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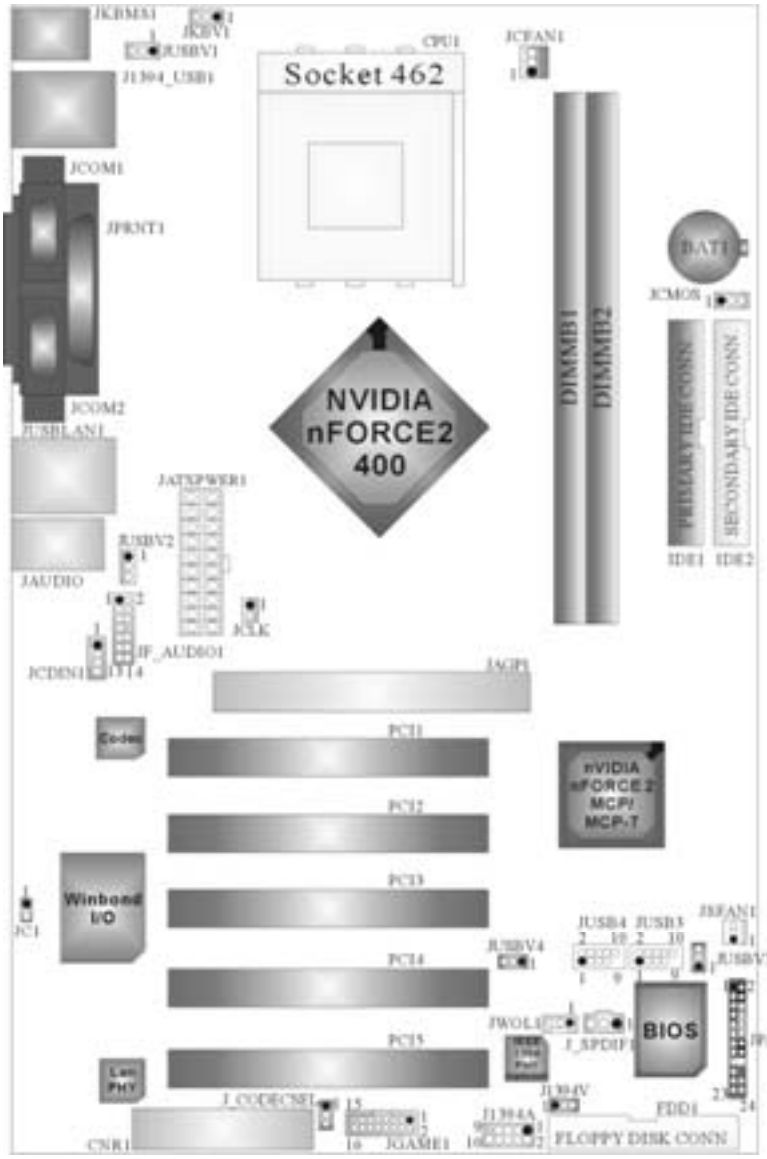
Content

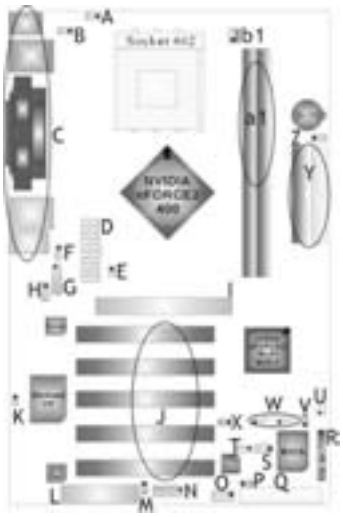
Content

Layout of M7NCD



※NOTE: ●represents the first pin.

Component Index



A. Power Source Selection for Keyboard and Mouse (JKBV1)
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Z. Clear CMOS (JCMOS)
a1. DIMM Modules (DIMMB1-2)
b1. CPU Fan Connector (JCFAN1)

* optional

English

M7NCD Features

A. Hardware

CPU
- Provides Socket-462.
- Supports the AMD® processor up to XP 3200+.
- Front Side Bus at 266/333/400 MHz.

Chipset
- North Bridge: nVIDIA nFORCE2 400.
- South Bridge: nVIDIA nFORCE2 MCP/ MCP-T.

Main Memory
- Supports up to 2 DDR devices.
- Supports 266/333/400MHz (without ECC) DDR devices.
- Maximum memory size of 2GB.

Super I/O
- Chip: Winbond W83627HF.
- Meet Low Pin Count (LPC) Spec. 1.0
- Integrate Hardware Monitor functions.
- Support Device Power Management (DPM) and ACPI.

1394A Chip (optional)
- Chip: RTL8801B.
- Supports 2 ports with transfer up to 400 mbps.

LAN (optional)
- Chip: RTL8201BL.
- Dual Speed - 10/100 Mbps.
- Half and Full Duplex.
- Auto Negotiation: 10/ 100, Full/ Half Duplex

Slots
- Five 32-bit PCI bus master slots.
- One CNR slot.
- One AGP: ❶AGP3.0 8X interface at 533Mb/s.
  ❷Supports AGP 2X, 4X, 8X

On Board IDE
- Supports four IDE disk drives.
- Supports PIO Mode 4, Master Mode and Ultra DMA 33/66/100/133 Bus Master Mode.

On Board AC'97 Sound Codec

- Chip: ALC655.
- Compliant with AC'97 specification.
- AC'97 2.2 interface.
- Supports 6 channels.

On Board Peripherals

a. Rear side

- 2 serial ports.
- 1 parallel port. (SPP/EPP/ECP mode)
- Audio ports in vertical position.
- 1 LAN port. (optional)
- PS/2 mouse and PS/2 keyboard.
- 2 USB2.0 ports.
- 1 IEEE 1394A (FireWire™) Connector. (optional)

b. Front Side

- 1 floppy port supports 2 FDDs with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
- 4 USB2.0 ports.
- 1 front audio header.
- 1 IEEE 1394A (FireWire™) Connector. (optional)

Dimensions

- ATX Form Factor: 19.5cm X 30.5cm (W X L)

B. BIOS & Software

BIOS

- Award legal Bios.
- APM1.2.
- ACPI.
- USB Function.

Software

- Supports CPU Savior™, 9th Touch™, FLASHER™, WinFlasher™, StudioFun!™ (optional) and Watchdog™.
- Offers the highest performance for Windows 98 SE, Windows 2000, Windows Me, Windows XP, SCO UNIX etc.

Package contents

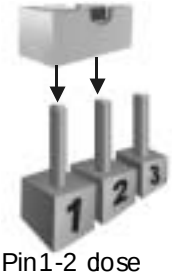
- HDD Cable X1
- FDD Cable X1
- User's Manual X1
- USB Cable X1 (optional)
- Rear I/O Panel for ATX Case X1 (optional)
- Fully Setup Driver CD X1
- StudioFun! Application CD X1 (optional)
- IEEE 1394 Cable X1 (optional)

How to setup Jumper

The illustration shows how jumpers are setup. When the Jumper cap is placed on pins, the jumper is "***close***". If no jumper cap is placed on the pins, the jumper is "***open***". The illustration shows a 3-pin jumper whose pin 1and 2 are "***close***" when jumper cap is placed on these 2 pins.

Jumper close

Jumper open



Pin1-2 close

CPU Installation

Step1: Pull the lever sideways away from the socket and then raise the lever up to a 90-degree angle.

Step2: Look for the white dot/cut edge. The white dot/cut edge should point towards the lever pivot. The CPU will fit only in the correct orientation.

Step3: Hold the CPU down firmly, and then close the lever.

Step4: Put the CPU fan on the CPU and buckle it. Connect the CPU fan power cable to the JCFAN1. This completes the installation.

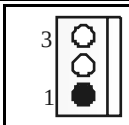
Step1

Step2

Step3

Step4

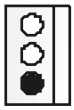
CPU Fan Header: JCFAN1



JCFAN1

Pin No.	Assignment
1	Ground
2	+12V
3	FAN rpm Rate Sense

System Fan Header: JSFAN1 (optional)



JSFAN1

Pin No.	Assignment
1	Ground
2	+12V
3	FAN rpm Rate Sense

DDR DIMM Modules: DIMMB1, DIMMB2

DRAM Access Time: 2.5V Unbuffered DDR 266/333/400 MHz Type required.
DRAM Type: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM Module (184 pin)

Total Memory Size with Unbuffered DIMMs

DIMM Socket Location	DDR Module	Total Memory Size (MB)
DIMMB1	64MB/128MB/256MB/512MB/1GB *1	Max is 2GB
DIMMB2	64MB/128MB/256MB/512MB/1GB *1	

Only for reference

Installing DDR Module

1. Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.
2. Insert the DIMM firmly and vertically into the slot until the retaining chip snap back in place and the Dimm is properly seated.

Jumpers, Headers, Connectors & Slots

Floppy Disk Connector: FDD1

The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.

Hard Disk Connectors: IDE1/ IDE2

The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0~4, Bus Master, and Ultra DMA 33/ 66/ 100/ 133 functionality. It has two HDD connectors IDE1 (primary) and IDE2 (secondary).
The IDE connectors can connect a master and a slave drive, so you can connect up to four hard disk drives. The first hard drive should always be connected to IDE1.

Peripheral Component Interconnect Slots: PCI 1-5

This motherboard is equipped with 5 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.

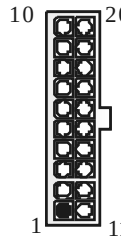
Accelerated Graphics Port Slot: JAGP1

Your monitor will attach directly to that video card. This motherboard supports video cards for PCI slots, but it is also equipped with an Accelerated Graphics Port (AGP). An AGP card will take advantage of AGP technology for improved video efficiency and performance, especially with 3D graphics.

Communication Network Riser Slot: CNR1

The CNR specification is an open Industry Standard Architecture, and it defines a hardware scalable riser card interface, which supports audio, network and modem only.

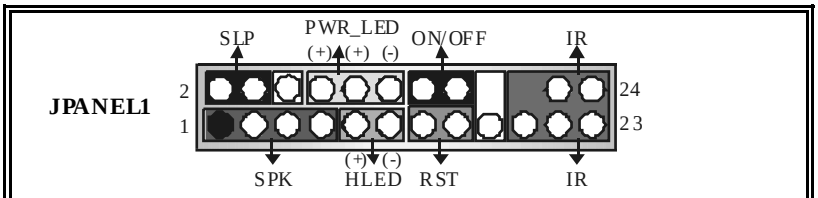
Power Connectors: JATXPWER1



JATXPWER1

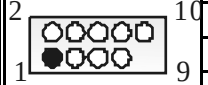
PIN	Assignment	PIN	Assignment
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	Ground	13	Ground
4	+5V	14	PS_ON
5	Ground	15	Ground
6	+5V	16	Ground
7	Ground	17	Ground
8	PW_OK	18	-5V
9	Standby Voltage +5V	19	+5V
10	+12V	20	+5V

Front Panel Connector: JPANEL1



Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	2	Sleep Control	Sleep Button
3	NA		4	Ground	
5	NA		6	NA	NA
7	Speaker		8	Power LED (+)	POWER LED
9	HDD LED (+)	Hard Drive LED	10	Power LED (+)	
11	HDD LED (-)		12	Power LED (-)	
13	Ground	Reset Button	14	Power Button	Power-on Button
15	Reset Control		16	Ground	
17	NA		18	KEY	
19	NA	IrDA Connector	20	KEY	IrDA Connector
21	+5V		22	Ground	
23	IRTX		24	IRRX	

Front USB Header: JUSB3/ JUSB4



JUSB3/ JUSB4

Pin	Assignment	Pin	Assignment
1	+5V(fused)	2	+5V(fused)
3	USBP4-	4	USBP5-
5	USBP4+	6	USBP5+
7	Ground	8	Ground
9	KEY	10	NA

Wake On LAN Header: JWOL1

JWOL1

Pin	Assignment
1	+5V_SB
2	Ground
3	Wake up

Power Source Selection for Keyboard and Mouse: JKBV1

JKBV1	Assignment	Description
 Pin 1-2 close	+5V	+5V for keyboard and mouse
 Pin 2-3 close	+5V Standby Voltage	PS/2 Mouse and PS/2 Keyboard are powered with +5V standby voltage

Note: In order to support this function "Power-on system via keyboard and mouse", "JKBV1" jumper cap should be placed on pin 2-3.

Power Source Selection for USB: (JUSBV1=>optional)/ JUSBV2/ JUSBV3/ JUSBV4

JUSBV1/JUSBV2/ JUSBV3/ JUSBV4	Assignment	Description
 Pin 1-2 close	+5V	JUSBV1: 5V for USB connector located at the J1394_USB1 port JUSBV2: 5V for USB connector located at the JUSBLAN1 port JUSBV3: 5V for USB connector located at the JUSB3 port JUSBV4: 5V for USB connector located at the JUSB4 port
 Pin 2-3 close	+5V Standby Voltage	JUSBV1: J1394_USB1 port powered with standby voltage of 5V JUSBV2: JUSBLAN1 port powered with standby voltage of 5V JUSBV3: JUSB3 port powered with standby voltage of 5V JUSBV4: JUSB4 port powered with standby voltage of 5V

Note: In order to support this function "Power-on the system via USB device", "JUSBV1/JUSBV2/ JUSBV3/ JUSBV4" jumper cap should be placed on pin 2-3 respectively.

Power Source Selection for IEEE1394: J1394V

J1394V	Assignment	Description
 Pin 1-2 close	+3.3V	J1394V: 3.3V for IEEE1394A connector located at the J1394A header.
 Pin 2-3 close	+3.3V Standby Voltage	J1394V: J1394A header powered with standby voltage of 3.3V

Clear CMOS Jumper: JCMOS

JCMOS	Assignment
 Pin 1-2 Close	Normal Operation (default)
 Pin 2-3 Close	Clear CMOS Data

The following procedures are for resetting the BIOS password. It is important to follow these instructions closely.

※ Clear CMOS Procedures:

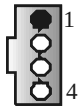
1. Remove AC power line.
2. Set the jumper to "Pin 2-3 Close".
3. Wait for five seconds.
4. Set the jumper to "Pin 1-2 Close".
5. Power on the AC.
6. Reset your desired password or clear the CMOS data.

Case Open Connector: JC1

JC1

Pin	Assignment
1	Case Open Signal
2	Ground

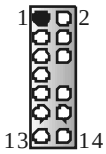
CD-ROM Audio-In Header: JCDIN1



JCDIN1

Pin	Assignment
1	Left Channel Input
2	Ground
3	Ground
4	Right Channel Input

Front Panel Audio Header: JF_AUDIO1



JF_AUDIO1

Pin	Assignment	Pin	Assignment
1	Mic In/ Center	2	Ground
3	Mic Power/ Bass	4	Audio Power
5	Right Line Out/ Speaker Out Right	6	Right Line Out/ Speaker Out Right
7	Reserved	8	Key
9	Left Line Out/ Speaker Out Left	10	Left Line Out/ Speaker Out Left
11	Right Line In/ Right Rear Speaker	12	Right Line In/ Right Rear Speaker
13	Left Line In/ Left Rear Speaker	14	Left Line In/ Left Rear Speaker

Safe/ User Mode Selection: JCLK

JCLK	Assignment
 Pin 1-2 Close	Safe mode
 Pin 1-2 Open	User Mode (default) (133/ 166/ 200 MHz)

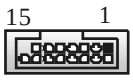
Note: When overclock function failed and system is unable to boot-up, please follow the instruction below:

1. Turn off the system.
2. Closed the JCLK jumper.
3. Turn on the system.
4. Enter CMOS setup menu and load defaults settings.
5. Turn off the system.
6. Open the JCLK jumper.
7. Turn on the system.

Digital Audio Connector: J_SPDIF1 (optional)

Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

Game Header: JGAME1 (optional)



Pin	Assignment	Pin	Assignment
1	+5V	2	+5V
3	Joystick B Button 1	4	Joystick A Button 1
5	Joystick B Coordinate X	6	Joystick A Coordinate X
7	MIDI Output	8	Ground
9	Joystick B Coordinate Y	10	Ground
11	Joystick B Button 2	12	Joystick A Coordinate Y
13	MIDI Input	14	Joystick A Button 2
15	NA	16	+5V

Front 1394 Header: J1394A (optional)

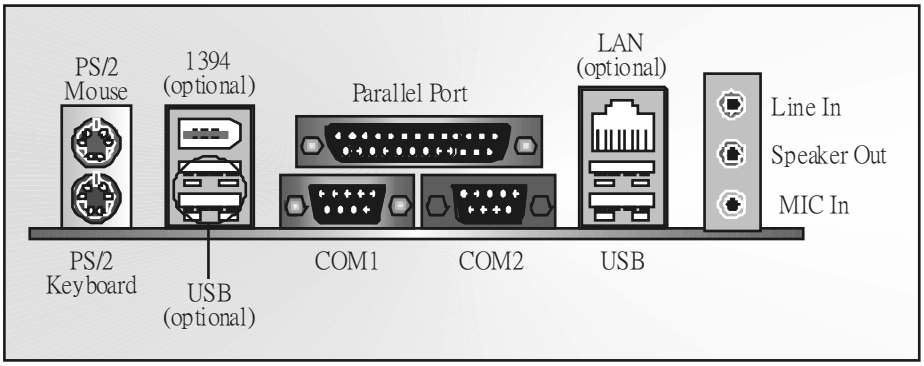
J1394A

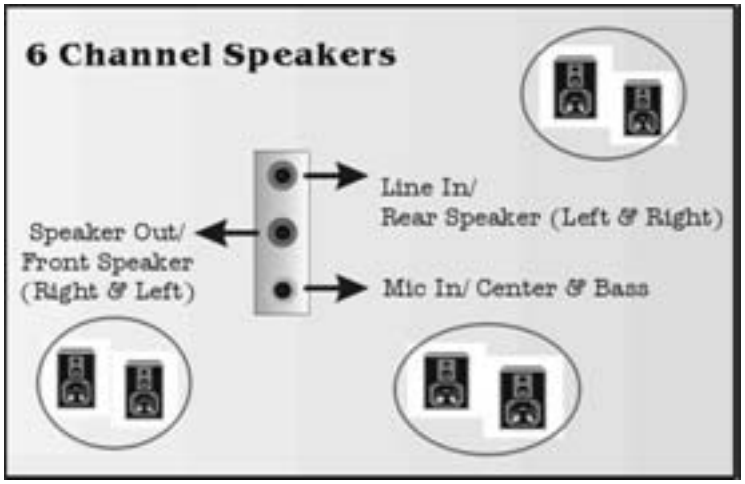
Pin	Assignment	Pin	Assignment
1	A1+	2	A1-
3	Ground	4	Ground
5	B1+	6	B1-
7	+12V	8	+12V
9	KEY	10	NA

CNR Codec/ Onboard Selection: J_CODECSEL

J_CODECSEL	Assignment
 Pin 1-2 Close	Onboard Codec is used (default)
 Pin 2-3 Close	CNR Codec is used

Back Panel Connectors





Deutsch

Spezifikationen von M7NCD

A. Hardware

CPU
- Unterstützung für Sockel 462.
- Unterstützung für den AMD® Prozessor bis zu XP 3200+.
- FSB von 266/333/400 MHz.

Chipsatz
- Northbridge: nVIDIA nFORCE2 400.
- Southbridge: nVIDIA nFORCE2 MCP/ MCP-T.

Hauptspeicher
- Unterstützung für 2 DDR Geräte.
- Unterstützung für 266/333/400 MHz (ohne ECC) DDR Geräte.
- High-Performance 128-Bit DDR400 mit der Twin-Bank Architektur.
- Die maximale Speichergröße ist 2GB.

Super I/O
- Chip: Winbond W83627HF.

1394A Chip (optional)
- Chip: RTL8801B.
- Unterstützung für 2 1394-Ports mit der Datenübertragungsrate bis auf maximal 400Mbps.

LAN (optional)
- Chip: RTL8201BL.
- Dopplete Geschwindigkeit von 10/100 Mbps.
- Voll und Halb-Duplex.
- Auto-Negotiation: 10/ 100, Voll/Halb-Duplex

Slots
- Fünf 32-Bit PCI-Bus-Slots.
- Ein CNR-Slot.
- Ein AGP-Slot: ❶ AGP3.0 8X Interface bei 533Mb/s.
  ❷ Unterstützung für 2X/4X/8X AGP.

Onboard-IDE
- Unterstützung für vier IDE Diskettenlaufwerke.
- Unterstützung für PIO Modus 4, Master Modus und Ultra DMA 33/66/100/133 Bus Master Modus.

Onboard AC'97 Sound Codec

- Chip: ALC650.
- Entspricht der Spezifikation von AC'97.
- Unterstützung für AC97 2.2 Interface.
- Unterstützung für 6-Kanal Audio.

Onboard-Peripheriegeräte

a. Rückwand

- 2 serielle Schnittstellen.
- 1 parallele Schnittstelle. (SPP/EPP/ECP-Modus)
- Audio-Ports auf vertikale Position.
- 1 LAN-Port. (optional)
- Uerstützung für PS/2-Maus und PS/2-Tastatur.
- 4 USB2.0-Ports.
- 1 IEEE 1394A (FireWire) Anschluss. (optional)

b. Vorderseite

- 1 Floppy-Port mit Unterstützung für 2 Diskettenlaufwerke.(360KB, 720KB, 1.2MB, 1.44MB und 2.88MB).
- 2 USB2.0-Ports..
- 1 front audio header.
- 1 IEEE 1394A (FireWire) Anschluss. (optional)

Abmessungen

- ATX Form-Factor: 19.9cm X 30.4cm (W X L)

B. BIOS & Software

BIOS

- Award legal BIOS.
- Unterstützung für APM1.2.
- Unterstützung für ACPI.
- Unterstützung für die USB Funktion.

Software

- Unterstützung für CPU Savior™, 9th Touch™, FLASHER™, WinFlasher™, StudioFun!™ (optional) und Watchdog™.
- Unterstützung für die am meisten verbreiteten Betriebsysteme wie Windows 98SE, Windows 2000, Windows ME, Windows XP and SCO UNIX usw..

Verpackungsinhalt

- HDD Kable X1
- FDD Kable X1
- Benutzer Handbuch X1
- USB Kable X1 (optional)
- I/O-Rückwand für ATX Gehäuse X1 (optional)

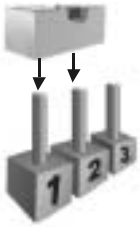
- Treiber CD für Installation X1
- StudioFun! Anwendung CD X1 (optional)

Einstellung der Jumper

Die Abbildung verdeutlicht, wie Jumper eingestellt werden. Pins werden durch die Jumper-Kappe verdeckt, ist der Jumper "***geschlossen***". Keine Pins werden durch die Jumper-Kappe verdeckt, ist der Jumper "***geöffnet***". Die Abbiildung zeigt einen 3-Pin Jumper dessen Pin1 und Pin2 "***geschlossen***" sind, bzw. es befindet sich eine Jumper-Kappe auf diesen beiden Pins.

Jumper geschlossen

Jumper geöffnet



Pin1-2 geschlossen

Installation der CPU

Schritt 1: Ziehen Sie den Hebel seitlich vom Sockel weg. Heben Sie den Hebel dann in 90-Grad-Winkel nach oben.

Schritt 2: Suchen Sie nach der scharfen Kante, die auf Drehpunkt des Hebels weisen muss. Die CPU passt nur, wenn sie richtig ausgerichtet ist.

Schritt 3: Drücken Sie die CPU fest in den Sockel und schließen Sie den Hebel.

Schritt 4: Stecken Sie Ihren CPU-Lüfter auf die CPU. Schließen Sie die Stromversorgungsstecker für CPU-Lüfter an JCFAN1 an. Dann beenden Sie die Installation.

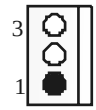
Schritt 1

Schritt 2

Schritt 3

Schritt 4

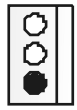
CPU-Lüfter Header: JCFAN1



JCFAN1

Pin	Beschreibung
1	Masse
2	+12V
3	Lüfter RPM Geschwindigkeit Sensor

System-Lüfter Header: JSFAN1



JSFAN1

Pin	Beschreibung
1	Masse
2	+12V
3	Lüfter RPM Geschwindigkeit Sensor e

DDR-DIMM-Modules: DIMMB1, DIMMB2

DRAM-Zugriffszeit: 2.5V Unbuffered DDR 266/333/400 MHz Typ erfordlich.

DRAM-Typ: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM-Module (184-Pin)

Gesamte Speichergröße von Unbuffered-DIMMs

DIMM-Sockel Standort	DDR-Module	Speichergröße (MB))
DIMMB1	64MB/128MB/256MB/512MB/1GB *1	Maximal ist 2GB
DIMMB2	64MB/128MB/256MB/512MB/1GB *1	

*** Nur als Referenz ***

Installation von DDR-Modul

1. Öffnen Sie einen DIMM-Slots, indem Sie die seitlich Chips nach außen drücken. Richten Sie das DIMM-Modul so über dem Slot aus, dass das Modul mit der Kerbe in den Slot passt.

2. Drücken Sie das DIMM-Modul in den Slot, bis die seitlichen Clips zuschnappen und das Modul fest sitzt.

Jumpers, Headers, Anschlüsse & Slots

Diskettenanschluss: FDD1

Das Motherboard enthält einen standardmäßigen Diskettenanschluss, der 360K-, 720K-, 1.2M-, 1.44M- und 2.88M-Disketten unterstützt. Dieser Anschluss unterstützt die mitgelieferte Bandkabel des Diskettenlaufwerks..

Festplattenanschlüsse: IDE1 und IDE2

Das Mainboard hat einen 32-bit Enhanced PCI IDE-Controller, der die Modi PIO0~4, Bus Master sowie die Ultra DMA/33/66/100/133- Funktion zur Verfügung stellt. Dieser ist mit zweii HDD-Anschlüssen versehen IDE1 (primär) und IDE2 (sekundär).
Die IDE-Anschlüsse können eine Master- und eine Slave-Festplatte verbinden, so dass bis zu 4 Festplatten angeschlossen werden können. Die erste Festplatte sollte immer an IDE1 angeschlossen werden.

Peripheral Component Interconnect Slots: PCI1-5

Dieses Motherboard ist mit 5 standardmäßigen PCI-Slots ausgestattet. PCI steht für Peripheral Component Interconnect und bezieht sich auf einem Busstandard für Erweiterungskarten, der den älteren ISA-Busstandard in den meisten Schnittstellen ersetzt hat. Dieser PCI-Slot ist für 32 bits vorgesehen.

Accelerated Graphics Port Slot: JAGP1

Ihr Monitor wird direkt an die Grafikkarte angeschlossen. Dieses Motherboard unterstützt Grafikkarten für PCI-Slots, aber es ist auch mit einem Accelerated Graphics Port ausgestattet. AGP-Karten verwenden die AGP-Technologie, um die Wirksamkeit und Leistung von Videosignalen zu verbessern, besonders wenn es sich um 3D-Grafiken handelt.

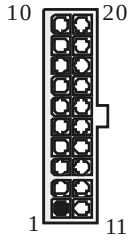
Communication Network Riser Slot: CNR1

Die CNR-Angaben entsprechen einer offenen Industry Standard Architecture, und sie definieren eine Hardware-skalierbare Riser-Card-Schnittstelle, welche nur Audio, Netzwerk und Modem unterstützt.

Digital Audio Anschluss: J_SPDIF1 (optional)

Pin	Belegung
1	+5V
2	SPDIF_Ausgabe
3	Masse

Stromversorgungsanschluss: JATXPWER1

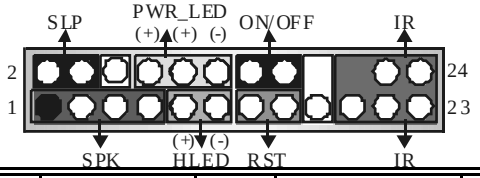


JATXPWER1

PIN	Belegung	PIN	Belegung
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	Masse	13	Masse
4	+5V	14	PS_ON
5	Masse	15	Masse
6	+5V	16	Masse
7	Masse	17	Masse
8	PW_OK	18	-5V
9	+5V reservierte Spannung	19	+5V
10	+12V	20	+5V

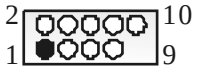
Anschlüsse für die Vorderseite: JPANEL1

JPANEL1



Pin	Belegung	Funktion	Pin	Belegung	Funktion
1	+5V	Lautsprecher-Anschluss	2	Schlaf - Kontroll	Schlaf - Knopf
3	Kein		4	Masse	
5	Kein		6	Kein	Kein
7	Lautsprecher		8	Power LED (+)	POWER LED
9	HDD LED (+)	Festplatte LED	10	Power LED (+)	
11	HDD LED (-)		12	Power LED (-)	
13	Masse	Rückstell-knopf	14	Power-Knopf	Power-On Knopf
15	Reset-Kontroll		16	Masse	
17	Kein		18	Schlüsse	
19	Kein	IrDA-Anschluss	20	Schlüsse	IrDA Anschluss
21	+5V		22	Masse	
23	IRTX		24	IRRX	

Front USB Header: JUSB3



JUSB3

Pin	Belegung	Pin	Belegung
1	+5V(geschmelzt)	**2**	+5V(geschmelzt))
3	USB-	**4**	USB-
5	USB+	**6**	USB+
7	Masse	**8**	Masse
9	Kein Pin	**10**	Kein

Wake On LAN Header: JWOL1

JWOL1

Pin	Belegung
1	+5V_SB
2	Masse
3	Aufwecken

Auswahl von Stromsmodi für Tastatur/ Maus: JKBV1

JKBV1	Pin-Belegung	Beschreibung
 Pin 1-2 geschlossen	+5V	+5V für Tastatur und Maus
 Pin 2-3 geschlossen	+5V reservierte Spannung	Durch +5V reservierte Spannung für PS/2-Maus und PS/2-Tastatur zum Erwecken vom System

Anmerkung: Um die Funktion —"Erwecken durch Tastatur/Maus" — zu aktivieren, müssen Pins 2-3 von JKBV1 durch die Jumperkappe verdeckt werden.

Auswahl von Stromsmodi für USB: JUSBV1/ JUSBV2/JUSBV3

JUSBV1/JUSBV2/ JUSBV3	Pin-Belegung	Beschreibung
 Pin 1-2 geschlossen	+5V	JUSBV1: 5V für USB-Port von J1394_USB1 JUSBV2: 5V für USB-Port von JUSBLAN1 JUSBV3: 5V für USB-Port von JUSB3
 Pin 2-3 geschlossen	+5V reservierte Spannung	JUSBV1: 5V reservierte Spannung für J1394_USB1 zum Erwecken JUSBV2: 5V reservierte Spannung für JUSBLAN1 zum Erwecken JUSBV3: 5V reservierte Spannung für JUSB3 zum Erwecken

Anmerkung: Um die Funktion —"Erwecken durch USB-Geräte"—zu aktivieren, müssen Pins 2-3 von JUSBV1/JUSBV2/JUSBV3 durch die Jumperkappe verdeckt werden.

Jumper zum Löschen des CMOS: JCMOS

JCMOS	Beschreibung
 Pin 1-2 geschlossen	Normale Operation (Default)
 Pin 2-3 geschlossen	CMOS-Daten Löschen

Die folgende Schritte leiten Sie, das Kennwort für BIOS-System zurückzusetzen. Es ist wichtig, die Anweisung zu folgen.

※ **Prozeduren zum Löschen des CMOS:**

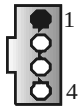
1. Ausschalten Sie das System.
2. Lassen Sie Pin 2-3 von JCOMS1 geshclossen sein.
3. Bitte warten Sie 15 Sekunden.
4. Lassen Sie Pin 1-2 von JCOMS1 geshclossen sein.
5. Einschalten Sie das System wieder.
6. Zurücksetzen Sie ihr gewunschtes Kennwort oder löschen Sie die CMOS-Daten.

Warnmeldung für Chassis-Öffnen Anschluss: JC1

JC1

Pin	Belegung
1	Gehäuse Öffnen Signal
2	Masse

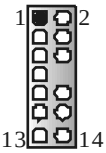
CD-ROM Audio-In Header: JCDIN1



JCDIN1

Pin	Belegung
1	Link-Kanal Eingabe
2	Masse
3	Masse
4	Recht-Kanal Eingabe

Front Panel Audio Header: JF_AUDIO1



JF_AUDIO1

Pin	Belegung	Pin	Belegung
1	Mikrofon-Eingang/ Zentrum	2	Masse
3	Mikrofon-Betriebsspannung/ Bass	4	Audio-Betriebsspannung
5	Audio-Signal des rechten Kanals zur Vorderseite / Lautsprecher-Signal des rechten Kanals zur Vorderseite	6	Audio-Signal des rechten Kanals zur Vorderseite / Lautsprecher-Signal des rechten Kanals zur Vorderseite

7	Reservieret für spät. Verwendung durch Kopfhörer-Verstärker	**8**	Schlüsse
9	Audio-Signal des linken Kanals zur Vorderseite / Lautsprecher-Signal des linken Kanals zur Vorderseite	**10**	Audio-Signal des linken Kanals zur Vorderseite / Lautsprecher-Signal des linken Kanals zur Vorderseite
11	Audio-Signal des rechten Kanals von der Vorderseite / Lautsprecher-Signal des rechten Kanals von der Vorderseite	**12**	Audio-Signal des rechten Kanals von der Vorderseite/ Lautsprecher-Signal des rechten Kanals von der Vorderseite
13	Audio-Signal des linken Kanals von der Vorderseite/ Lautsprecher-Signal des linken Kanals von der Vorderseite	**14**	Audio-Signal des linken Kanals von der Vorderseite/ Lautsprecher-Signal des linken Kanals von der Vorderseite

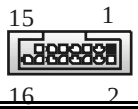
Safe/ User Modi Auswahl: JCLK

JCLK	Beschreibung
 Pin 1-2 geschlossen	Safe Mode
 Pin 1-2 geöffnet	User Mode (Default) (133/ 166/ 200 MHz)

Anmerkung: Wenn Übertakt Funktion nicht gelungen ist, und das System kann nicht arbeiten, folgen Sie bitte die untenstehende Bedienungsanleitung:

1. Ausschalten Sie das System.
2. Lassen Sie den Jumper JCLK geschlossen sein.
3. Anschalten Sie das System.
4. Eingeben Sie CMOS Setup Menü und wählen Sie das Default-Settings.
5. Ausschalten Sie das System wieder.
6. Lassen Sie den Jumper JCLK geöffnet sein.
7. Anschalten Sie das System.

Game Header: JGAME1 (optional)



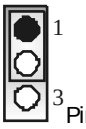
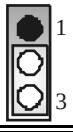
Pin	Belegung	Pin	Belegung
1	+5V	2	+5V
3	Joystick B Knopf 1	4	Joystick A Knopf 1
5	Joystick B Koordierung X	6	Joystick A Koordierung X
7	MIDI Ausgabe	8	Masse
9	Joystick B Koordierung Y	10	Masse
11	Joystick B Knopf 2	12	Joystick A Koordierung Y
13	MIDI Eingabe	14	Joystick A Knopf 2
15	Kein	16	+5V

Front 1394 Header: J1394A (optional)

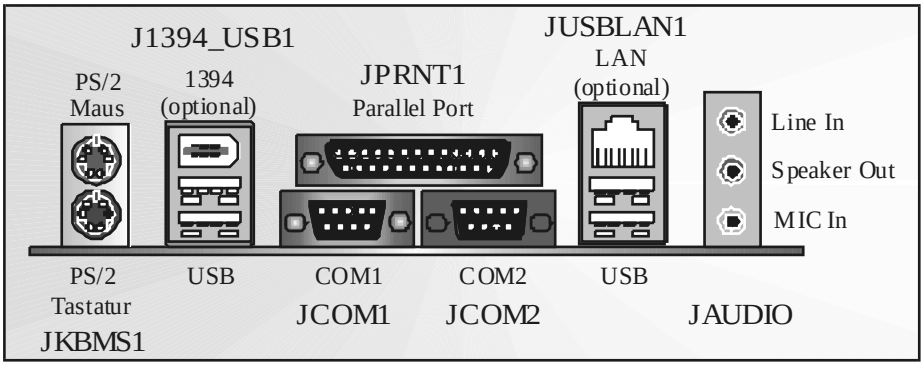
J1394A

Pin	Belegung	Pin	Belegung
1	A1+	2	A1-
3	Masse	4	Masse
5	B1+	6	B1-
7	+12V	8	+12V
9	Schlüsse	10	Kein

Auswahl CNR /Onboard-Codec: J_CODECSEL

J_CODECSEL	Beschreibung
 Pin 1-2 geschlossen	Verwendung von Onboard-Codec (Default)
 Pin 2-3 geschlossen	Verwendung von CNR-Codec

Anschlüsse für die Rückwand



Français

Caractéristiques de M7NCD

A. Matériel

Processeur
- Avec socket-462.
- Prise en charge du processeur AMD® jusqu'à XP 3200+.
- Bus frontal à 266/333/400 MHz.

Jeu de puces
- North Bridge : nVIDIA nFORCE2 400.
- South Bridge : nVIDIA nFORCE2 MCP/ MCP-T.

Mémoire principale
- Prise en charge de deux périphériques 2 DDR.
- Prise en charge des périphériques DDR 266/333/400 MHz (sans ECC).
- Taille maximale de la mémoire : 2Go.

Super E/S
- Puce : Winbond W83627HF.
- Conforme aux spécifications Low Pin Count (LPC). 1.0
- Intégration des fonctions du moniteur de matériel.
- Prise en charge de Device Power Management (DPM) et ACPI.

Puce 1394A (optionnel)
- Puce : RTL8801B.
- Prise en charge de 2 ports avec transfert jusqu'à 400 mbps.

LAN (optionnel)
- Puce : RTL8201BL.
- Double vitesse - 10/100 Mbps.
- Semi-duplex et duplex intégral
- Auto-négociation: 10/ 100, Semi-duplex/intégral

Fentes :
- Cinq fentes Bus Master PCI à 32 bits.
- Une fente CNR.
- Une AGP: ❶Interface AGP3.0 8X à 533 Mb/s.
  ❷Prise en charge AGP 2X, 4X, 8X.

IDE intégré
- Prise en charge de quatre lecteurs de disque IDE.
- Prise en charge de PIO Mode 4, Master Mode et Ultra DMA 33/66/100/133 Bus Master Mode.

AC'97 Sound Codec intégré

- Puce : ALC655.
- Conforme aux spécifications AC'97.
- Interface AC'97 2.2.
- Prise en charge de 6 canaux.

Périphériques intégrés

a. Côté arrière

- 2 ports série
- 1 port parallèle (mode SPP/EPP/ECP)
- Ports audio en position verticale.
- 1 port LAN. (optionnel)
- Souris PS/2 et clavier PS/2.
- 2 ports USB2.0.
- 1 connecteur IEEE 1394A (FireWire™). (optionnel)

b. Côté frontal:

- 1 port disquette prenant en charge 2 FDD avec 360K, 720K, 1.2M, 1.44M et 2,88Mo.
- 4 ports USB2.0.
- 1 en-tête audio avant.
- 1 connecteur IEEE 1394A (FireWire™). (optionnel)

Dimensions

- Facteur de forme ATX : 19,5cm X 30,5cm (Larg X L)

B. BIOS et logiciel

BIOS

- Award legal Bios.
- APM1.2.
- ACPI.
- Fonction USB.

Logiciel

- Prise en charge de CPU Savior™, 9th Touch™, FLASHER™, WinFlasher™, StudioFun! (optionnel) et Watchdog™
- Offrant la meilleure performance pour Windows 98 SE, Windows 2000, Windows Me, Windows XP, SCO UNIX etc.

Watchdog Technology

It is important to know that when overclocking, the system can be at a vulnerable state. Therefore, the BIOSTAR Watchdog Technology was designed to protect your PC under dangerous over-clock situations. Any over-clocking that reaches the threshold settings, the Watchdog Technology will disable your system from rebooting in the BIOS setting. Under this circumstance, please power off your PC. After that, press <Insert> and power on your system simultaneously to restart your system. This user-friendly design can save you from squandering your time on opening the case just to clear the CMOS. In the end, thanks to the Watchdog Technology, everything is back at a safe and sound!

StudioFun!™

Introduction

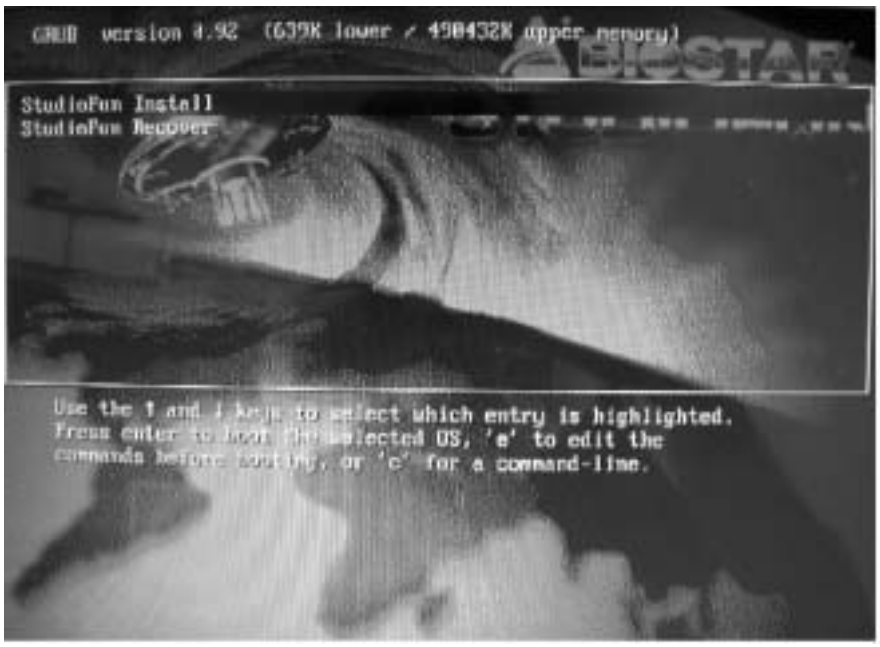
StudioFun!™ is a media-player based on optimized GNU/Linux distribution to bring a "Room Theater" experience into life. It plays DVD, VCD, MP3, Audio CD and other multimedia. Furthermore, Users can take snapshots of video and customize the saved images as screensavers or photo slideshows. Of course, the images can be stored in USB mass storage devices like flash disks and USB floppy disks.

Hardware Requirements

The supported hardware list of StudioFun! updates regularly. So please check the "**hwreq.txt**" located in the root of StudioFun! Application Pack CD to get the latest supporting information.

Installation Procedure

Insert the "StudioFun! Application Pack CD" in a CD/DVD ROM drive and let the system boot through the CD. The disk will boot and bring up the grub boot loader installation menu. Two options are specified: "StudioFun Install" and "StudioFun Recover".



StudioFun! Install

This option will do the basic installation of the distribution. The installation works on pre-installed windows or GNU/Linux distribution.

On selecting the "StudioFun Install" option the installer boots and displays a dialog box indicating the space required and waits for a confirmation. Selecting "Ok" will continue the installation while selecting "Cancel" will terminate the installation and reboot the machine.

If Windows or GNU/Linux is the only OS installed on the hard disk with no free space, it will resize the partition, either NTFS or FAT32 or ext2, and install StudioFun!. *If the hard disk has a 128MB of free space available, the installation will use the free space.*

After installing the base system you will be prompted to select the resolution from the following choices

1. 1024x768 (recommended)
2. 800x600
3. 640x480

Select the desired resolution. The default is 1024x768 for high-end graphics.

Next you will be prompted to choose the DVD area/region selection code. Choose this based on the type of DVDs you will be playing.

The installation procedure will then probe for the type of mouse installed. The distribution currently supports PS/2, USB and Serial mice. In case of serial mouse you will have to move the mouse when prompted. The other two are probed and installed automatically.

The installation procedure will now finish, the CD is ejected and a dialog box prompting to reboot the machine is displayed. Press "OK" button and enjoy StudioFun!.

3.1.1 Error Messages

1. *Media corrupted!!* Please check the media! The CD-ROM is corrupted
2. *Extraction of base system failed!!* Please try again later!! The CD-ROM is corrupted.
3. *Unsupported hardware found, Aborting...* If you try to install StudioFun! on an unsupported and undocumented hardware the above error message is popped.
4. *No device found!* This error message is given if there is no hard disk in the system.

StudioFun! Recover

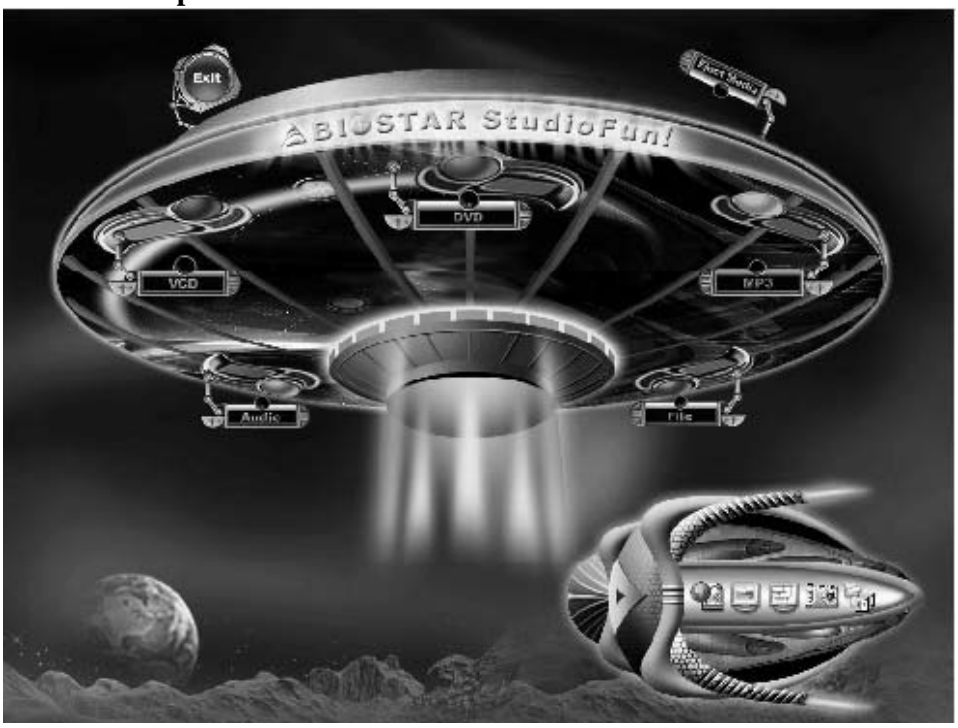
Where there is a MBR (Master Boot record) corruption, the "StudioFun Recover" will automatically probe the hard disk master boot record and find out the installed operating system(s). Once success, it will re-install the boot loader with correct options in the MBR. Please be noted that the newly probed one will over write any custom boot loader option specified from other GNU/Linux installations.

Booting to StudioFun!

After the Installation, remove the CD from the CD-ROM and restart the system. After the rebooting, you will get the "GRUB boot loader menu screen". Select the StudioFun! Option to boot to the StudioFun! Partition.

After executing the boot up, you will see the main Desktop screen. The following section is a complete description of the Desktop application.

Desktop



This is the main shell of the StudioFun! software. It illustrates two main categories, one is the main "Media Control" part and the other is the "Control Panel".

Media control

The Media Control consists of the following functionalties:

1. VCD

This control icon will glow whenever a VCD is detected in a DVD/CD-ROM drive. The VCD will be auto-played *only* when it is put in to the drive when the Desktop (StudioFun! shell) is up and running whereas the control will simply glow to inform the user about a VCD present in the DVD/CD-ROM drive when the Desktop is not launched.

2. DVD

This control will glow whenever a DVD is detected in a DVD drive. The DVD will be auto-played *only* when it is put in to the drive when the Desktop (StudioFun! shell) is up

and running, otherwise, the control will simply glow to inform the user about a DVD present in the DVD/CD-ROM.

3. MP3

This control will glow whenever a MP3 is detected in a DVD/CD-ROM drive. The MP3 will be auto-played *only* when it is put in to the drive when the Desktop (StudioFun! shell) is up and running, otherwise, the control will simply glow to inform the user about a MP3 present in the DVD/CD-ROM drive.

4. AUDIO

This control will glow whenever a AUDIO is detected in a DVD/CD-ROM drive. The AUDIO will be auto-played *only* when it is put in to the drive when the Desktop (StudioFun! shell) is up and running, otherwise, the control will simply glow to inform the user about a AUDIO present in the DVD/CD-ROM drive.

5. FILE

This control will glow whenever a File CD (CDs with other media type files) is detected in a DVD/CD-ROM drive. The File CD will be auto-played *only* when it is put in to the drive when the Desktop (StudioFun! shell) is up and running, otherwise, the control will simply glow to inform the user about a File CD present in the DVD/CD-ROM drive.

6. EJECT MEDIA

When clicked this control, the file disk from the DVD/CDROM drives will be ejected.

7. EXIT

This is the "Power on/off" control of the Desktop (StudioFun! shell).

Control Panel

The Control panel part has five icons, which are shortcuts to other applications present in the StudioFun!. Tool tips will pop up once the mouse is rolled to the icons

1. Select Region

Clicking this icon will invoke the application for selection DVD region settings. Refer to section 5.2 Select DVD Region application for more details.

2. Screensaver

Clicking this icon will invoke the screensaver application. Refer to section 5.3 **Screensaver** for more details.

3. Display Settings

Clicking this icon will invoke the application for changing the screen resolutions. Refer to section 5.4, **Display Settings** for more details.

4. File Manager

Clicking this icon will invoke the file manager. Refer to section 5.6 **File manager** for more details.

When user has a DVD and a CD-ROM Drive, DVD Drive has the priority:

If user has both DVD and a CD-ROM drive, DVD drive will be given the preference when both the drives hold valid media in them, i.e., if the CD-ROM drive has a media and a DVD drive also has a media, and the StudioFun! is started, the disk inside the DVD drive will be played.

Other general user scenarios

When a user clicks on any of the media-controls when it is not glowing, except the eject media and exit, the media-player will just come up and wait for user input.

Software Details

XINE

XINE is a multimedia player. It plays back Audio CD, DVD, and VCD. It also decodes multimedia files like AVI, MOV, WMV, and MP3 from local disk drives. It interprets most of the common multimedia formats.

• **Features of Xine**

a. Skinnable GUI
b. Navigation controls (seeking, pause, fast, slow, next chapter, etc)
c. On Screen Display (OSD) features
d. DVD and external subtitles
e. DVD/VCD menus (requires external plug-in)
f. Audio and subtitle channel selection
g. Closed Caption support
h. Brightness, contrast, audio volume, hue, saturation adjusting requires hardware/driver support)
i. Playlist
j. Image snapshot
k. Audio re-sampling
l. Software de-interlacing algorithms
m. Configuration dialog
n. Aspect ratio changing
o. Full-screen display

• **Supported File Formats**

a. Video CD
b. MPEG program streams (.mpg .mpeg)
c. ogg (.ogg) avi (.avi)
d. asf (.asf, .wmv)
e. QuickTime (.mov)
f. MPEG-Video (.mpv, .m2v)
g. MPEG-Audio (.mp2, .mp3)
h. WAV (.wav) Video CODEC
i. MPEG 1/2
j. MPEG 4 (aka OpenDivX)
k. MS MPEG 4
a. Chapter 5: Software Details 10
l. Windows Media Video 7
m. Motion JPEG

- **Remote Control Support.**
    a. Infrared interface
    b. User-friendly

- **Usage of StudioFun! with CelomaChrome skin**
    a. Select VCD button to play a VCD disc
    b. Select DVD button to play a DVD disc
    c. Select CDDA button to play a Audio CD
    d. Select next chapter or MRL (>>|) button to play next track in Audio CD, VCD and MP3 songs and to play next chapter in DVD
    e. Select previous chapter or MRL (|<<) button to play previous track in Audio CD, VCD and MP3 songs and to play previous chapter in DVD
    f. Select slow motion (<<) button to play the video / audio in slow motion (Select play button after reaching the required position)
    g. Select fast motion (>>) button to play the video / audio in fast motion (Select play button after reaching the required position)
    h. Select subs + / - button to select the appropriate subtitle (Usable while playing
    i. Select audio + / - button to select the appropriate audio track (For example when
    j. The DVD contains one audio track in English and the other with some other language,
    k. Usable while playing DVD's)
    l. Select "hide button" to hide the control panel of the player
    m. Select "menu" button to use menu while playing DVD
    n. Select "control" button to adjust brightness / color
    o. Select "setup" button to modify the settings of the player
    p. Select "f.scr" button to show the video output of the player in full screen mode
    q. Select "snap" button to take a snapshot of the currently playing video
    r. Select "plist" button to add / remove / manage playlist
    s. Select "mrl" button to add new file to play

Select Region

Overview

Select region is a utility to set a DVD region. With the help of this application user can set or change a DVD region. Only one region can be set at a time.

About Select Region

With the help of this application you can set a region for DVD. Only one region can be set at a time. If you keep the mouse pointer on any region, you can view the countries, which comes under that region.

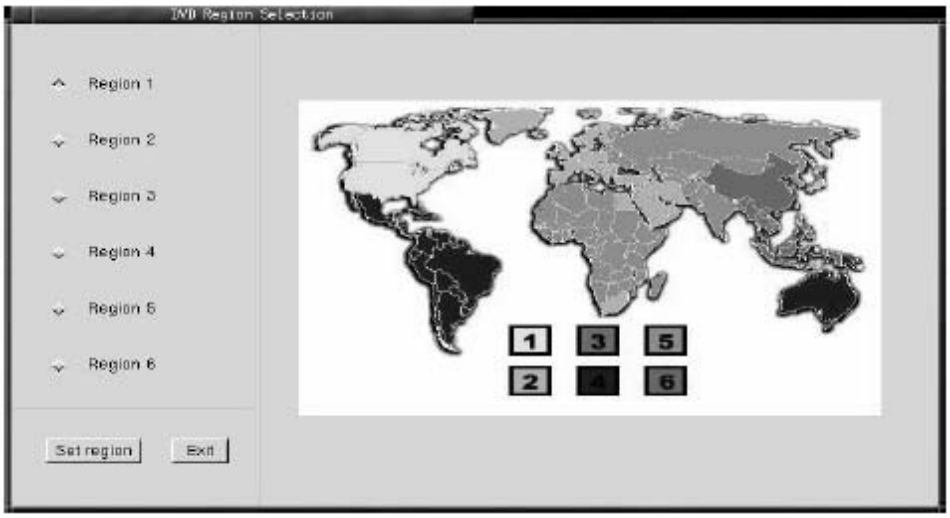
"Ok" - Click to set the selected region.

"Cancel" - Click to quit the application.

How to select DVD region

You can select only one region at a time. You can change your selection by clicking on any other region.

• A snapshot of the application is shown below:



Screensaver

Screensaver

The xscreensaver daemon waits until the keyboard and mouse have been idle for a period, and then runs a graphics demo chosen at random. The demo is terminated as soon as there is any mouse or keyboard activity.
The xscreensaver-demo program is the graphical user interface to xscreensaver. It lets you tune the various parameters used by the xscreensaver daemon, and browse through the graphics demos.
StudioFun! comes with xscreensaver when you click on the screensaver icon the application comes up. Then user can choose various graphics demos like chbg, halo, hypercube or hyperball.

Screensaver comes with various options

• Preview Option: When a user selects a particular graphics demo and clicks on preview button the demo comes up.

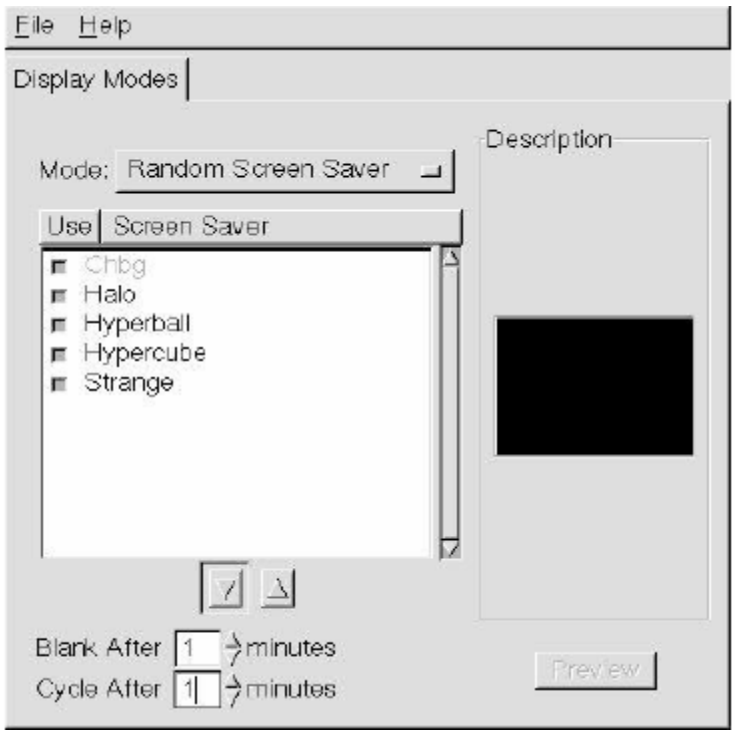
• Blank After Option: The screensaver will blank the screen after the keyboard and mouse have been idle default time is 1 minute and user can change the settings.

• Cycle After Option: When screensaver is running this cycle time defines the time limit for each screensaver.

• Mode Screensaver comes with various modes:
1. Random Screen Saver: When user chooses this option, Screensaver cycles through various graphics demos randomly
2. Only one Screen Saver: When user chooses this option, screensaver displays only one graphics demo.
3. Blank Screen Only: When user chooses this option, screensaver only blanks the screen instead of displaying the graphics demo.
4. Disable Screen Saver: When user chooses this option, screensaver is disabled.

• Various Graphics Demos
XScreensaver comes with various screensaver
Chbg: This screensaver displays the images stored in StudioFun! the time gap between images is 5 seconds.
Hyperball
Hypercube
Halo
Strange

• A snapshot of the application is shown below:



Display Settings

Display Settings

Display setting is a program to change the current resolution settings of the Display.
By default user of StudioFun! will be given a choice to select between any of the following three resolutions.

- 640x480
- 800x600
- 1024x768

The current resolution of the Display will be selected by default. It requires restart of the StudioFun! to reflect the changes made.

File Manager

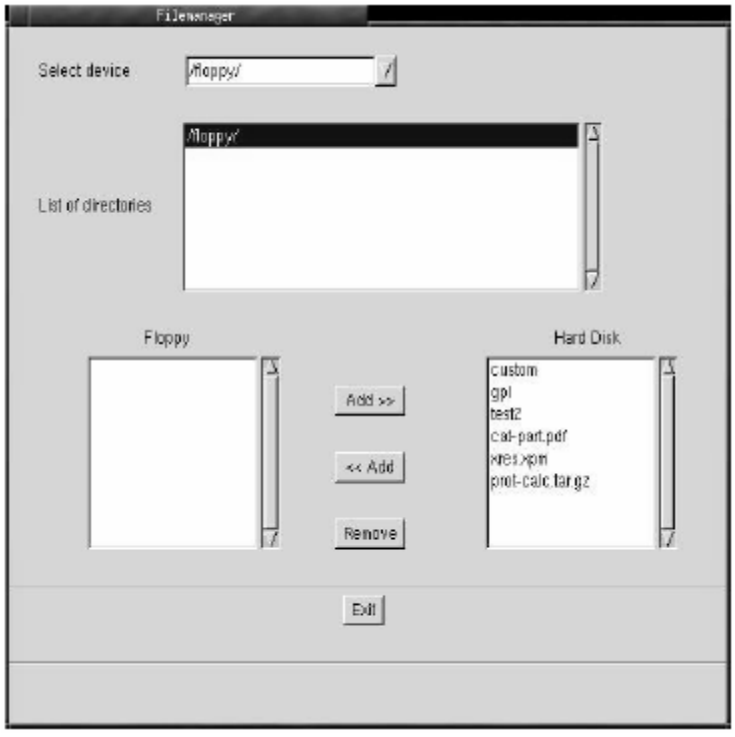
Overview

File manger is a utility to copy files from deferent devices to hard disk and vice versa. User can copy files from devices such as, floppy, CD-Rom and Flashdisk to hard disk and also from hard disk to floppy and Flashdisk.

About File manager

The hard disk files are stored in a directory called "/studiofun" on the hard disk. You can also delete files from hard disk, but you cannot delete files from any device.

- ✧ Select device - Contains the device names /floppy, /cdrom and /flashdisk. Select a device from/to which you want to copy files. **Please double click the device option twice to mount the device.**
- ✧ List Directories - Shows the list of directories of the selected device after double clicking it.
- ✧ Floppy/cdrom/Flashdisk - Shows the contents of the selected directory from the "List directories" field after double clicking it.
- ✧ Hard disk - Shows the contents of a directory called "/studiofun".
- ✧ Add (>>) - Click to copy selected files from a device to hard disk.
- ✧ Add (<<) - Click to copy selected files from hard disk to a device.
- ✧ Remove - Click to delete files from hard disk.
- ✧ Exit - Click to quit the application.



WarpSpeeder

Introduction

[WarpSpeeder™], a new powerful control utility, features three user-friendly functions including Overclock Manager, Overvoltage Manager, and Hardware Monitor.

With the Overclock Manager, users can easily adjust the frequency they prefer orthey can get the best CPU performance with just one click. The Overvoltage Manager, on the other hand, helps to power up CPU core voltage and Memory voltage. The cool Hardware Monitor smartly indicates the temperatures, voltage and CPU fan speed as well as the chipset information. Also, in the About panel, you can get detail descriptions about BIOS model and chipsets. In addition, the frequency status of CPU, memory, AGP and PCI along with the CPU speed are synchronically shown on our main panel.

Moreover, to protect users' computer systems if the setting is not appropriate when testing and results in system fail or hang, [WarpSpeeder™] technology assures the system stability by automatically rebooting the computer and then restart to a speed that is either the original system speed or a suitable one.

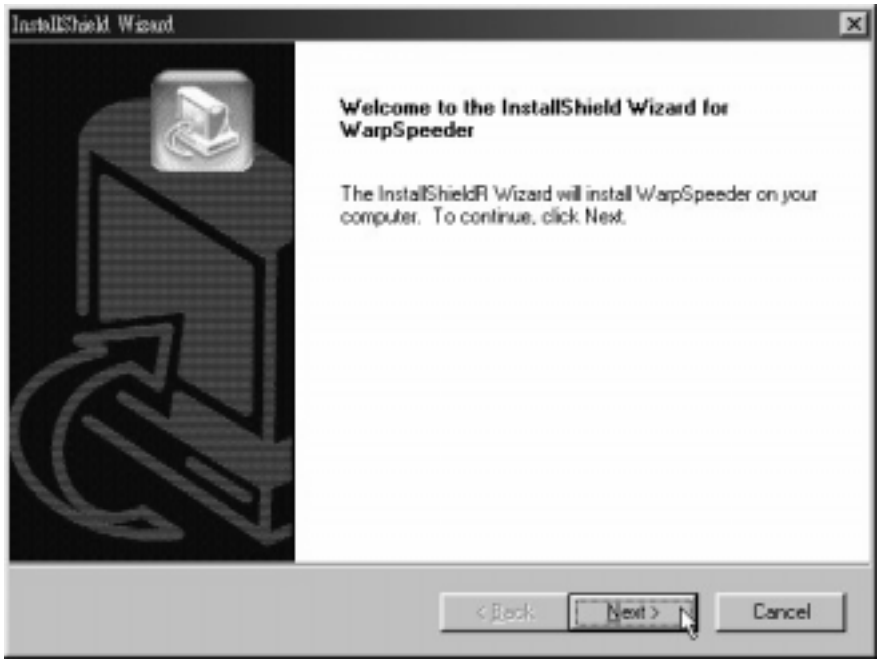
System Requirement

OS Support: Windows 98 SE, Windows Me, Windows 2000, Windows XP

DirectX: DirectX 8.1 or above. (The Windows XP operating system includes DirectX 8.1. If you use Windows XP, you do not need to install DirectX 8.1.)

Installation

1. Execute the setup execution file, and then the following dialog will pop up. Please click “Next” button and follow the default procedure to install.



2. When you see the following dialog in setup procedure, it means setup is completed. If the “Launch the WarpSpeeder Tray Utility” checkbox is checked, the Tray Icon utility and [WarpSpeeder™] utility will be automatically and immediately launched after you click “Finish” button.

Usage

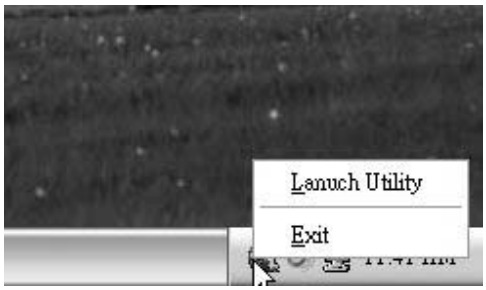
The following figures are just only for reference, the screen printed in this user manual will change according to your motherboard on hand.

[WarpSpeeder™] includes 1 tray icon and 5 panels:

1. Tray Icon:

Whenever the Tray Icon utility is launched, it will display a little tray icon on the right side of Windows Taskbar.

This utility is responsible for conveniently invoking [WarpSpeeder™] Utility. You can use the mouse by clicking the left button in order to invoke [WarpSpeeder™] directly from the little tray icon or you can right-click the little tray icon to pop up a popup menu as following figure. The "Launch Utility" item in the popup menu has the same function as mouse left-click on tray icon and "Exit" item will close Tray Icon utility if selected.



2. Main Panel

If you click the tray icon, [WarpSpeeder™] utility will be invoked. Please refer

do the following figure; the utility's first windowy ou will see is Main Panel.

Main Panel contains features as follows:

a. Display the CPU Speed, CPU external clock, Memory clock, AGP clock, and PCI clock information.

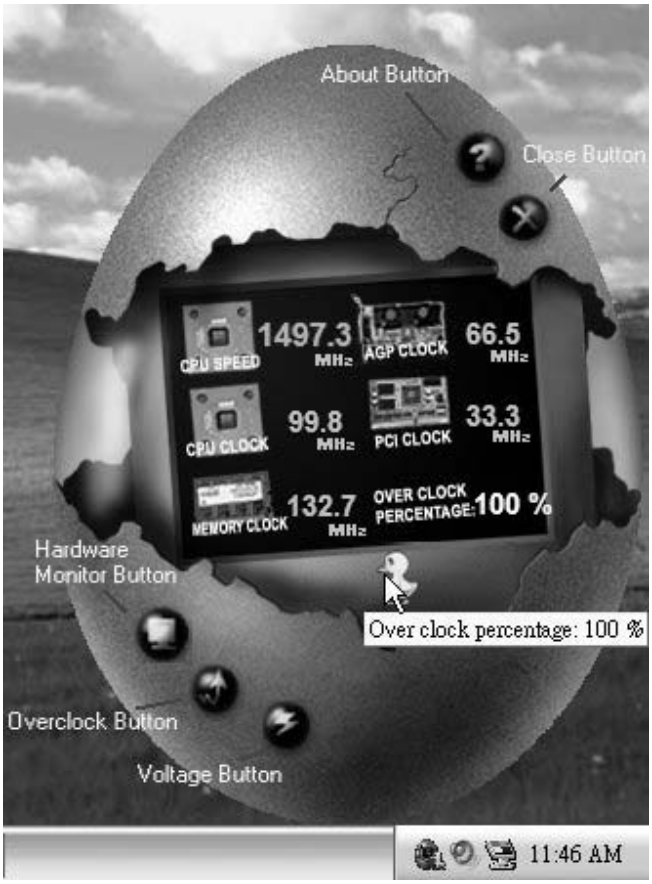
b. Contains About, Voltage, Overclock, and Hardware Monitor Buttons for invoking respective panels.

c. With a user-friendly Status Animation, it can represent 3 overclock percentage stages:

Duck walking => overclock percentage from 100% ~ 110 %

Duck running => overclock percentage from 110% ~ 120%

Duck burning => overclock percentage from 120% ~ above



3. Voltage Panel

Click the Voltage button in Main Panel, the button will be highlighted and the Voltage Panel will slide out to up as the following figure.

In this panel, you can decide to increase CPU core voltage and Memory voltage or not. The default setting is "No". If you want to get the best performance of overclocking, we recommend you click the option "Yes".

4. Overclock Panel

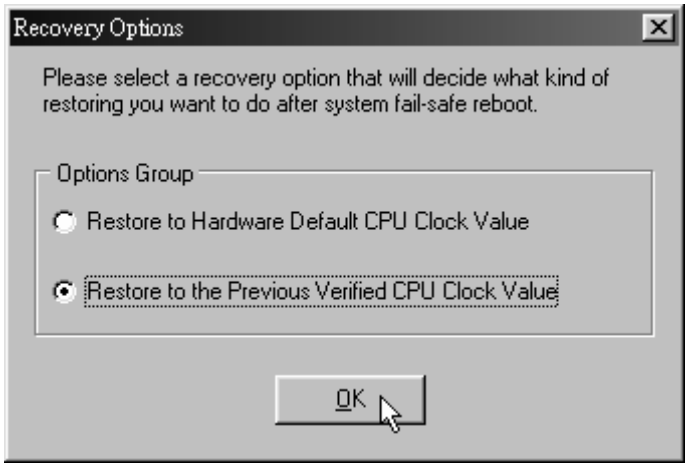
Click the Overclock button in Main Panel, the button will be highlighted and the Overclock Panel will slide out to left as the following figure.

Overclock Panel contains these features:

a. "–3MHz button", "-1MHz button", "+1MHz button", and "+3MHz button": provide user the ability to do real-time overclock adjustment.

Warning: Manually overclock is potentially dangerous, especially when the overclocking percentage is over 110 %. We strongly recommend you verify every speed you overclock by click the Verify button. Or, you can just click Auto overclock button and let [WarpSpeeder™] automatically gets the best result for you.

b. "Recovery Dialog button": Pop up the following dialog. Let user select a restoring way if system need to do a fail-safe reboot.



c. "Auto-overclock button": User can click this button and [WarpSpeeder™] will set the best and stable performance and frequency automatically. [WarpSpeeder™] utility will execute a series of testing until system fail. Then system will do fail-safe reboot by using Watchdog function. After reboot, the [WarpSpeeder™] utility will restore to the hardware default setting or load the verified best and stable frequency according to the Recovery Dialog's setting.

d. "Verify button": User can click this button and [WarpSpeeder™] will proceed a testing for current frequency. If the testing is ok, then the current frequency will be saved into system registry. If the testing fail, system will do a fail-safe rebooting. After reboot, the [WarpSpeeder™] utility will restore to the hardware default setting or load the verified best and stable frequency according to the Recovery Dialog's setting.

Note: Because the testing programs, invoked in Auto-overclock and Verify, include DirectDraw, Direct3D and DirectShow tests, the DirectX 8.1 or newer runtime library is required. And please make sure your display card's color depth is High color (16 bit) or True color(24/32 bit) that is required for Direct3D rendering.

5. Hardware Monitor Panel

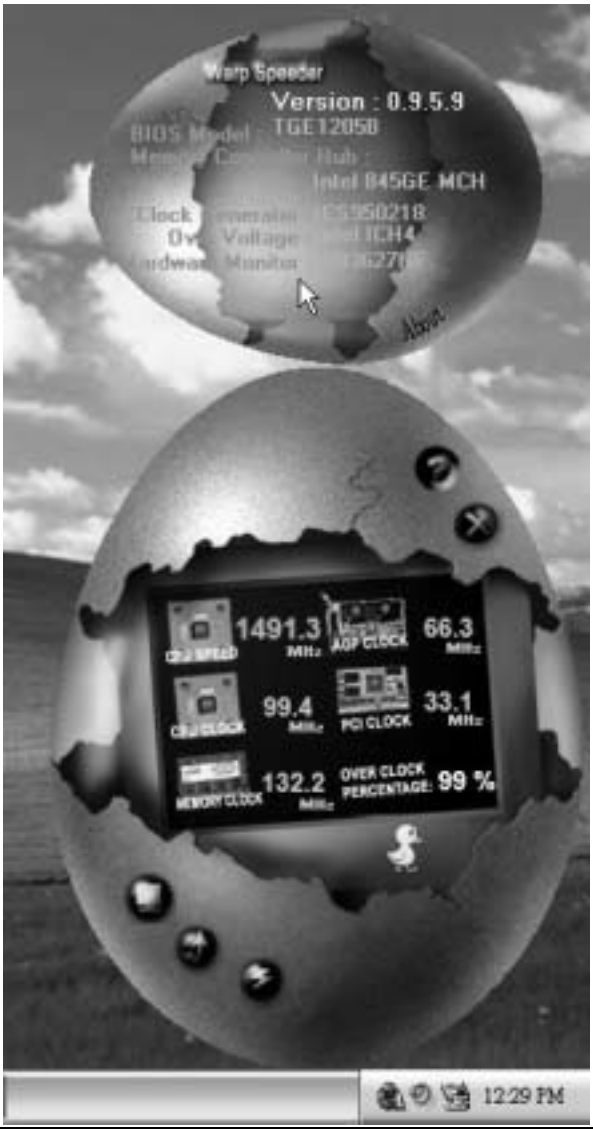
Click the Hardware Monitor button in Main Panel, the button will be highlighted and the Hardware Monitor panel will slide out to left as the following figure.

In this panel, you can get the real-time status information of your system. The information will be refreshed every 1 second.

6. About Panel

Click the About button in Main Panel, the button will be highlighted and the About Panel will slide out to up as the following figure.

In this panel, you can get model name and detail information in hints of all the chipset that are related to overclocking. You can also get the mainboard's BIOS model and the Version number of [WarpSpeeder™] utility.



Note: Because the overclock, overvoltage, and hardware monitor features are controlled by several separate chipset, [WarpSpeeder™] divide these features to separate panels. If one chipset is not on board, the correlative button in Main panel will be disabled, but will not interfere other panels' functions. This property can make [WarpSpeeder™] utility more robust.

Trouble Shooting

PROBABLE	SOLUTION
No power to the system at all Power light don't illuminate, fan inside power supply does not turn on. Indicator light on keyboard does not turn on	* Make sure power cable is securely plugged in * Replace cable * Contact technical support

PROBABLE	SOLUTION
System inoperative. Keyboard lights are on, power indicator lights are lit, hard drive is spinning.	* Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.

PROBABLE	SOLUTION
System does not boot from hard disk drive, can be booted from CD-ROM drive.	* Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup. * Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.

PROBABLE	SOLUTION
System only boots from CD-ROM. Hard disk can be read and applications can be used but booting from hard disk is impossible.	* Back up data and applications files. Reformat the hard drive. Re-install applications and data using backup disks.

PROBABLE	SOLUTION
Screen message says "Invalid Configuration" or "CMOS Failure."	* Review system's equipment . Make sure correct information is in setup.

PROBABLE	SOLUTION
Cannot boot system after installing second hard drive.	* Set master/slave jumpers correctly. * Run SETUP program and select correct drive types. Call drive manufacturers for compatibility with other drives.

Problemlösung

MÖGLICHE URSACHE	LÖSUNG
Das System hat keine Spannungsversorgung. Die Stromanzeige leuchtet nicht, der Lüfter im Inneren der Stromversorgung wird nicht eingeschaltet. Tastaturleuchten sind nicht an.	* Versichern Sie sich, dass das Stromkabel richtig angebracht ist * Ersetzen Sie das Stromkabel * Wenden Sie sich an Ihre Kundendienststelle

MÖGLICHE URSACHE	LÖSUNG
Das System funktioniert nicht. Die Tastaturleuchten sind an, die Stromanzeige leuchtet, die Festplatte dreht sich.	* Drücken Sie das DIMM-Modul bei gleichem Druck an beide Seiten, bis es einrastet.

MÖGLICHE URSACHE	LÖSUNG
Das System wird von der Festplatte nicht hochgefahren, vom CD-ROM-Treiber aber ja.	* Überprüfen Sie das Kabel zwischen Festplatte und Festplatten-Controller. Versichern Sie sich, dass beide Enden richtig angebracht sind; überprüfen Sie den Laufwerktyp in der standardmäßigen CMOS-Einrichtung. * Ein Backup der Festplatte ist sehr wichtig. Alle Festplatten können irgendwann beschädigt werden.

MÖGLICHE URSACHE	LÖSUNG
Das System wird nur von der CD-ROM hochgefahren. Die Festplatte wird gelesen und die Anwendungen sind funktionsfähig, aber es ist nicht möglich, das System von der Festplatte zu starten.	* Machen Sie eine Sicherungskopie von allen Daten und Anwendungsdateien. Formatieren Sie die Festplatte und reinstallieren Sie die Anwendungen und Daten mit Hilfe von Backup-Disks.

MÖGLICHE URSACHE	LÖSUNG
Auf dem Bildschirm erscheint die Meldung "Ungültige Konfiguration" oder "CMOS Fehler."	* Überprüfen Sie die Systemkomponenten und versichern Sie sich, das diese richtig eingerichtet sind.

MÖGLICHE URSACHE	LÖSUNG
Das System kann nach der Installation einer zweiten Festplatte nicht hochgefahren werden.	* Setzen Sie die Master/Slave-Jumper richtig ein. * Führen Sie das SETUP-Programm aus und wählen Sie die richtigen Laufwerktypen. Wenden Sie sich an den Laufwerkhersteller, um die Kompatibilität mit anderen Laufwerken zu überprüfen.

Dépannage

PROBLÈME	SOLUTION
Pas d'alimentation au système. Les voyants lumineux ne s'allument pas, le ventilateur à l'intérieur du bloc d'alimentation ne se met pas en marche. Le voyant du clavier ne s'allume pas	* Assurez-vous que le câble d'alimentation est bien branché * Remplacez le câble * Contactez le service d'assistance technique.

PROBLÈME	SOLUTION
Le système ne fonctionne pas. Les voyants du clavier sont allumés, les voyants de l'alimentation aussi, le disque dur tourne.	* En exerçant une pression uniforme sur les deux extrémités du DIMM, poussez le module vers le bas jusqu'à ce qu'il s'enclenche.

PROBLÈME	SOLUTION
Le système ne se réinitialise pas du disque dur, réinitialisation possible depuis le lecteur CD-ROM.	* Vérifiez le câble du disque à la carte du contrôleur de disque. Assurez-vous que les deux extrémités sont bien branchées ; vérifiez le type de lecteur dans la configuration standard de CMOS. * Il est très important d'effectuer des sauvegardes du disque dur. Les disques durs peuvent tomber en panne à n'importe quel moment.

PROBLÈME	SOLUTION
Le système ne se réinitialise que depuis le CD-ROM. Le disque dur peut être lu et les applications sont utilisables mais il est impossible d'effectuer de réinitialisation depuis le disque dur.	* Effectuez une sauvegarde des fichiers des données et d'application. Reformatez le disque dur. Ré-installez les applications et les données sauvegardées sur les disques de secours.

PROBLÈME	SOLUTION
Un message s'affiche indiquant que la configuration n'est pas valide ou qu'il y a une panne du CMOS.	* Vérifiez l'équipement du système. Assurez-vous que les informations de la configuration sont correctes.

PROBLÈME	SOLUTION
Impossible de réinitialiser le système après l'installation d'un deuxième disque dur.	* Réglez les cavaliers maître/esclave correctement. * Exécutez le programme SETUP et sélectionnez les types de lecteur. Contactez les fabricants pour toute question de compatibilité avec les autres disques.

11/28/2003

M7NCD BIOS Setup

BIOS Setup

Introduction

This manual discussed Award™ Setup program built into the ROM BIOS. The Setup program allows users 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 AMD® processor input/output system. The BIOS provides critical low-level support for standard devices such as disk drives and serial and parallel ports.

Adding important has customized the Award BIOS™, but nonstandard, features such as virus and password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

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

Plug and Play Support

These 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.

APM Support

These 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.

PCI Bus Support

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

DRAM Support

DDR SDRAM (Double Data Rate Synchronous DRAM) are supported.

Supported CPUs

This AWARD BIOS supports the AMD® CPU.

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.

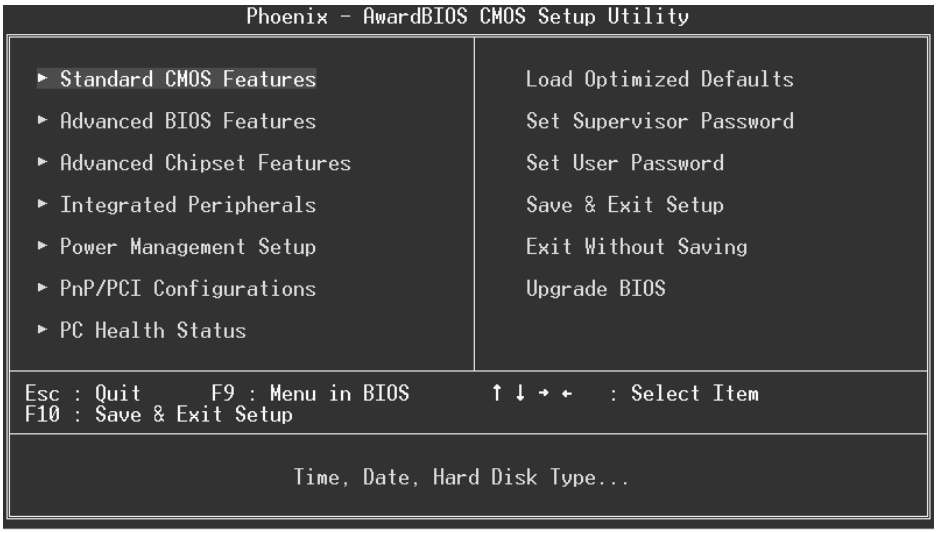
Keystroke	Function
Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item on the left (menu bar)
Right arrow	Move to the item on the right (menu bar)
Move Enter	Move to the item you desired
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric 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
F7 key	Load the optimized defaults
F10 key	Save all the CMOS changes and exit

1 Main Menu

Once you enter Award BIOS™ CMOS Setup Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup functions. 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**) is just for reference, please refer to the BIOS installed on board, for update information.

■ **Figure 1. Main Menu**



Standard CMOS Features

This submenu contains industry standard configurable options.

Advanced BIOS Features

This submenu allows you to configure enhanced features of the BIOS.

Advanced Chipset Features

This submenu allows you to configure special chipset features.

Integrated Peripherals

This submenu allows you to configure certain IDE hard drive options and Programmed Input/ Output features.

Power Management Setup

This submenu allows you to configure the power management features.

PnP/PCI Configurations

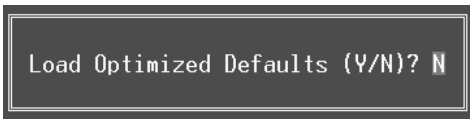
This submenu allows you to configure certain "Plug and Play" and PCI options.

PC Health Status

This submenu allows you to monitor the hardware of your system.

Load Optimized Defaults

This selection allows you to reload the BIOS when the system is having problems particularly with the boot sequence. These configurations are factory settings optimized for this system. A confirmation message will be displayed before defaults are set.



Set Supervisor Password

Setting the supervisor password will prohibit everyone except the supervisor from making changes using the CMOS Setup Utility. You will be prompted with to enter a password.

Set User Password

If the Supervisor Password is not set, then the User Password will function in the same way as the Supervisor Password. If the Supervisor Password is set and the User Password is set, the "User" will only be able to view configurations but will not be able to change them.

Save & Exit Setup

Save all configuration changes to CMOS(memory) and exit setup. Confirmation message will be displayed before proceeding.

Exit Without Saving

Abandon all changes made during the current session and exit setup. confirmation message will be displayed before proceeding.

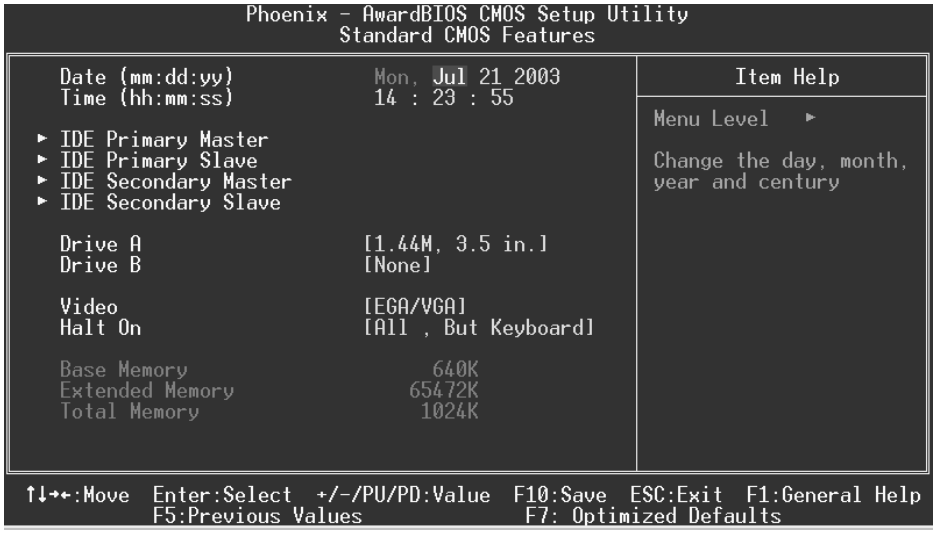
Upgrade BIOS

This submenu allows you to upgrade bios.

2 Standard CMOS Features

The items in Standard CMOS Setup Menu are 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 Setup**



Main Menu Selections

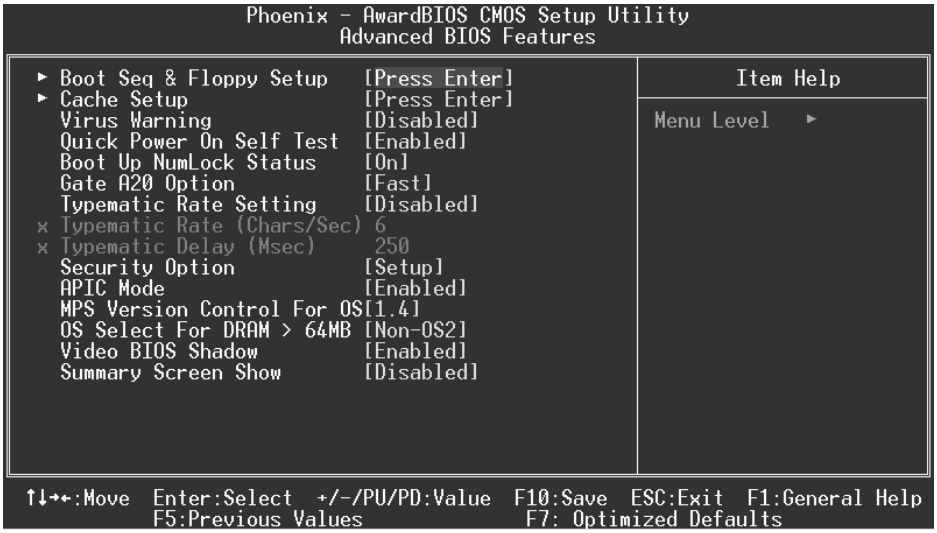
This table shows the selections that you can make on the Main Menu.

Item	Options	Description
Date	mm : dd : yy	Set the system date. Note that the 'Day' automatically changes when you set the date.
Time	hh : mm : ss	Set the system internal clock.
IDE Primary Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options
IDE Primary Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Secondary Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Secondary Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
Drive A Drive B	360K, 5.25 in 1.2M, 5.25 in 720K, 3.5 in 1.44M, 3.5 in 2.88M, 3.5 in None	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 you.
Base Memory	N/A	Displays the amount of conventional memory detected during boot up.
Extended Memory	N/A	Displays the amount of extended memory detected during boot up.
Total Memory	N/A	Displays the total memory available in the system.

3 Advanced BIOS Features

■ **Figure 3. Advanced BIOS Setup**



Boot Seq & Floppy Setup

First/ Second/ Third/ Boot Other Device
These BIOS attempt to load the operating system from the device in the sequence selected in these items.
The Choices: Floppy, LS120, HDD-0, SCSI, CDROM, HDD-1, HDD-2, HDD-3, ZIP100, USB-FDD, USB-ZIP, USB-CDROM, USB-HDD, LAN, HPT370, Disabled, Enabled.

Swap Floppy Drive
For systems with two floppy drives, this option allows you to swap logical drive assignments.
The Choices: Disabled (default), Enabled.

Boot Up Floppy Seek
Enabling this option will test the floppy drives to determine if they have 40 or 80 tracks. Disabling this option reduces the time it takes to boot-up.
The Choices: Enabled, **Disabled** (default).

Cache Setup

External Cache
This option you to enable or disable "Level 2" secondary cache on the CPU, which may improve performance.
The Choices:

Enabled (default)	Enable cache.
Disabled	Disable cache.

Virus Warning

This option allows you to choose the Virus Warning feature that is used to protect the IDE Hard Disk boot sector. If this function is enabled and an attempt is made to write to the boot sector, BIOS will display a warning message on the screen and sound an alarm beep.

Disabled (default)	Virus protection is disabled.
Enabled	Virus protection is activated.

Quick Power On Self Test

Enabling this option will cause an abridged version of the Power On Self-Test (POST) to execute after you power up the computer.

Enabled (default)	Enable quick POST.
Disabled	Normal POST.

Boot Up NumLock Status

Selects the NumLock. State after power on.

On (default)	Numpad is number keys.
Off	Numpad is arrow keys.

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

When a key is held down, the keystroke will repeat at a rate determined by the keyboard controller. When enabled, the typematic rate and typematic delay can be configured.
The Choices: Disabled (default), Enabled.

Typematic Rate (Chars/Sec)

Sets the rate at which a keystroke is repeated when you hold the key down.
The Choices: 6 (default)**,** 8,10,12,15,20,24,30.

Typematic Delay (Msec)

Sets the delay time after the key is held down before it begins to repeat the keystroke.

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

Security Option

This option will enable only individuals with passwords to bring the system online and/or to use the CMOS Setup Utility.

System	A password is required for the system to boot and is also required to access the Setup Utility.
Setup (default)	A password is required to access the Setup Utility only.

This will only apply if passwords are set from the Setup main menu.

APIC Mode

By selecting Enabled enables ACPI device mode reporting from the BIOS to the operating system.

The Choices: Enabled (default), Disabled.

MPS Version Control For OS

The BIOS supports version 1.1 and 1.4 of the Intel multiprocessor specification. Select version supported by the operation system running on this computer.

The Choices: 1.4 (default), 1.1.

OS Select For DRAM > 64MB

A choice other than Non-OS2 is only used for OS2 systems with memory exceeding 64MB.

The Choices: Non-OS2 (default), OS2.

Video BIOS Shadow

Determines whether video BIOS will be copied to RAM for faster execution.

The Choices:

Enabled (default)	Optional ROM is enabled.
Disabled	Optional ROM is disabled.

Summary Screen Show

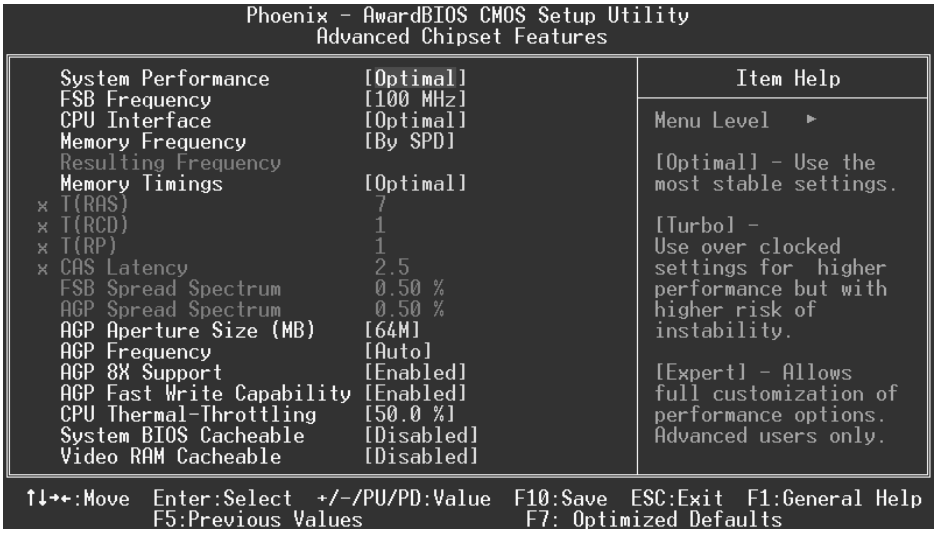
This item allows you to enable/ disable display the Summary Screen Show.

The Choices: Disabled (default), Enabled.

4 Advanced Chipset Features

This submenu allows you to configure the specific features of the chipset installed on your system. This chipset manage bus speeds and access to system memory resources, such as DRAM. It also coordinates communications with the PCI bus. The default settings that came with your system have been optimized and therefore should not be changed unless you are suspicious that the settings have been changed incorrectly.

■ **Figure 4. Advanced Chipset Setup**



System Performance

Optimal (Default)
This item allows you to use the most stable settings.

Expert
This item allows full customization of performance. Only for advanced users.

Turbo
This item allows you to use over clocked settings for higher performance but with higher risk of inestability.

FSB Frequency

This item allows you to select the FSB Frequency.
The Choices: 100MHz (Default).

CPU Interface

Optimal (Default)
This item allows you to use the most stable CPU/ FSB parameters.

Aggressive
This item allows you to use overclocked CPU/ FSB parameters.

Memory Frequency

Select "Auto" for best performance.
The Choices: By SPD (Default), 50%, 60%, 66%, 75%, 80%, 83%, 100%, 120%, 125%, 133%, 150%, 166%, 200%, Auto.

Memory Timings

Optimal (Default)
This item allows you to use the most stable settings.

Expert
This item allows you to enter timings manually.

Turbo

T(RAS)

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 7 (Default), 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15.

T(RCD)

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 1 (Default), 2, 3, 4, 5, 6, 7.

T (RP)

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 1 (Default), 2, 3, 4, 5, 6, 7.

CAS Latency

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 2.5 (Default), 2.0, 3.0.

FSB Spread Spectrum

This item allows you to select the FSB Spread Spectrum.
The Choices: 0.50% (Default).

AGP Spread Spectrum

This item allows you to select the AGP Spread Spectrum.
The Choices: 0.5% (Default).

AGP Aperture Size (MB)

Select the size of the Accelerated Graphics Port (AGP) aperture. The apertures is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation.
The Choices: 64 (default), 4, 8, 16, 32, 128, 256.

AGP Frequency

This item allows you to select the AGP Frequency.
The Choices: Auto (Default), 50MHz, 66MHz, 67MHz, 68MHz, 69MHz, 70MHz, 71MHz, 72MHz, 73MHz, 74MHz, 75MHz, 76MHz, 77MHz, 78MHz, 79MHz, 80MHz, 81MHz, 82MHz, 83MHz, 84MHz, 85MHz, 86MHz, 87MHz, 90MHz, 93MHz, 95MHz, 97MHz, 100MHz.

AGP 8X Support

This item allows you to enable or disable AGP 8X Support.
The Choices: Enabled (Default), Disabled.

AGP Fast Write Capability

This item allows you Enabled or Disabled AGP Fast Write Capability.
The Choices: Enabled (Default), Disabled.

CPU Thermal Throttling

This item allows you to select the CPU Thermal Throttling.
The Choices: 50% (Default), Disabled, 87.5%, 75%, 62.5%, 37.5%, 25%, 12.5%.

System BIOS Cacheable

Selecting Enabled allows you caching of the system BIOS ROM at F0000h~FFFFFh, resulting a better system performance. However, if any program writes to this memory area, a system error may result.
The Choices: Enabled, **Disabled** (default).

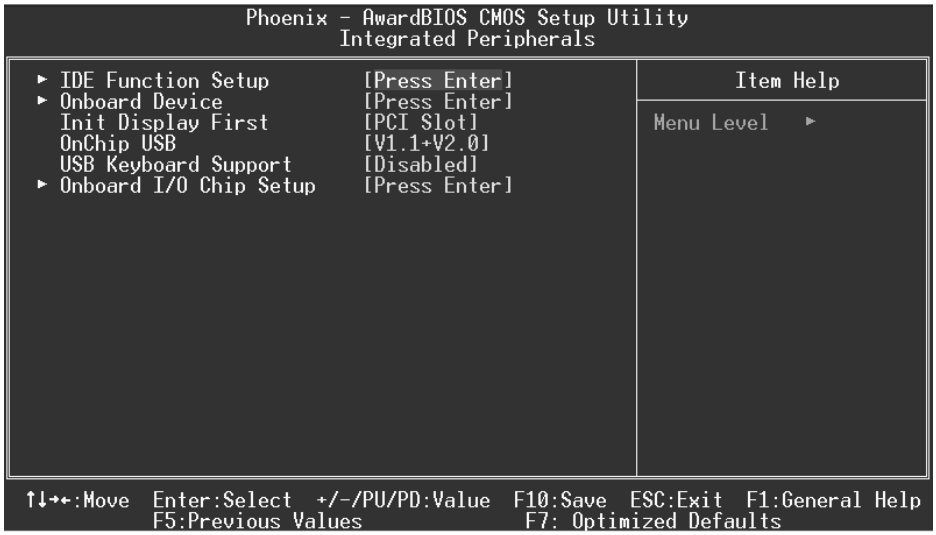
Video RAM Cacheable

Enabling this option allows caching of the video RAM, resulting a better system performance. However, if any program writes to this memory area, a system error may result.

The Choices: Disabled (default), Enabled.

5 Integrated Peripherals

■ **Figure 5. Integrated Peripherals**



IDE Function Setup

The chipset contains a PCI IDE interface with support for two IDE channels.
Select "Enabled" to activate the first and / or second IDE interface. If you install a primary and / or secondary add-in IDE interface, select "Disabled" to deactivate an interface. If you highlight the literal "Press Enter" next to the "Onchip IDE Control" label and then press the enter key, it will take you a submenu with the following options:

OnChip IDE Channel 0/1
The motherboard chipset contains a PCI IDE interface with support for two IDE channels. Select "Enabled" to activate the first and/or second IDE interface. Select "Disabled" to deactivate an interface if you are going to install a primary and/or secondary add-in IDE interface.
The Choices: Enabled (default), Disabled.

Primary / Secondary Master / Slave PIO
The IDE PIO (Programmed Input / Output) fields let you set a PIO mode (0-4) for each of the IDE devices that the onboard IDE interface supports. Modes 0 through 4 provides successively increased performance. In Auto mode, the system automatically determines the best mode for each device.
The Choices: Auto (default), Mode0, Mode1, Mode2, Mode3, Mode4.

IDE Primary / Secondary Master / Slave UDMA
Ultra DMA/100 functionality can be implemented if it is supported by the IDE hard drives in your system. As well, your operating environment requires 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/100, select Auto to enable BIOS support.
The Choices: Auto (default), Disabled.

IDE Prefetch Mode
The "onboard" IDE drive interfaces supports IDE prefetching for faster drive access. If the interface does not support prefetching. If you install a primary and/or secondary add-in IDE interface, set this option to "Disabled".
The Choices: Enabled (default), Disabled.

IDE HDD Block Mode
Block mode is also called block transfer, multiple commands, or multiple sector read / write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read / write per sector where the drive can support.
The Choices: Enabled (default), Disabled.

Onboard Device

AC97 Audio
This item allows you to decide to enable/ disable to support AC97 Audio.
The Choices: Auto (default), Disabled.

MC97 Modem
This item allows you to decide to enable/ disable to support AC97 Modem.
The Choices: Auto (default), Disabled.

MAC LAN (nVIDIA)
This item allows you to select MAC LAN.
The Choices: Auto (Default), Disabled.

Machine MAC (NV) Address
This item allows you to enable or disable Machine MAC Address.
The Choices: Disabled (Default), Enabled.

MAC (NV) Address Input

Onchip 1394 Chip
This item allows you to set the Onchip 1394 Chip.
The Choices: Auto (Default), Disabled.

Init Display First

This item allows you to decide to active whether PCI Slot or on-chip VGA first.
The Choices: Onboard/AGP, **PCI Slot** (default).

OnChip USB

This item allows you to set the onchip USB.
The Choices: V1.1+V2.0 (default), Disabled, V1.1.

USB Keyboard Support

The default value is Disabled.

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

Onboard I/O Chip Setup

Power On Function
This item allows you to choose the powen on function.
The Choices: Button Only (default), Password, Hot Key, Mouse Left, Mouse Right, Any Key, Keyboard 98.

KB Power on Password
Input password and press Enter to set the Keyboard power on password .

HOT Key power ON
Input password and press Enter to set the Keyboard power on password .
The Choices: Ctrl-F1(default) , Ctrl-F2 , Ctrl-F3 , Ctrl-F4 , Ctrl-F5, Ctrl-F6 , Ctrl-F7 , Ctrl-F8 , Ctrl-F9, Ctrl-F10 , Ctrl-F11 , Ctrl-F12 .

Onboard FDC Controller
Select Enabled if your system has a floppy disk controller (FDC) installed on the system board and you wish to use it. If install and FDC or the system has no floppy drive, select Disabled in this field.
The Choices: Enabled (default), Disabled.

Onboard Serial Port 1
Select an address and corresponding interrupt for the first and second serial ports.
The Choices: 3F8/IRQ4 (default), Disabled, Auto, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3.

Onboard Serial Port2
Select an address and corresponding interrupt for the first and second serial ports.
The Choices: Disabled, 3F8/IRQ4, **2F8/IRQ3** (default), 3E8/IRQ4, 2E8/IRQ3, Auto.

UART Mode Select
This item allows you to determine which Infra Red (IR) function of onboard I/O chip.
The Choices: Normal (default), ASKIR, **IrDA.**

RxD, TxD Active
This item allows you to determine which Infrared (IR) function of onboard I/O chip.
The Choices: Hi / Lo (default), Hi / Hi, Lo / Hi, Lo / Lo.

IR Transmission Delay
This item allows you to enable/disable IR transmission delay.
The Choices: Enabled (default), Disabled.

UR2 Duplex Mode
Select the value required by the IR device connected to the IR port. Full-duplex mode permits simultaneous two-direction transmission. Half-duplex mode permits transmission in one direction only at a time.
The Choices: Half (default), Full.

Use IR Pins
Consult your IR peripheral documentation to select the correct setting of the TxD and RxD signals.
The Choices: IR-Rx2Tx2 (default), RxD2, TxD2.

Onboard Parallel Port
This item allows you to determine access onboard parallel port controller with which I/O address.
The Choices: 378/IRQ7 (default), 278/IRQ5, 3BC/IRQ7, Disabled.

Parallel Port Mode
The default value is SPP.

SPP (default)	Using Parallel port as Standard Printer 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.

EPP Mode Select
Select EPP port type 1.7 or 1.9.
The Choices: EPP 1.7(default), EPP1.9.

ECP Mode Use DMA
Select a DMA Channel for the port.
The Choices: 3 (default), 1.

Game Port Address
Game Port I/O Address.
The Choices: 201 (default), 209, Disabled.

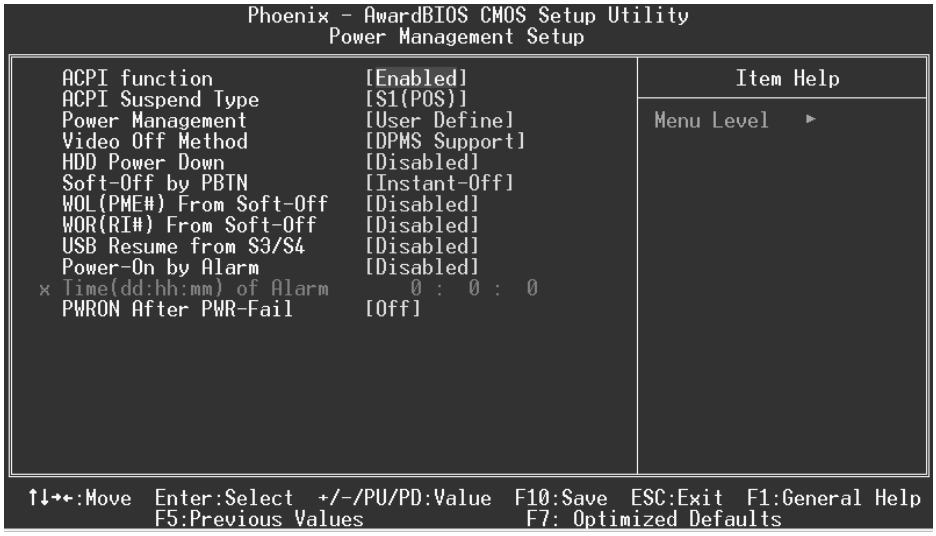
Midi Port Address
Midi Port Base I/O Address.
The Choices: 330 (default), 300, 290, Disabled.

Midi Port IRQ
This determines the IRQ in which the Midi Port can use.
The Choices: 10 (default), 5

6 Power Management Setup

The Power Management Setup Menu allows you to configure your system to utilize energy conservation and power up/power down features.

- **Figure 6. Power Management Setup**



ACPI function

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

The Choices: Enabled (default), Disabled.

ACPI Suspend Type

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

The Choices: S1 (POS) (default)		Power on Suspend
	S3 (STR)	Suspend to RAM
	S1 & S3	POS+STR

Power Management

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

1.HDD Power Down.

2.Suspend Mode.

There are four options of Power Management, three of which have fixed mode settings

Min. Power Saving

Minimum power management.
Suspend Mode = 1 hr.
HDD Power Down = 15 min

Max. Power Saving

Maximum power management only available for sl CPU's.
Suspend Mode = 1 min.
HDD Power Down = 1 min.

User Defined (default)

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.

Video Off Method

This option determines the manner in which the monitor is goes blank.

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.

HDD Power Down

When enabled, the hard disk drive will power down and after a set time of system inactivity. All other devices remain active.
The Choices: Disabled (default), 1 Min, 2 Min, 3 Min, 4 Min, 5 Min, 6 Min, 7 Min,8 Min, 9 Min, 10 Min, 11 Min, 12 Min, 13 Min, 14 Min, 15Min.

Soft-Off by PBTN

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

WOL (PME#) From Soft-Off

This item allows you to enable or disable the WOL (PME#) From Soft-Off.
The Choices: Disabled (Default), Enabled.

WOR (RI#) From Soft-Off

This item allows you to enable or disable the WOR (RI#) From Soft-Off.
The Choices: Disabled (Default), Enabled.

USB Resume from S3/S4

This item allows you to enable or disable S3 Resume by USB (Win98).
The Choices: Disabled (Default), Enabled.

Power-On by Alarm

This item allows you to enable or disabled power on by alarm.
The Choices: Disabled (Default), Enabled.

PWRON After PWR-Fail

This field determines the action the system will automatically take when power is restored to a system that had lost power previously without any subsequent manual intervention. There are 3 sources that provide current to the CMOS area that retains these Power-On instructions; the motherboard battery (3V), the Power Supply (5VSB), and the Power Supply (3.3V). While AC is not supplying power, the motherboard uses the motherboard battery (3V). If AC power is supplied and the Power Supply is not turned on, 5VSB from the Power Supply is used. When the Power Supply is eventually turned on 3.3V from the Power Supply will be used.
There are 3 options: "Former-Sts", "On", "Off".

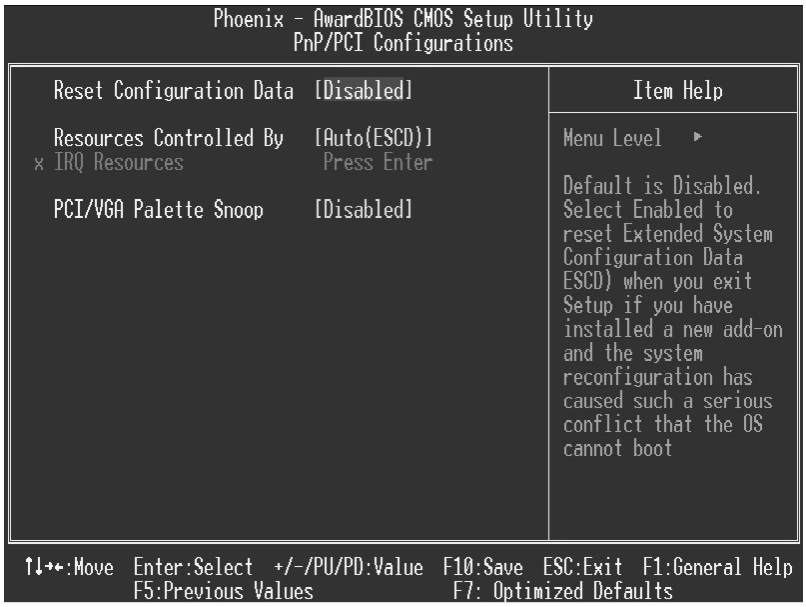
"Former-Sts"	Means to maintain the last status of the CMOS when AC power is lost.
"On"	Means always set CMOS to the "On" status when AC power is lost
"Off" (default)	Means always set CMOS to the "Off" status when AC power is lost.

For example: If set to "Former-Sts" and AC power is lost when system is live, then after AC power is restored, the system will automatically power on. If AC power is lost when system is not live, system will remain powered off.

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 uses when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

■ **Figure 7. PnP/PCI Configurations**



Reset Configuration Data

The system BIOS supports the PnP feature which requires the system to record which resources are assigned and protects 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 in the system BIOS. If the Disabled (default) option is chosen, the system's ESCD will update only when the new configuration varies from the last one. If the Enabled option is chosen, the system is forced to update ESCDs and then is automatically set to the "Disabled" mode.

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

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.

The Choices: Disabled (default), Enabled.

Resources Controlled By

By Choosing "**Auto(ESCD)**" (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

This submenu will allow you to assign each system interrupt a type, depending on the type of device using the interrupt. When you press the "Press Enter" tag, you will be directed to a submenu that will allow you to configure the system interrupts. This is only configurable when "Resources Controlled By" is set to "Manual".

IRQ-3	assigned to	PCI Device
IRQ-4	assigned to	PCI Device
IRQ-5	assigned to	PCI Device
IRQ-7	assigned to	PCI Device
IRQ-9	assigned to	PCI Device
IRQ-10	assigned to	PCI Device
IRQ-11	assigned to	PCI Device
IRQ-12	assigned to	PCI Device
IRQ-14	assigned to	PCI Device
IRQ-15	assigned to	PCI Device

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.

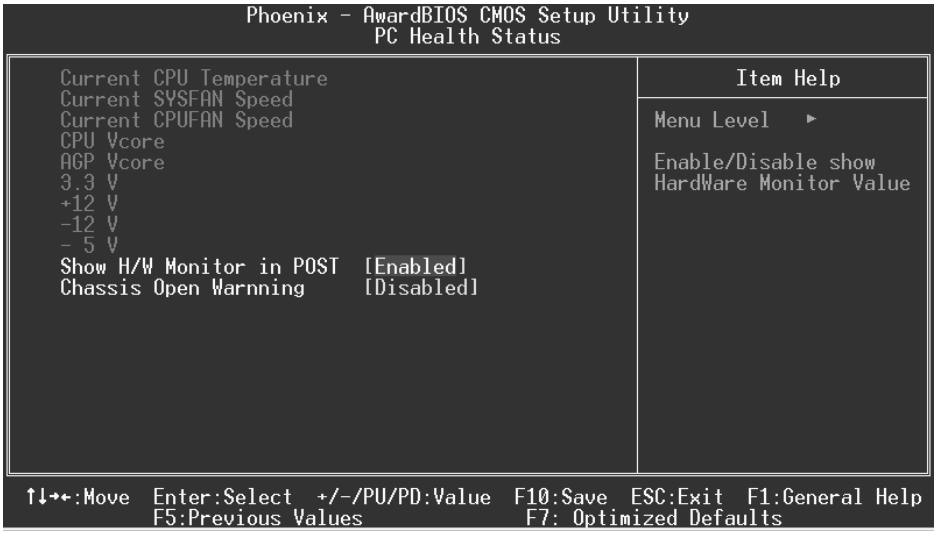
However, the color information coming from the VGA controller is drawn from the palette table inside the VGA controller to generate the proper colors, and the graphic controller needs to know what is in the palette of the VGA controller. To do this, the non-VGA graphic controller watches for the Write access to the VGA palette and registers the snoop data. In PCI based systems, where the VGA controller is on the PCI bus and a non-VGA graphic controller is on an ISA bus, 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)	Disables the function.
Enabled	Enables the function.

8 PC Health Status

■ **Figure 8. PC Health Status**



Current CPU Temperature

Show you the current CPU temperature.

Current SYSFAN Speed

This field displays the current SYSFAN speed.

Current CPUFAN Speed

This field displays the current CPUFAN speed.

CPU Vcore/ AGP Vcore/ +3.3V/ +12V/ -12V/ -5V

Detect the system's voltage status automatically.

Show H/W Monitor in POST

If you computer contain a monitoring system, it will show PC health status during POST stage. The item offers several delay time to select you want.
The Choices: Enabled (default), Disabled.

Chassis Open Warning

This item allows you to enable or disable Chassis Open Warning beep.
The Choices: Disabled (Default), Enabled.