabled	
Wake Up On LAN	Enabled	
USB KB Wake-up From S3	Disabled	
CPU Thermal-Throttling	50.0%	
Resume by Alarm	Disabled	
Data (of Month) Alarm	0	
Time (of hh:mm:ss) Alarm	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 PIRQ[A-D]#	Disabled	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
 F1:General Help F5:Previous Values F6:Fail-Safe Defaults
 F7:Optimized Defaults

ACPI Function

This item display status of the Advanced Configuration and Power Management (ACPI).

ACPI Suspend Type

The item allows you to select the suspend type under ACPI operating system.

S1(POS)(default) Power on Suspend.

S3(STR) Suspend to RAM.

Power Management

This option allows you to set each mode individually.

When not disabled, each of the ranges are from 1 min. to 1 hr. except for HDD Power Down which ranges from 1 min. to 15 min. and disable.

The Choices: User Define (default), Min Saving, Max Saving.

HDD Power Down

By default, this is “Disabled”, meaning that no matter the mode of the rest of system, the hard drive will remain ready. Otherwise, you have a range of choices from 1 to 15 minutes or Suspend. This means that you can select to have your hard disk drive be turned off after a selected number of minutes or when the rest of the system goes into a suspend mode.

The Choices: Disabled(default).

Doze Mode/Suspend Mode

The **Doze Mode**, and **Suspend Mode** fields set the Period of time after each of these modes activates. At Max Saving, these modes activate sequentially (in the given order) after one minute; at Min Saving after one hour.

The Choices: Disabled(default).

Video Off In Suspend

This field determines when to activate the video off feature for monitor power management.

The Choices: Yes(default), No

Video Off Method

This determines the manner in which the monitor is blanked.

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 Support (default) Initial display power management signaling.

Suspend Type

Stop Grant(default) Set Suspend type is stop grant.

PwrOn Suspend Set Suspend type is Power on Suspend.

Modem Use IRQ

This determines the IRQ, which can be applied in Modem use.

3(default)

4/5/7/9/10/11/NA

Suspend Mode

Disabled(default) Disabled.

1 min - 1 Hour Set the timer to enter Suspend Mode.

HDD Power Down

Disabled(default) Disabled.

1 - 15 mins Enabled.

Soft-Off by PWR-BTTN

Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state when the system has “hung”.

The Choices: Instant-Off(default), Delay 4 Sec.

Wake Up by PCI card

Enabled	Enabled.
Disabled(default)	Disabled.

Power On By Ring

Enabled(default)	Enabled.
Disabled	Disabled.

Wake Up On LAN

Enabled(default)	Enabled.
Disabled	Disabled.

USB KB Wake-Up From S3

Disabled(default)	Disabled.
Enabled	Enabled.

CPU Thermal-Throttling

50.0%(default)
Monitor CPU Temp. will cause system to slow down
CPU Duty Cycle to 12.5% / 25.0% / 37.5% / 62.5% /
70.5% / 87.5%

Resume by Alarm

Disabled(default)	Disabled.
Enabled	Enabled.

Primary IDE 0/1

Disabled(default)	Disabled.
Enabled	Enabled monitor Primary IDE 0/1 for Green event.

Secondary IDE 0/1**Disabled(default)**

Disabled.

Enabled

Enabled monitor Secondary IDE 0/1 for Green event.

FDD, COM, LPT Port**Disabled(default)**

Disabled.

Enabled

Enabled monitor FDD, COM, LPT Port.

PCI PIRQ[A-D]#**Disabled(default)**

Ignore PCI PIRQ[A-D]#

Active.

Enabled

Monitor PCI PIRQ[A-D]#

Active.

2.7 PnP/PCI Configurations

This section describes configuring the PCI bus system. PCI or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed of the CPU itself when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users make any changes to the default settings.

© Figure 7. PnP/PCI Configurations

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PnP/PCI Configurations

Reset Configuration Data	Disabled	Item Help
Resources Controlled By	Auto(ESCD)	Menu Level
IRQ Resources	Press Enter	
PCI/VGA Palette Snoop	Disabled	When resources
INT Pin 1 Assignment	Auto	are controlled
INT Pin 2 Assignment	Auto	manually, assign
INT Pin 3 Assignment	Auto	each system
INT Pin 4 Assignment	Auto	interrupt a type,
		depending on the
		type of device
		using the
		interrupt

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
 F1:General Help F5:Previous Values F6:Fail-Safe Defaults
 F7:Optimized Defaults

Reset Configuration Data

The system BIOS supports the PnP feature so the system needs to record which resource is assigned and proceeds resources from conflict. Every peripheral device has a node, which is called ESCD. This node records which resources are assigned to it. The system needs to record and update ESCD to the memory locations. These locations (4K) are reserved at the system BIOS. If Disabled (Default) is chosen, the system's ESCD will update only when the new configuration varies from the last one. If Enabled is chosen, the system is forced to update ESCDs and then is automatically set to the "Disabled" mode.

IRQ3	assigned to:PCI/ISA PnP
IRQ4	assigned to:PCI/ISA PnP
IRQ5	assigned to:PCI/ISA PnP
IRQ6	assigned to:PCI/ISA PnP
IRQ7	assigned to:PCI/ISA PnP
IRQ8	assigned to:PCI/ISA PnP
IRQ9	assigned to:PCI/ISA PnP
IRQ10	assigned to:PCI/ISA PnP
IRQ11	assigned to:PCI/ISA PnP
IRQ12	assigned to:PCI/ISA PnP
IRQ13	assigned to:PCI/ISA PnP
IRQ14	assigned to:PCI/ISA PnP
IRQ15	assigned to:PCI/ISA PnP
DMA-0	assigned to:PCI/ISA PnP
DMA-1	assigned to:PCI/ISA PnP
DMA-2	assigned to:PCI/ISA PnP
DMA-3	assigned to:PCI/ISA PnP
DMA-4	assigned to:PCI/ISA PnP
DMA-5	assigned to:PCI/ISA PnP
DMA-6	assigned to:PCI/ISA PnP
DMA-7	assigned to:PCI/ISA PnP

The above settings will be shown on the screen only if “Manual” is chosen for the resources controlled by function.

Legacy is the term, which signifies that a resource is assigned to the ISA Bus and provides for non-PnP ISA add-on cards. PCI/ISA PnP signifies that a resource is assigned to the PCI Bus or provides for ISA PnP add-on cards and peripherals.

Resources Controlled By

By Choosing “Auto” (default), the system BIOS will detect the system resources and automatically assign the relative IRQ and DMA channel for each peripheral. By Choosing “Manual”, the user will need to assign IRQ & DMA for add-on cards. Be sure that there are no IRQ/DMA and I/O port conflicts.

IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

PCI / VGA Palette Snoop

Choose Disabled or Enabled. Some graphic controllers which are not VGA compatible take the output from a VGA controller and map it to their display as a way to provide boot information and VGA compatibility.

However, the color information coming from the VGA controller is drawn from the palette table inside the VGA controller to generate the proper colors, and the graphic controller needs to know what is in the palette of the VGA controller. To do this, the non-VGA graphic controller watches for the write access to the VGA palette and registers the snoop data. In PCI based systems, the Write Access to the palette will not show up on the ISA bus if the PCI VGA controller responds to the Write.

In this case, the PCI VGA controller should not respond to the Write, it should only snoop the data and permit the access to be forwarded to the ISA bus. The non-VGA ISA graphic controller can then snoop the data on the ISA bus. Unless you have the above situation, you should disable this option.

Disabled (default)	Function Disabled.
Enabled	Function Enabled.

2.8 PC Health Status

© Figure 8. PC Health Status

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PC Health Status

CPU Warning Temperature	Disabled	Item Help
Current System Temp.		Menu Level
Current CPU1 Temperature		
Current CPU2 Temperature		
Current CPU Fan1 Speed		
Current CPU Fan2 Speed		
Current CPU Fan3 Speed		
VCORE1		
VCORE2		
VCC3		
+5V		
+12V		
-12V		
-5V		
VBAT(V)		
5VSB(V)		
Shut down Temperature	Disabled	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
 F1:General Help F5:Previous Values F6:Fail-Safe Defaults
 F7:Optimized Defaults

Current Voltage(V) Vcore /VCC3/ +12V/+5V/5VSB/VBAT

Detect system's voltage status automatically.

Current CPU1, CPU2/System Temperature(°C/°F)

This field displays the current CPU temperature,if your computer contains a monitoring system.

Current Fan/Power Fan / System Fan Speed

These field displays the current speed of up to System Fans,if your computer contains a monitoring system.

CPU Warning Temperature(°C)

Disabled(default)	Disabled.
60°C / 140°F	Monitor CPU Temp.at 60°C / 140°F.
50°C / 122°F	Monitor CPU Temp.at 50°C / 122°F.
53°C / 127°F	Monitor CPU Temp.at 53°C / 127°F.
56°C / 133°F	Monitor CPU Temp.at 56°C / 133°F.
63°C / 145°F	Monitor CPU Temp.at 63°C / 145°F.
66°C / 151°F	Monitor CPU Temp.at 66°C / 151°F.
70°C / 158°F	Monitor CPU Temp.at 70°C / 158°F.

Shutdown Temperature(°C / °F)

Disabled(default)	Disabled.
60°C / 140°F	Monitor CPU Temp.at 60°C / 140°F, if Temp.>60°C / 140°F system will automatically power off.
65°C / 149°F	Monitor CPU Temp.at 65°C / 149°F, if Temp.>65°C / 149°F system will automatically power off.
70°C / 158°F	Monitor CPU Temp.at 70°C / 158°F, if Temp.>70°C / 158°F system will automatically power off.
75°C / 167°F	Monitor CPU Temp.at 75°C / 167°F, if Temp.>75°C / 167°F system will automatically power off.

2.9 Frequency / Voltage Control

© Figure 9. Frequency / Voltage Control

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

Frequency / Voltage Control

Auto Detect DIMM / PCI CLK	Enabled	Item Help
Spread Spectrum	Disabled	
Clock By Slight Adjust	66	Menu Level
CPU Clock Ratio	X3	

←→↑↓: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit
 F1:General Help F5:Previous Values F6:Fail-Safe Defaults
 F7:Optimized Defaults

Auto Detect DIMM / PCI CLK

This item allows you to enable/disable auto detect DIMM / PCI CLOCK.

The Choices: Enabled(default), Disabled.

Spread Spectrum

This function is designed for the EMI test only.

The Choices: Disabled(default), Enabled.

Clock By Slight Adjust

This item allows you to select the CPU clock from 133MHz to 166MHz, 100MHz to 133MHz or 66MHz to 100MHz depending on the CPU Host Clock .

The Choices: Mix= 66(default), Max=166.

CPU Clock Ratio

This option will not be shown if you are using a CPU with the locked ratio.

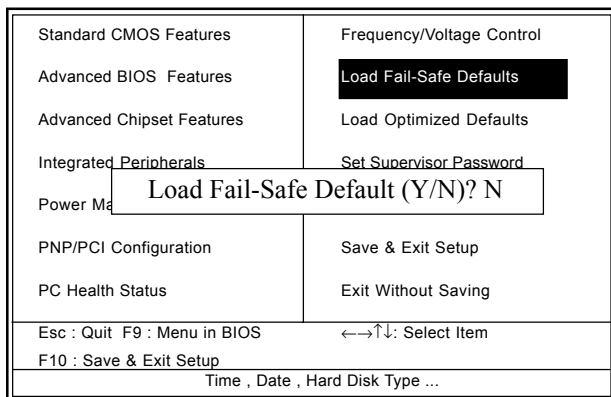
X3/X3.5/X4/X4.5/X5/X5.5/X6/X6.5/X7/X7.5/X8.

2.10 Load Fail-Safe Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:

© **Figure 10. Load Fail-Safe Defaults**

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



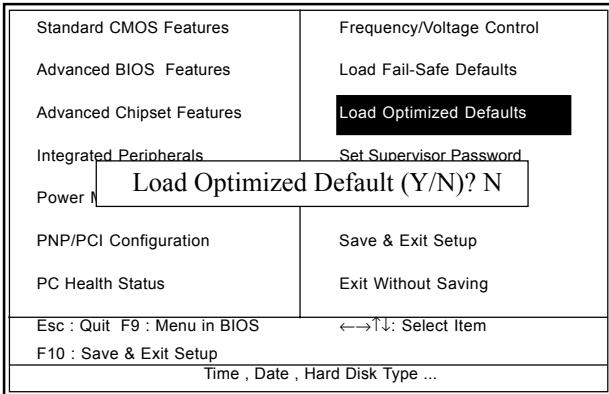
Pressing 'Y' loads the default values that are factory settings for optimal performance of system operations.

2.11 Load Optimized Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:

© Figure 11. Load Optimized Defaults

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

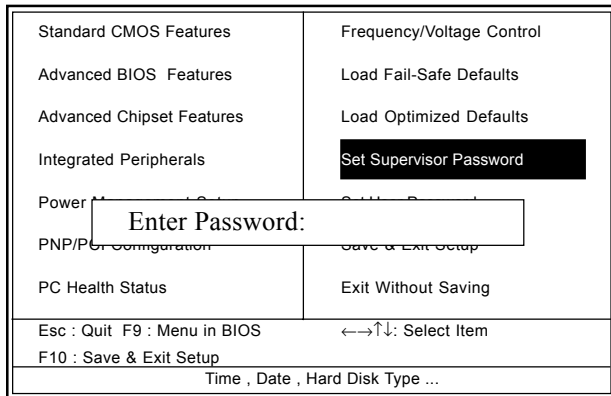


Pressing ‘Y’ loads the default values that are factory settings for optimal performance of system operations.

2.12 Set Supervisor / User Password

© Figure 12. Set Supervisor / User Password

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



When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Enter Password

Type a password, up to eight characters, and press <Enter>. The password you type now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <ESC> to abort the selection and not enter a password. To disable the password, just press <Enter> when you are prompted to enter a password. A message will confirm that you wish to disable the password. Once the password is disabled, the system will boot and you can enter setup freely.

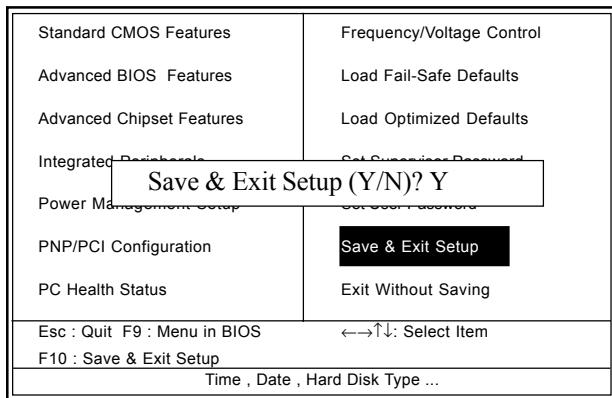
Password Disabled

If you select “System” at the Security Option of BIOS Features Setup Menu, you will be prompted for the password every time when the system is rebooted, or any time when you try to enter Setup. If you select “Setup” at the Security Option of BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

2.13 Save & Exit Setup

© Figure 13. Save & Exit Setup

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



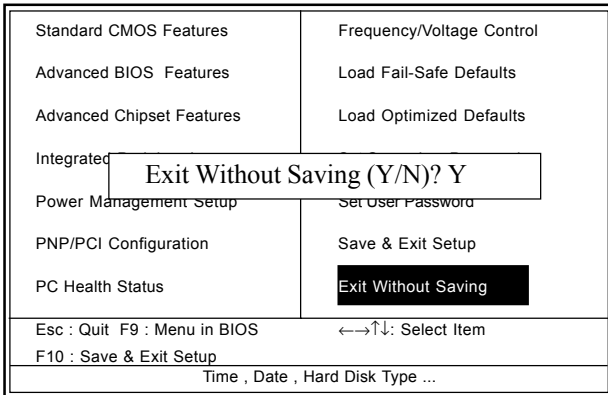
Typing “Y” will quit the Setup Utility and save the user setup value to RTC CMOS RAM.

Typing “N” will return to the Setup Utility.

2.14 Exit Without Saving

© Figure 14. Exit Without Saving

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



Typing “Y” will quit the Setup Utility without saving to RTC CMOS RAM.

Typing “N” will return to the Setup Utility.

Date : / /

Warranty Card/Technical Fault Report

M/B Model No.: _____

Vender

Serial No. : _____

Date of Purchase: _____

--

Hardware Configuration Used :

CPU	
RAM (Brand,MB)	
Video Card	
Hard Drive	
Other Card	

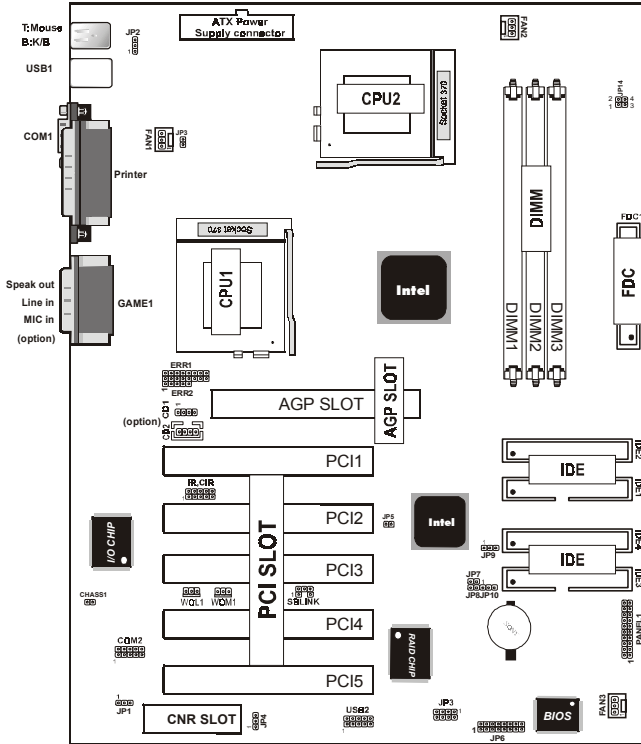
Diagnostic Software Used :

--

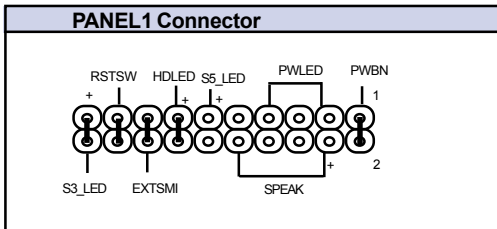
Fault Description :

--

The 6A815EPD Mainboard Layout



Front Panel Connector(PANEL1)



3. Driver Installation

Introduction

There are motherboard drivers and utilities included in ACORP Bonus CD disc. You don't need to install all of them in order to boot your system. But after you finish the hardware installation, you have to install your operation system first (such as windows 98) before you can install any drivers or utilities. Please refer to your operation system installation guide.

Note: Please follow recommended procedure to install Windows 95 and Windows 98.

3.1 Auto-run Menu

You can use the auto-run menu of Bonus CD disc. Choose the utility and driver and select model name.



3.2 Installing Intel INF Driver

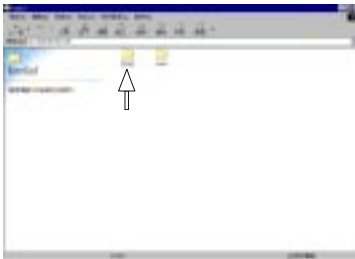
You can install the Intel inf driver (IDE Bus master (For Windows NT use), Intel ATAPI Vendor Support Driver, Intel AGP, IRQ Routing Driver (For Windows 98 use), Intel Registry (INF) Driver) from the Bonus Pack CD disc auto-run menu.



(1)
Click "Intel Driver" Item.



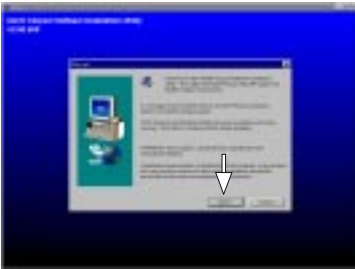
(2)
Click "Intelinf" Item.
(For Windows NT no Support)



(3)
Click "Disk1" Item.



(4)
Click "Setup".



(5)
Click "Next".

3.3 Installing Ultra ATA Driver

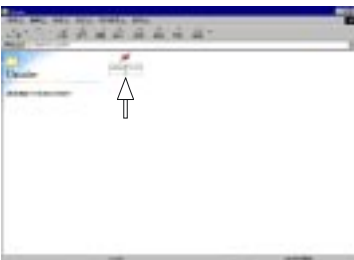
It is necessary to install Bus Master IDE drive to support ATA hard disk. You can find the Ultra ATA driver from the Bonus Pack CD disc auto-run menu.



(1)
Click "Intel Driver" Item.



(2)
Click "Uatadrv" Item.



(3)
Click "intelata603_multi".

Note: Installing this Bus Master IDE driver may cause Suspend to Hard Drive failure.

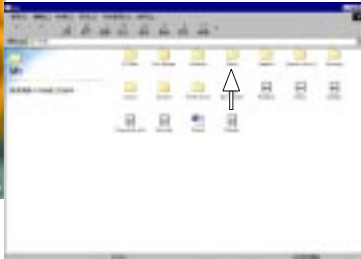
3.4 Installing Hardware Monitoring Utility

You can install Hardware Monitoring Utility to monitor CPU temperature, fans and system voltage. The hardware monitoring function is automatically implemented by the BIOS and utility software. No hardware installation is needed.



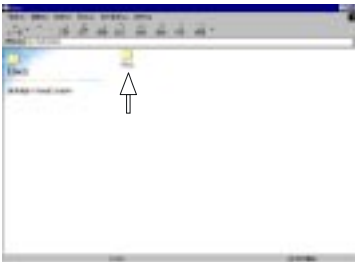
(1)

Click "Intel Driver" Item.



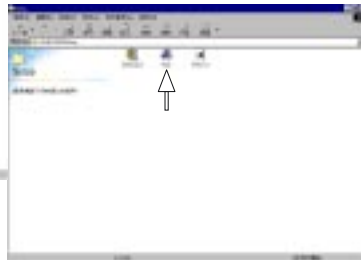
(2)

Click "HWM" Item.



(3)

Click "Setup" Item.



(4)

Click "Setup".

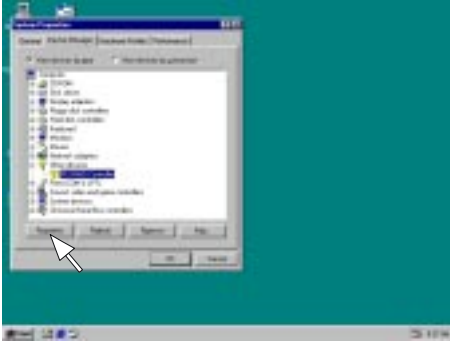


(5)

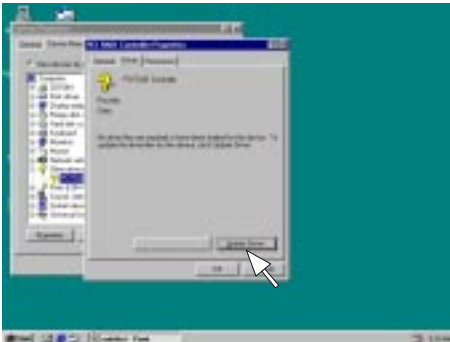
Click "OK".

3.5 Installing Onboard IDE RAID Driver

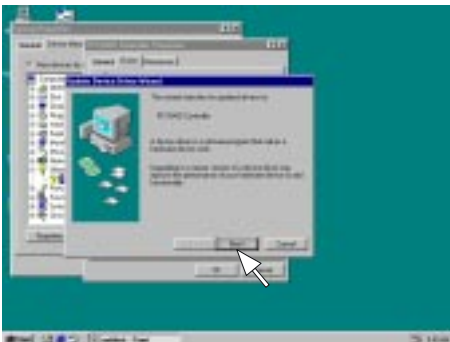
The onboard PROMISE FastTrak 100 Lite chipset provides DOS, Windows 98/98 SE/ME/NT/2000 driver for install. You can find the Onboard IDE RAID driver from the Bonus Pack CD disc auto-run menu.



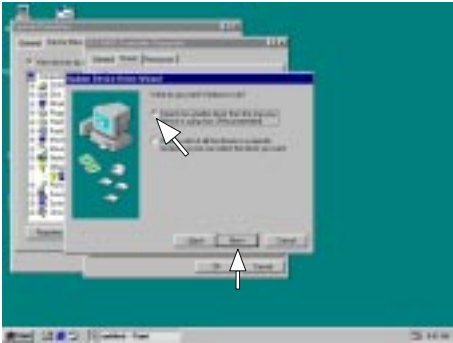
(1)
Click "Properties"
Item.



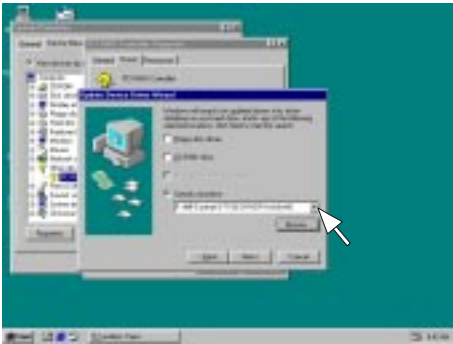
(2)
Click "Update
Driver" Item.



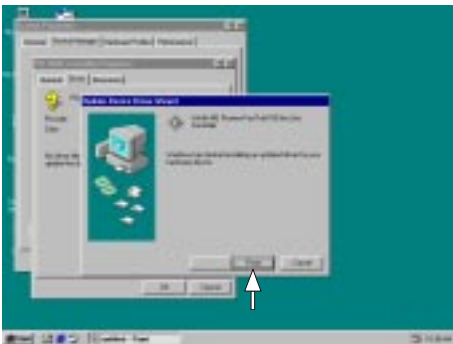
(3)
Click "Next" Item.



(4)
Click "Next" Item.



(5)
Selection your system environment follow path :\\MB\\fasttrak\\ then
Click "Next" Item.

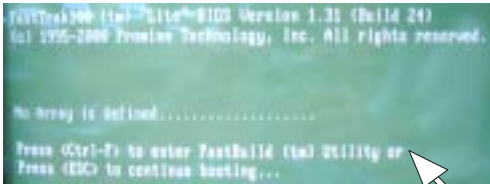


(6)
Click "finish" Item.

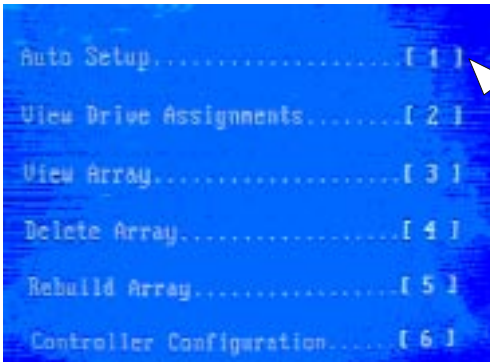
3.6 Installing Win2000 RAID Driver

How to install Win2000 RAID driver, please follow the procedure below to set up RAID driver.

1. Boot your system. If this is the first time you boot the Promise onboard BIOS, it will display the following screen.



2. Press <Ctrl-F> keys to display the FastBuild (tm) Utility Main Menu.
3. Press "1" to display Auto Setup Menu below. This is the fastest and easiest method to create your IDE RAID.

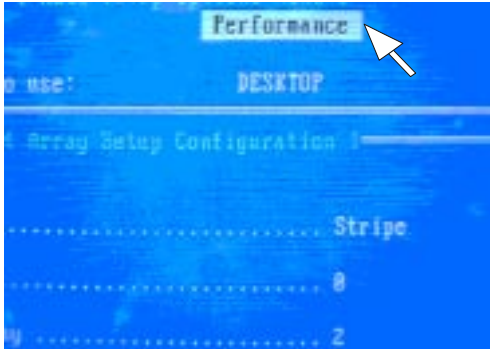


Creating Arrays Automatically

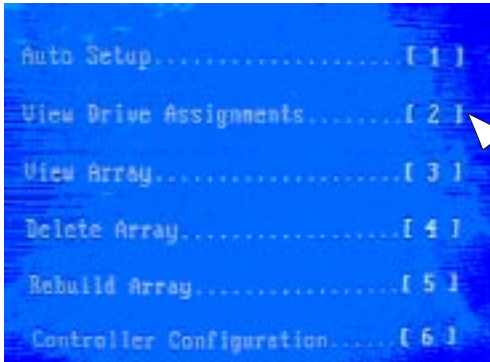
The Auto Setup <1> selection from the Main Menu can intuitively help create your disk array. It will assign all available drives appropriate for the disk array you are creating. After setting, use Ctrl-Y to Save selections. FastBuild will automatically build the array.

Optimize Array For

Select which you want, performance (RAID 0) or security (RAID 1) under the "Optimize Array For".



4. Press "2" to display View Drive Assignments Menu below.



View Drive Assignments

The View Drive Assignments <2> option in the Main displays which drives are assigned to a disk arrays or are unassigned.

Technology, Inc.

Capacity (MB)	Assignment	Mode
19892	Array 1	H5
28629	Array 1	H5

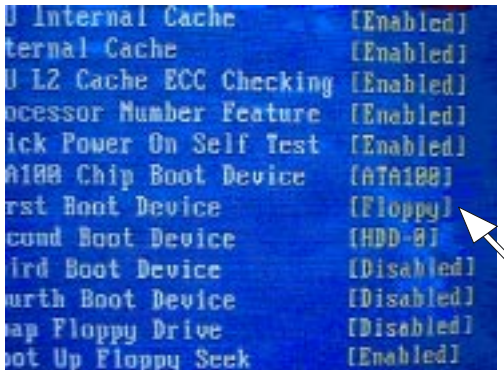
5. Press "3" to display View Array Menu below.

Auto Setup.....	[1]
View Drive Assignments.....	[2]
View Array.....	[3]
Delete Array.....	[4]
Rebuild Array.....	[5]
Controller Configuration.....	[6]

6. Then you will find the display below, if you select "performance" (RAID 0).

Array No	RAID Mode	Total Drv
Array 1	Stripe	2
Array 2	----	----
Array 3	----	----
Array 4	----	----

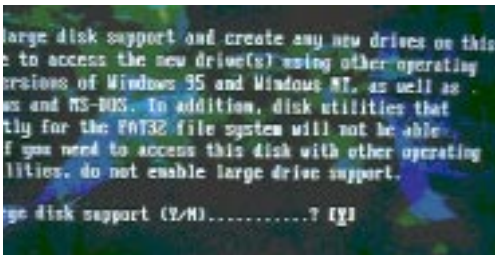
7. Save & reboot, then go into the BIOS setting to select the first boot device "Floppy" from "Advanced BIOS features" as follow.



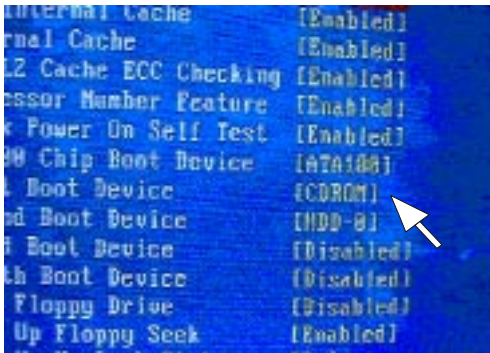
8. After reboot the system by bootable disk, modifying the "CONFIG.SYS" of the bootable disk as below and save it.

```
[CD]
device=himem.sys /testmem:off
device=oakcdrom.sys /D:mscd001
device=btosm.sys
device=flashpt.sys
device=btcdrom.sys /D:mscd001
device=aspi2dos.sys
device=aspi8dos.sys
device=aspi4dos.sys
device=aspi8u2.sys
device=aspicd.sys /D:mscd001
DEVICE=FASTTRACK.SYS
```

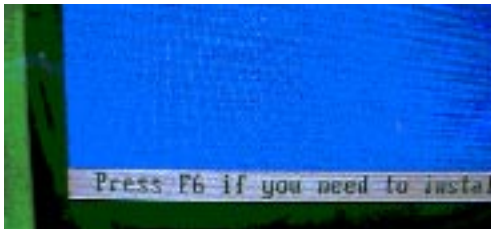
9. On the other hand, copying the files of "MB\FASTTRACK\FT100 DRIVER\TXTSETUP.OEM & FASTTRACK as well as the folder of "Win2000" from the attached CD to the other FDD.
10. Using the modified disk to boot the PC.
11. Running FDISK.



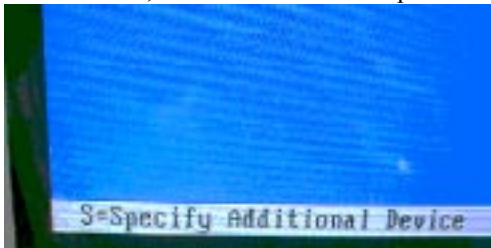
12. Separating and allocating the required volume of disk, and reboot the system then Format C:.
13. After that restart the system and set the CMOS from "Advanced BIOS features" as following chart.



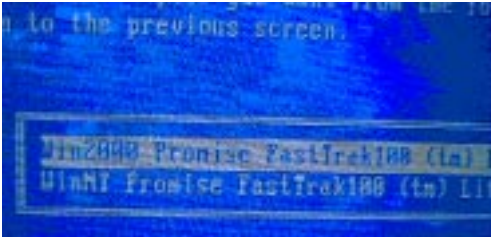
14. Input the Win2000 CD in CD Drive and boot the system from CD-ROM. Also, put the FDD that include the "FastTrack" & "TXTSETUP" files and "WIN2000" folder, then press F6 button as soon as the following message appeared.



15. After that, continue to install OS procedures.



16. Press "S".



17. Selecting "Win2000 Promise..." then go back to install Win2000 continuously.

6A815EPD System Compatibility Test Report

Item		21	22	23	24	25
Test Equipment	CPU	Intel 800E x 1 (1.7V)	Intel 700E x 1 (1.7V)	Celeron 900 x 1 (1.7V)	FC-PGA 2 1GB x 2 (1.75V)	Intel 1GB x 2 (1.75V)
	Memory	VALUE 128MB-133 x 3	MIRA 64MB-100 x 3	TIC 128MB-133 x 3	KINGMAX 128MB-133 x 3	KINGMAX 128MB-133 x 3
	Display	NVIDIA GeForce 2 MX200	MSI MS-8817	NVIDIA GeForce 2 MX400	ATI Xpert 2000 Pro	ATI Xpert 2000 Pro
	H.D.D	Seagate ST330621A / 30GB	Quantum LD15000AT / 15GB	Quantum LM15000AT / 15GB	Seagate ST330621A / 30GB	Seagate ST330621A / 30GB
	CD-ROM	ACER 652P-074 / 52x	AFREEY CD-2052E / 52x	ACER 652P-074 / 52x	LEMEL 52x	LEMEL 52x
	POWER	High Power HPC-400-101	CWT CWT-300ATX12	High Power HPC-400-101	SevenTeam ST-301HR	SevenTeam ST-301HR
Test Environment	OS System	WinNT	WinNT	Win 2000	Win 2000	Win 2000
	Software	Winstone 99	Winstone 99	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001

Item		26	27	28	29	30
Test Equipment	CPU	Intel 933EB x 2 (1.75V)	Intel 933EB x 2 (1.7V)	Intel 866EB x 2 (1.75V)	Intel 866EB x 2 (1.7V)	Intel 800EB x 2 (1.7V)
	Memory	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3
	Display	MSI MS8829	MSI MS8829	MSI MS8829	MSI MS8829	MSI MS8829
	H.D.D	Maxtor 98196H8 / 80GB	Maxtor 98196H8 / 80GB	Maxtor 98196H8 / 80GB	Maxtor 98196H8 / 80GB	Maxtor 98196H8 / 80GB
	CD-ROM	Pioneer Dr-A14 / 32x	Pioneer Dr-A14 / 32x	Pioneer Dr-A14 / 32x	Pioneer Dr-A14 / 32x	Pioneer Dr-A14 / 32x
	POWER	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101
Test Environment	OS System	Win 2000	Win 2000	Win 2000	Win 2000	Win 2000
	Software	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001

Item		31	32	33	34	35
Test Equipment	CPU	Intel 733EB x 2 (1.7V)	Intel 850E x 2 (1.7V)	Intel 800E x 2 (1.7V)	Intel 700E x 2 (1.7V)	FC-PGA 2 1GB x 1 (1.75V)
	Memory	WINBOND 128MB-133 x 3	NANYA 128MB-100 x 3	VALUE 128MB-133 x 3	MIRA 64MB-100 x 3	HITACHI 128MB-133 x 3
	Display	NVIDIA GeForce 2 MX	ATI Rage 128	NVIDIA GeForce 2 MX200	MSI MS-8817	Gigabyte GA-660PluS
	H.D.D	Quantum AS20000AT / 200GB	Seagate ST330621A / 30GB	Seagate ST330621A / 30GB	Quantum LD15000AT / 15GB	Seagate ST320414A / 20GB
	CD-ROM	ACER 652P-074 / 52x	Genuine GC-852 / 52x	ACER 652P-074 / 52x	AFREEY CD-2052E / 52x	Creative CD-5233 / 52x
	POWER	High Power HPC-400-101	SevenTeam ST-301HR	High Power HPC-400-101	CWT CWT-300ATX12	High Power HPC-400-101
Test Environment	OS System	Win 2000	Win 2000	Win 2000	Win 2000	Win 2000
	Software	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001

Item		36	37	38	39	40
Test Equipment	CPU	Intel 1GB x 1(1.75V)	Intel 933EB x 1 (1.75V)	Intel 933EB x 1(1.7V)	Intel 866EB x 1 (1.75V)	Intel 866EB x 1(1.7V)
	Memory	HITACHI 128MB-133 x 3	MICRON 256MB-133 x 2	MICRON 256MB-133 x 2	MICRON 256MB-133 x 2	MICRON 256MB-133 x 2
	Display	Gigabyte GA-660PluS	ASUS V3800	ASUS V3800	ASUS V3800	ASUS V3800
	H.D.D	Seagate ST320414A / 20GB	Quantum AS20000AT / 20GB	Quantum AS20000AT / 20GB	Quantum AS20000AT / 20GB	Quantum AS20000AT / 20GB
	CD-ROM	Creative CD-5233 / 52x	Genuine GC-852 / 52x	Genuine GC-852 / 52x	Genuine GC-852 / 52x	Genuine GC-852 / 52x
	POWER	High Power HPC-400-101	SHARK HPS300-101	SHARK HPS300-101	SHARK HPS300-101	SHARK HPS300-101
Test Environment	OS System	Win 2000	Win 2000	Win 2000	Win 2000	Win 2000
	Software	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001

6A815EPD System Compatibility Test Report

Item		41	42	43	44	45
Test Equipment	CPU	Intel 800EB x 1 (1.7V)	Intel 733EB x 1 (1.7V)	Intel 850E x 1(1.7V)	Intel 800E x 1 (1.7V)	Intel 700E x 1 (1.7V)
	Memory	MICRON 256MB-133 x 2	WINBOND 128MB-133 X 3	NANYA 128MB-100 x 3	VALUE 128MB-133 x 3	MIRA 64MB-100 x 3
	Display	ASUS V3800	NVIDIA GeForce 2 MX	ATI Rage 128	NVIDIA GeForce 2 MX200	MSI MS-8817
	H.D.D	Quantum AS2000AT / 20GB	Seagate ST320414A / 20GB	Quantum LM15000AT / 15GB	Seagate ST330621A / 30GB	Quantum LD15000AT / 15GB
	CD-ROM	Genuine GC-852 / 52x	ACER 652P-074 / 52x	Genuine GC-852 / 52x	ACER 652P-074 / 52x	AFREEY CD-2052E / 52x
	POWER	SHARK HPS300-101	High Power HPC-400-101	SevenTeam ST-301HR	High Power HPC-400-101	CWT CWT-300ATX12
Test Environment	OS System	Win 2000	Win 2000	Win 2000	Win 2000	Win 2000
	Software	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001	CCWinstone 2001

Item		46	47	48	49	50
Test Equipment	CPU	Celeron 900 x 1 (1.7V)	FC-PGA 2 1GB x 1 (1.75V)	Intel 1GB x 1(1.75V)	Intel 933EB x 1 (1.75V)	Intel 933EB x 1(1.7V)
	Memory	TIC 128MB-133 x 3	HITACHI 128MB-133 x 3	HITACHI 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3
	Display	NVIDIA GeForce 2 MX400	Gigabyte GA-660PluS	Gigabyte GA-660PluS	ASUS V3800	ASUS V3800
	H.D.D	Seagate ST330621A / 30GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB
	CD-ROM	ACER 652P-074 / 52x	Creative CD-5233 / 52x	Creative CD-5233 / 52x	Genuine A508 / 50x	Genuine A508 / 50x
	POWER	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101	SevenTeam ST-300BLV	SevenTeam ST-300BLV
Test Environment	OS System	Win 2000	Win 98SE	Win 98SE	Win 98SE	Win 98SE
	Software	CCWinstone 2001	Winstone 99	Winstone 99	Winstone 99	Winstone 99

Item		51	52	53	54	55
Test Equipment	CPU	Intel 866EB x 1 (1.75V)	Intel 866EB x 1(1.7V)	Intel 800EB x 1 (1.7V)	Intel 733EB x 1 (1.7V)	Intel 850E x 1(1.7V)
	Memory	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 X 3	NANYA 128MB-100 x 3
	Display	ASUS V3800	ASUS V3800	ASUS V3800	NVIDIA GeForce 2 MX	ATI Rage 128
	H.D.D	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Quantum LM15000AT / 15GB
	CD-ROM	Genuine A508 / 50x	Genuine A508 / 50x	Genuine A508 / 50x	ACER 652P-074 / 52x	Genuine GC-852 / 52x
	POWER	SevenTeam ST-300BLV	SevenTeam ST-300BLV	SevenTeam ST-300BLV	High Power HPC-400-101	SevenTeam ST-301HR
Test Environment	OS System	Win 98SE	Win 98SE	Win 98SE	Win 98SE	Win 98SE
	Software	Winstone 99	Winstone 99	Winstone 99	Winstone 99	Winstone 99

Item		56	57	58	59	60
Test Equipment	CPU	Intel 800E x 1 (1.7V)	Intel 700E x 1 (1.7V)	Celeron 900 x 1 (1.7V)	FC-PGA 2 1GB x 1 (1.75V)	Intel 1GB x 1(1.75V)
	Memory	VALUE 128MB-133 x 3	MIRA 64MB-100 x 3	TIC 128MB-133 x 3	HITACHI 128MB-133 x 3	HITACHI 128MB-133 x 3
	Display	NVIDIA GeForce 2 MX200	MSI MS-8817	NVIDIA GeForce 2 MX400	Gigabyte GA-660PluS	Gigabyte GA-660PluS
	H.D.D	Seagate ST330621A / 30GB	Quantum LD15000AT / 15GB	Seagate ST330621A / 30GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB
	CD-ROM	ACER 652P-074 / 52x	AFREEY CD-2052E / 52x	ACER 652P-074 / 52x	Creative CD-5233 / 52x	Creative CD-5233 / 52x
	POWER	High Power HPC-400-101	CWT CWT-300ATX12	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101
Test Environment	OS System	Win 98SE	Win 98SE	Win 98SE	Win ME	Win ME
	Software	Winstone 99	Winstone 99	Winstone 99	Winbench 99	Winbench 99

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Item		61	62	63	64	65
Test Equipment	CPU	Intel 933EB x 1 (1.75V)	Intel 933EB x 1(1.7V)	Intel 866EB x 1 (1.75V)	Intel 866EB x 1(1.7V)	Intel 800EB x 1 (1.7V)
	Memory	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3
	Display	ASUS V3800	ASUS V3800	ASUS V3800	ASUS V3800	ASUS V3800
	H.D.D	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB	Seagate ST320414A / 20GB
	CD-ROM	Genuine A508 / 50x	Genuine A508 / 50x	Genuine A508 / 50x	Genuine A508 / 50x	Genuine A508 / 50x
	POWER	SevenTeam ST-300BLV	SevenTeam ST-300BLV	SevenTeam ST-300BLV	SevenTeam ST-300BLV	SevenTeam ST-300BLV
Test Environment	OS System	WinME	WinME	WinME	WinME	WinME
	Software	Winbench 99	Winbench 99	Winbench 99	Winbench 99	Winbench 99

Item		66	67	68	69	70
Test Equipment	CPU	Intel 733EB x 1 (1.7V)	Intel 850E x 1(1.7V)	Intel 800E x 1 (1.7V)	Intel 700E x 1 (1.7V)	Celeron 900 x 1 (1.7V)
	Memory	WINBOND 128MB-133 X 3	NANYA 128MB-100 x 3	VALUE 128MB-133 x 3	MIRA 64MB-100 x 3	TIC 128MB-133 x 3
	Display	NVIDIA GeForce 2 MX	ATI Rage 128	NVIDIA GeForce 2 MX200	MSI MS-8817	NVIDIA GeForce 2 MX400
	H.D.D	Seagate ST320414A / 20GB	Quantum LM15000AT / 15GB	Seagate ST330621A / 30GB	Quantum LD15000AT / 15GB	Seagate ST330621A / 30GB
	CD-ROM	ACER 652P-074 / 52x	Genuine GC-852 / 52x	ACER 652P-074 / 52x	AFREEY CD-2052E / 52x	ACER 652P-074 / 52x
	POWER	High Power HPC-400-101	SevenTeam ST-301HR	High Power HPC-400-101	CWT CWT-300ATX12	High Power HPC-400-101
Test Environment	OS System	WinME	WinME	WinME	WinME	WinME
	Software	Winbench 99	Winbench 99	Winbench 99	Winbench 99	Winbench 99

Item		71	72	73	74	75
Test Equipment	CPU	FC-PGA 2 1GB x 2 (1.75V)	Intel 1GB x 2 (1.75V)	Intel 933EB x 2 (1.75V)	Intel 933EB x 2 (1.7V)	Intel 866EB x 2 (1.75V)
	Memory	KINGMAX 128MB-133 x 3	KINGMAX 128MB-133 x 3	KINGMAX 256MB-150 x 2	KINGMAX 256MB-150 x 2	KINGMAX 256MB-150 x 2
	Display	ATI Xpert 2000 Pro	ATI Xpert 2000 Pro	MSI MS8806	MSI MS8806	MSI MS8806
	H.D.D	Seagate ST330621A / 30GB	Seagate ST330621A / 30GB	Seagate ST330621A / 20GB	Seagate ST330621A / 20GB	Seagate ST330621A / 20GB
	CD-ROM	LEMEL 52x	LEMEL 52x	ASUS CD-S400 / 40x	ASUS CD-S400 / 40x	ASUS CD-S400 / 40x
	POWER	SevenTeam ST-301HR	SevenTeam ST-301HR	SHARK HPS300-101	SHARK HPS300-101	SHARK HPS300-101
Test Environment	OS System	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)
	Software					

Item		76	77	78	79	80
Test Equipment	CPU	Intel 866EB x 2 (1.7V)	Intel 800EB x 2 (1.7V)	Intel 733EB x 2 (1.7V)	Intel 850E x 2 (1.7V)	Intel 800E x 2 (1.7V)
	Memory	KINGMAX 256MB-150 x 2	KINGMAX 256MB-150 x 2	WINBOND 128MB-133 X 3	NANYA 128MB-100 x 3	TIC 128MB-133 x 3
	Display	MSI MS8806	MSI MS8806	NVIDIA GeForce 2 MX	ATI Rage 128	NVIDIA GeForce 2 MX400
	H.D.D	Seagate ST330621A / 20GB	Seagate ST330621A / 20GB	Seagate ST320414A / 20GB	Quantum LM15000AT / 15GB	Seagate ST330621A / 30GB
	CD-ROM	ASUS CD-S400 / 40x	ASUS CD-S400 / 40x	ACER 652P-074 / 52x	Genuine GC-852 / 52x	ACER 652P-074 / 52x
	POWER	SHARK HPS300-101	SHARK HPS300-101	High Power HPC-400-101	SevenTeam ST-301HR	High Power HPC-400-101
Test Environment	OS System	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)
	Software					

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Item		81	82	83	84	85
Test Equipment	CPU	Intel 700E x 2 (1.7V)	FC-PGA 2 1GB x 1 (1.75V)	Intel 1GB x 1(1.75V)	Intel 933EB x 1 (1.75V)	Intel 933EB x 1(1.7V)
	Memory	MIRA 64MB-100 x 3	WINBOND 128MB-133 x 3	TIC 128MB-133 x 3	WINBOND 128MB-133 x 3	MICRON 256MB-133 x 2
	Display	MSI MS-8817	NVIDIA GeForce 2 MX	NVIDIA GeForce 2 MX400	NVIDIA GeForce 2 MX	ASUS V3800
	H.D.D	Quantum LD15000AT / 15GB	Quantum AS20000AT / 20GB	Seagate ST330621A / 30GB	Quantum AS20000AT / 20GB	Quantum AS20000AT / 20GB
	CD-ROM	AFREEY CD-2052E / 52x	ACER 652P-074 / 52x	ACER 652P-074 / 52x	ACER 652P-074 / 52x	Genuine GC-852 / 52x
	POWER	CWT CWT-300ATX12	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101	SHARK HPS300-101
Test Environment	OS System	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)
	Software					

Item		86	87	88	89	90
Test Equipment	CPU	Intel 866EB x 1 (1.75V)	Intel 866EB x 1(1.7V)	Intel 800EB x 1 (1.7V)	Intel 733EB x 1 (1.7V)	Intel 850E x 1(1.7V)
	Memory	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 x 3	WINBOND 128MB-133 X 3	NANYA 128MB-100 x 3
	Display	NVIDIA GeForce 2 MX	NVIDIA GeForce 2 MX	NVIDIA GeForce 2 MX	NVIDIA GeForce 2 MX	ATI Rage 128
	H.D.D	Quantum AS20000AT / 20GB	Quantum AS20000AT / 20GB	Quantum AS20000AT / 20GB	Seagate ST320414A / 20GB	Quantum LM15000AT / 15GB
	CD-ROM	ACER 652P-074 / 52x	ACER 652P-074 / 52x	ACER 652P-074 / 52x	ACER 652P-074 / 52x	Genuine GC-852 / 52x
	POWER	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101	High Power HPC-400-101	SevenTeam ST-301HR
Test Environment	OS System	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)
	Software					

Item		91	92	93	94	95
Test Equipment	CPU	Intel 800E x 1 (1.7V)	Intel 700E x 1 (1.7V)	Celeron 900 x 1 (1.7V)	FC-PGA 2 1GB x 1 (1.75V)	Intel 1GB x 1 (1.75V)
	Memory	VALUE 128MB-133 x 3	MIRA 64MB-100 x 3	TIC 128MB-133 x 3	KINGMAX 128MB-133 x 3	KINGMAX 128MB-133 x 3
	Display	NVIDIA GeForce 2 MX200	MSI MS-8817	NVIDIA GeForce 2 MX400	ATI Xpert 2000 Pro	ATI Xpert 2000 Pro
	H.D.D	Seagate ST330621A / 30GB	Quantum LD15000AT / 15GB	Quantum LM15000AT / 15GB	Seagate ST330621A / 30GB	Seagate ST330621A / 30GB
	CD-ROM	ACER 652P-074 / 52x	AFREEY CD-2052E / 52x	ACER 652P-074 / 52x	LEMEL 52x	LEMEL 52x
	POWER	High Power HPC-400-101	CWT CWT-300ATX12	High Power HPC-400-101	SevenTeam ST-301HR	SevenTeam ST-301HR
Test Environment	OS System	Win2000 (Japanese)	Win2000 (Japanese)	Win2000 (Japanese)	Win98SE (Japanese)	Win98SE (Japanese)
	Software					

Item		96	97	98	99	100
Test Equipment	CPU	Intel 933EB x 1 (1.75V)	Intel 933EB x 1(1.7V)	Intel 866EB x 1 (1.75V)	Intel 866EB x 1(1.7V)	Intel 800EB x 1 (1.7V)
	Memory	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3	KINGMAX 128MB-150 x 3
	Display	WinFast S320V	WinFast S320V	WinFast S320V	WinFast S320V	WinFast S320V
	H.D.D	Maxtor 52049H3 / 20GB	Maxtor 52049H3 / 20GB	Maxtor 52049H3 / 20GB	Maxtor 52049H3 / 20GB	Maxtor 52049H3 / 20GB
	CD-ROM	ASUS CD-S400 / 40x	ASUS CD-S400 / 40x	ASUS CD-S400 / 40x	ASUS CD-S400 / 40x	ASUS CD-S400 / 40x
	POWER	SevenTeam ST-301HR	SevenTeam ST-301HR	SevenTeam ST-301HR	SevenTeam ST-301HR	SevenTeam ST-301HR
Test Environment	OS System	Win98SE (Japanese)	Win98SE (Japanese)	Win98SE (Japanese)	Win98SE (Japanese)	Win98SE (Japanese)
	Software					

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Item		101	102	103	104	105
Test Equipment	CPU	Intel 733EB x 1 (1.7V)	Intel 850E x 1(1.7V)	Intel 800E x 1 (1.7V)	Intel 700E x 1 (1.7V)	Celeron 900 x 1 (1.7V)
	Memory	WINBOND 128MB-133 X 3	NANYA 128MB-100 x 3	VALUE 128MB-133 x 3	MIRA 64MB-100 x 3	TIC 128MB-133 x 3
	Display	NVIDIA GeForce 2 MX	ATI Rage 128	NVIDIA GeForce 2 MX200	MSI MS-8817	NVIDIA GeForce 2 MX400
	H.D.D	Seagate ST320414A / 20GB	Quantum LM15000AT / 15GB	Seagate ST330621A / 30GB	Quantum LD15000AT / 15GB	Quantum LM15000AT / 15GB
	CD-ROM	ACER 652P-074 / 52x	Genuine GC-852 / 52x	ACER 652P-074 / 52x	AFREEY CD-2052E / 52x	ACER 652P-074 / 52x
	POWER	High Power HPC-400-101	SevenTeam ST-301HR	High Power HPC-400-101	CWT CWT-300ATX12	High Power HPC-400-101
Test Environment	OS System	Win98SE (Japanese)	Win98SE (Japanese)	Win98SE (Japanese)	Win98SE (Japanese)	Win98SE (Japanese)
	Software					

B. AGP Display Compatibility Test Win98 SE 1024 x 768 x 16 bit

AGP Model	Vendor	AGP Mode	Dirver Version	3D MARK 2001 Bench Mode	Quake III Demo 001		
					frames	seconds	fps
GeForce 256	Creative	4x	4.12.01.0758	2019	1346	11.5	117.5
GA-GF1280	Gigabyte	4x	4.12.01.0758	2172	1346	11.2	120.0
MS-8806(TNT II Pro)	MSI	4x	4.12.01.0758	1463	1346	17.7	76.0

C. AGP Display Compatibility Test Win2000 1024 x 768 x 32 bit

AGP Model	Vendor	AGP Mode	Dirver Version	3D MARK 2000 Bench Mode	Quake III Demo 001		
					frames	seconds	fps
GeForce 256	ACORP	4x	5.12.01.0758	3878	1346	13.2	102.3
V7100 (GeForce 2 MX)	ASUS	4x	5.12.01.0758	4416	1346	12.1	110.9
MS-8816 (GeForce 2 MX)	MSI	4x	5.12.01.0758	4436	1346	12.1	111.1

D. PCI/ISA Device Compatibility Test

Device TYPE	BUS	Description	Result
All PCI/ISA Device Card	PCI	Full Loading test for Win98SE	Pass

Device Model	BUS	Vendor Model	Driver Version	Result
All PCI/ISA Device Card	PCI	Creative PCI 128	4.12.01.2003	Pass
	PCI	Intel 82559	3.37.07.0000	Pass
	PCI	ACHIP 6712U	3.00	Pass
	PCI	Tekram DC-390	4.10.1998	Pass
	PCI	Smart Link 56K Modem	2.04	Pass

E. Other Peripherals Compatibility Test

Device Model	Vendor Model	Result
USB Mouse	GENUINE opticon Mouse	Pass
	Model : AM-868-U USB Mouse	Pass
USB Keyboard	Model : 7932M Keyboard	Pass
USB Modem	ACORP 56K Fax Modem	Pass
USB Print	EPSON STYLVS COLOR 740	Pass
USB ZIP	lomega ware ZIP 100	Pass
USB SCANNER	ACER S2W 3400	Pass
USB Joystick	Microsoft SideWinder P&P Game Pad	Pass
Mouse	Logitech M-MM43 Serial Mouse	Pass
	Microsoft Serial Mouse	Pass
Modem	Lemel 33.6K Modem	Pass
Print	HP Laserjet 5L	Pass
PS/2 Mouse	Microsoft PS / 2 Mouse	Pass
PS/2 Keyboard	Lemel 5201 Keyboard	Pass