

Item Checklist

Completely check your package. If you discover damaged or missing items, contact your retailer.

- WinneX 1 mainboard
- QDI Mainboard Utility CD-ROM
- I/O shield
- 1 IDE ribbon cable
- 1 floppy ribbon cable
- 1 9-pin ribbon cable with bracket for serial port 2 (manufacturing option)
- User' s manual

Notice

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If you require further information, please visit our web-site: "www.qdigrp.com".

Declaration of conformity



QUANTUM DESIGNS(HK) LTD.

**5/F Somerset House, TaiKoo Place 979 Kings Road,
Quarry Bay, Hong Kong**

declares that the product

**Mainboard
WinneX 1**

is in conformity with

(reference to the specification under which conformity is declared in
accordance with 89/336 EEC-EMC Directive)

- EN 55022 Limits and methods of measurements of radio disturbance characteristics of information technology equipment
- EN 50081-1 Generic emission standard Part 1:
Residential, commercial and light industry
- EN 50082-1 Generic immunity standard Part 1:
Residential, commercial and light industry

European Representative:

QDI COMPUTER (UK) LTD

QDI COMPUTER (SCANDINAVIA) A/S

QDI SYSTEM HANDEL GMBH

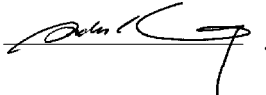
QDI COMPUTER (NETHERLANDS) B. V.

QDI COMPUTER (FRANCE) SARL

QDI COMPUTER HANDELS GMBH

QDI COMPUTER (ESPANA) S.A.

QDI COMPUTER (SWEDEN) AB

Signature :  . Place / Date : HONG KONG/1999

Printed Name : Anders Cheung Position/ Title : President

Declaration of conformity

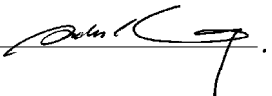


Trade Name: QDI Computer (U . S . A .) Inc.
Model Name: WinneX 1
Responsible Party: QDI Computer (U . S . A .) Inc.
Address: 41456 Christy Street
Fremont, CA 94538
Telephone: (510) 668-4933
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Equipment Classification: FCC Class B Subassembly
Type of Product: Mainboard
Manufacturer: Quantum Designs (HK) Inc.
Address: 5/F, Somerset House, TaiKoo Place
979 Kings Road, Quarry Bay, HONG
KONG

Supplementary Information:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Signature :  Date : 1999



CONTENTS

SpeedEasy Quick Setup(English)	S.1
SpeedEasy Schnell-Installation(Deutsch)	S.3
Fácil Y Veloz Rápida Instalación(Español)	S.5
Facilité de vitesse Initialisation(Français)	S.7
Setup Della Scheda SpeedEasy(Italiano)	S.9
SpeedEasy Ć Ę Ů Ț Ö Å Ÿ Œ Ä ĩ ȧ	S.11
SpeedEasy Ć Ę Ů Ț Ö Å Ÿ Œ ĩ ȧ	S.13
1. Introduction	1
Overview	1
Flexibility in Designing Cost-effective System	1
Key Features	2
Introduction to New Features	4
2. Installation Instructions	7
External Connectors	7
PS/2 Keyboard & PS/2 Mouse Connector	7
USB1 & USB2	7
Parallel Port Connector and Serial Port Connector	7
Line-in jack, Microphone-in jack, Speaker-out jack and MIDI/Joystick connector	8
ATX Power Supply Connector & Power Switch	8
Hard Disk LED Connector (HDLED)	9
Reset Switch (RESET)	9
Speaker Connector (SPEAKER)	9
Power LED Connector (PWR_LED)	9
Key-Lock Connector (KEY_L)	9
ACPI LED Connector (GREEN_LED)	9
Hardware Green Connector (SLEEP)	9
Infrared Header (IrDA)	10
Fan Connector (CPUFAN & CHSFAN)	10
Wake-Up On LAN (WOL)	11
Wake-Up On Internal Modem (WOM)	11
Digital Audio Connector (CDLIN1)	11



CONTENTS

4 pin SMBus Connector(SMBUS)	12
Sound Connector (PC-PCI)	12
Chassis Security Switch (CHSSEC)	12
Audio/Modem Riser Interface Connector (AMR)	13
Expansion Slots & I/O Ports description	13
Jumper Settings	13
Clear CMOS	14
Enable/Disable on-board audio (JSD)	14
Enable keyboard password power-on function(JKB)	14
Connector PCI 3.3VSB Voltage Jumper (JSB)	15
Overclocking Jumper Setting (JFS0, JFS1)	15
FWH Protection Jumper (JAV)	16
Installation of All Drivers	17
PC-cillin 98	18
QDI ManageEasy	18
3. BIOS Description	19
Utility Support	19
AWDFLASH.EXE	19
AWARD BIOS Description	20
Entering Setup	20
Load Optimized Defaults	20
Standard CMOS Features Setup	20
CPU SpeedEasy Setup	24
Advanced BIOS Features Setup	25
Advanced Chipset Features Setup	27
Power Management Setup	28
PNP/PCI Configuration Setup	30
Integrated Peripherals	31
PC Health Status	33
Password Setting	35
Boot with BIOS defaults	35
Appendix A QDI Mainboard Utility CD-ROM	37



Caution

Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, especially the SDRAM memory, otherwise your mainboard or the system memory might be seriously damaged.

The power status of the system is indicated by the red LED in the center of the mainboard.



SpeedEasy Quick Setup

Procedures :

1. Correctly insert the Intel®Celeron™PPGA processor.
2. Plug in other configurations and restore the system.
3. Switch on power to the system and press the key to enter BIOS Setup.
4. Enter "CPU SpeedEasy Setup" menu to set up the CPU speed.

Note: If you do not set the CPU speed, your system will run at the default setting (200MHz for processor with 100MHz host bus speed, 133MHz for processor with 66MHz host bus speed, for bus ratio locked processor, run its real speed.

5. Save and exit BIOS Setup, your system will now boot successfully.



CPU SpeedEasy Setup Menu

Select <CPU SpeedEasy Setup> item from the main menu and enter the sub-menu:

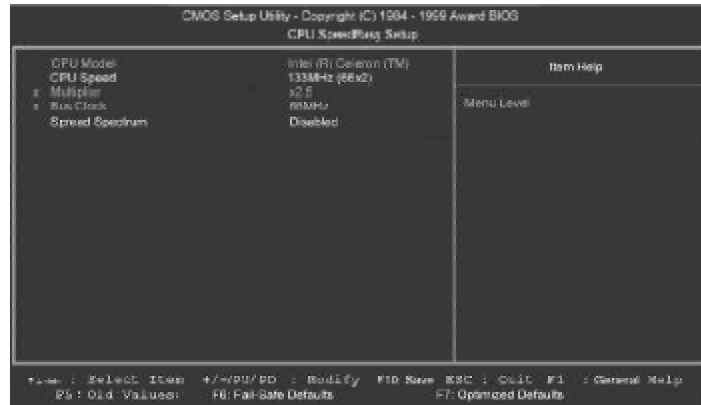


Figure - 1 CPU SpeedEasy Setup Menu

BIOS provides you with a set of basic values for your processor selection instead of the jumper settings. The processor speed can be manually selected on the “CPU SpeedEasy SETUP” menu screen.



Warning:

Do not set CPU frequency higher than its working frequency. If you do, we will not be responsible for any damages caused.



Schnell-Installation durch SpeedEasy

Vorgehensweise der Installation:

1. Legen sie die Intel®Celeron™PPGA im Slot 1 mit Hilfe der mitgelieferten Halterung.
2. Verwenden Sie das System mit den weiteren erforderlichen Computerkomponenten
3. Drücken Sie die Taste <Entf > und schalten Sie das System an um das BIOS-setup zu gelangen.
4. Steigen Sie in das Menü "CPU SpeedEasy Setup" ein, um die Geschwindigkeit einzustellen.

AHTNG Falls die akfrequenz der CPU nicht einbetriebsbereit ist, ändern Sie die CPU (00 Hz für die CPU mit 10 MHz Standardwert, 13 MHz für die CPU mit 6 MHz Standardwert).

4. Beachten Sie die in der Anleitung des IO, die die aufrichtige Taktzeit zuaktive.



CPU SpeedEasy Installationsmenü

Wählen Sie < CPU SpeedEasy Setup> aus dem Hauptmenü und öffnen Sie das untergeordnete Menü

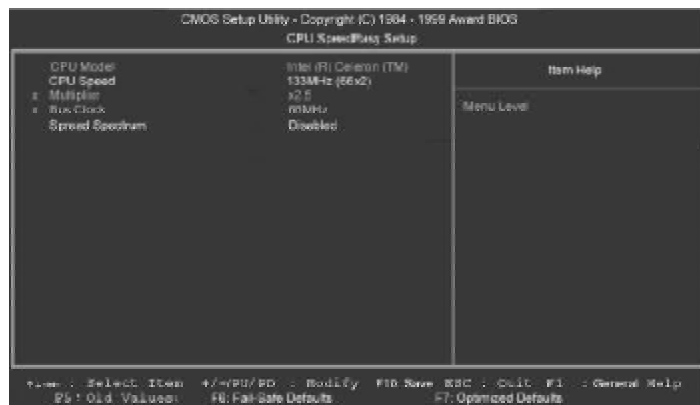


Abb. 1 CPU SpeedEasy Setup menü

Das BIOS stellt Ihnen eine Reihe von Grundeinstellungen für Ihren CPU zur Verfügung, anstelle von "jumper setting". Sie können manuell die Geschwindigkeit des CPU innerhalb des "CPU SpeedEasy SETUP" einstellen

⚠️ Warnung:

Bitte Setzen Sie die Taktfrequenz der CPU nicht höher als die tatsächliche freigegebene Taktfrequenz, ansonsten kann QDI für rechtliche Ansprüche nicht herangezogen werden.



SpeedEasy Instalación rápida

Procedimiento:

1. Introduzca correctamente el Intel®Celeron™PPGA.
2. Finalize el proceso de ensamblaje de su equipo.
3. Presione la tecla <Supr> y encienda el sistema, para entrar en BIOS.
4. Entre al menu "CPU SpeedEasy Setup" para establecer la velocidad de su CPU.

Nota: Si no establece la velocidad del CPU, su sistema funcionará a la velocidad minima por defecto (200MHz para CPU con velocidad de bus de 100MHz, 133MHz para CPU con velocidad de bus de 66MHz)

5. Salve y salga de BIOS, luego su sistema arrancará a la velocidad por Ud. seleccionada.



Menu del CPU SpeedEasy

Seleccione el ítem <CPU SpeedEasy Setup> desde el menú principal, y entre en el submenú:

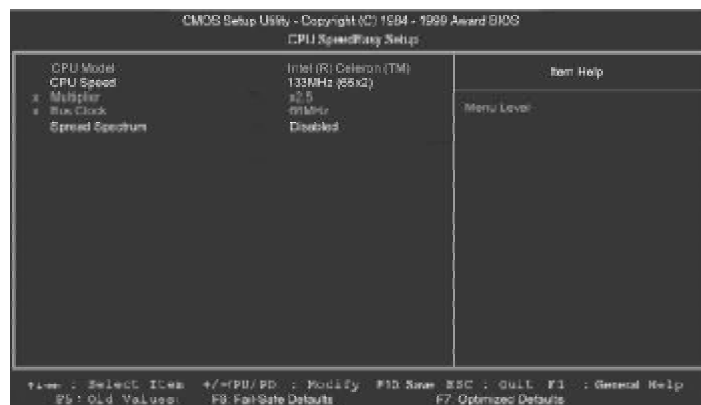


Figura-1 Menu del CPU SpeedEasy Setup

BIOS le proporcionará unos valores básicos para la elección de su CPU, en vez de tener que configurar jumpers. Ud. puede seleccionar manualmente la velocidad de CPU en el menú "CPU SpeedEasy Setup".



Aviso

No es recomendable seleccionar una frecuencia de trabajo superior a la a la cual esta diseñada su CPU. De otra manera, no seremos responsables de los daños que esto pudiera ocasionar.



Facilité de vitesse Initialisation

Procédure:

1. Ins, rez le Intel®Celeron™PPGA correctement.
2. Connectez les autres configurations et restaurez le systšme.
3. Appuyez sur la touche et mettez le systšme sous tension pour entrer dans l' initialisation BIOS.
4. Entrez le menu "CPU SpeedEasy Setup" (=initialisation de la facilit, de vitesse dans l' unit, centrale) pour d, terminer la vitesse de l' unite centrale.

Note: Si vous ne déterminez pas la vitesse de votre unité centrale, votre système fonctionnera par défaut (200MHz pour le CPU avec vitesse bus d' hôte de 100MHz, 133MHz pour le CPU avec vitesse bus d' hôte de 66MHz).

5. Sauvegardez et sortez de la position BIOS. Le système pourra alors démarrer avec le succès auquel vous vous attendez.



Menu d'initialisation de "SpeedEasy" dans l'unité centrale.

Sélectionnez la rubrique <CPU SpeedEasy Setup> dans le menu principal et entrez le sous-menu:

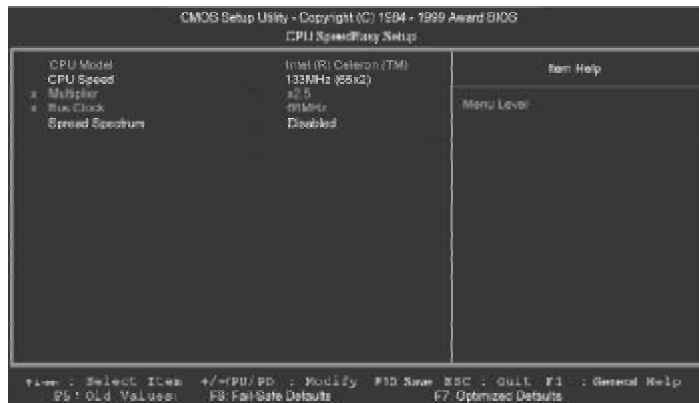


Figure-1 Menu d'initialisation de "SpeedEasy" dans l'unité centrale

BIOS fournira un jeu de valeurs de base pour votre lection de CPU au lieu de positions cavaliers. Vous pouvez sélectionner manuellement la vitesse de CPU dans l'affichage du menu "CPU SpeedEasy SETUP".



Avertissement:

Ne vous laissez pas aller à installer une fréquence à l'unité centrale supérieure à sa fréquence de travail. Sinon nous délinquons toutes responsabilités en ce qui concerne les dommages qui en résulteraient.



SETUP DELLA SCHEDA SPEEDEASY

Procedura di installazione:

1. Inserite il microprocessore Intel®Celeron™PPGA come da istruzioni.
2. Modificate la configurazione del computer e ripristinate il sistema.
3. Premete il tasto e accendete il computer per entrare nel setup BIOS.
4. Entrate nel menu "CPU SpeedEasy Setup" per regolare la velocità del microprocessore. ¹

Nota: se non regolate la velocità del microprocessore, il sistema funzionerà con le regolazioni standard (Microprocessore da 200MHz con velocità di "host bus" da 100MHz e microprocessore da 133MHz con velocità di "host bus" da 66MHz).

5. Salvate e uscite dal Setup BIOS, e fate ripartire il computer.

*CPU= microprocessore



Menu del Setup del Microprocessore SpeedEasy

Selezionare <CPU SpeedEasy Setup> dal menu principale ed entrare nel seguente sottomenu:

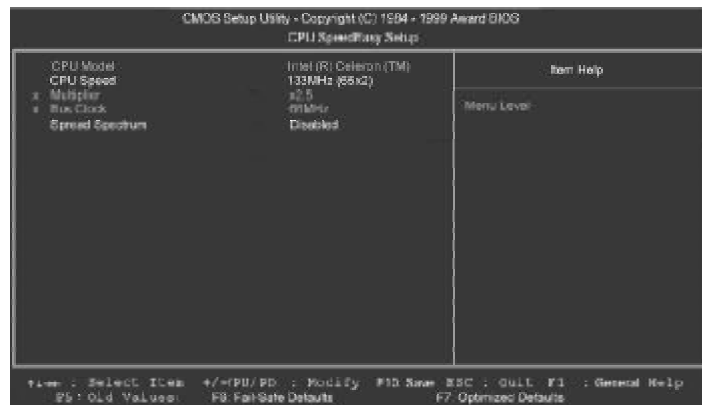


Figure -1 Menu del Setup del Microprocessore SpeedEasy

Il sistema BIOS Vi fornirà una serie di valori base per la selezione del microprocessore al posto della regolazione jumper (dell'accoppiamento). Potete selezionare manualmente la velocità del microprocessore sulla schermata "CPU SpeedEasy SETUP".



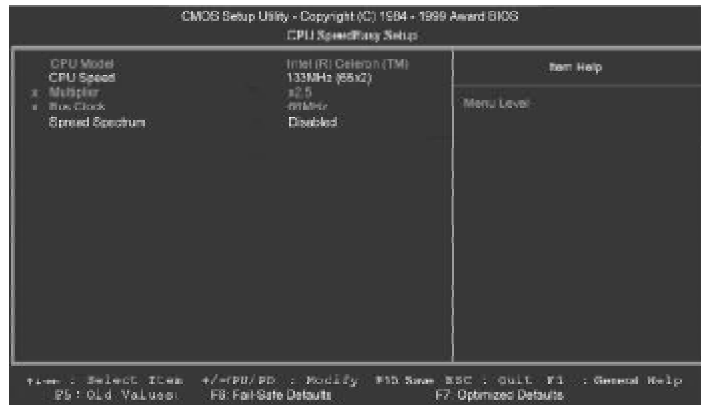
Avvertenza:

non dovete regolare la frequenza del microprocessore più alta di quella predisposta, altrimenti la casa produttrice non si farà carico di eventuali danni al microprocessore.



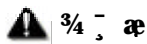
SpeedEasy

» CPU SpeedEasy Setup



» SpeedEasy

BIOS » CPU SpeedEasy Setup



» CPU SpeedEasy Setup



Chapter 1

Introduction

Overview

The WinneX 1 green mainboard utilizes the Intel first generation integrated graphics chipset —Intel®810 Chipset, providing a fully compatible, high performance and cost-effective PC/microATX platform. The new integrated technologies, together with the software configurable AC' 97 audio and modem system give customers an advanced, multimedia solution at an extremely low price. It provides 66/100 MHz system bus support for all Intel®Celeron™PPGA 370 processors. 100MHz SDRAMs are supported up to 512MB. It also provides advanced features such as Wake-on-LAN, Wake-on-Modem and Keyboard Password Power-on functions. Suspend to RAM, the optimal implementation of the Advanced Configuration and Power Interface (ACPI) specification, makes the PC's power consumption drop to the lowest possible level and enable quick wakeup. ManageEasy, our system management application is also supplied to enable remote monitoring and configuration of the system.

Flexibility in Designing Cost-effective System

The Intel®810 Chipset is a high-integration chipset which consists of a Graphics and Memory Controller Hub (GMCH) Host Bridge and an I/O Controller Hub (ICH) Bridge. There are two versions of the GMCH (GMCH0/GMCH) and two versions of ICH (ICH0/ICH). The Intel®810 Chipset System provides added flexibility in designing cost-effective solutions by using different combinations of the GMCH and ICH.

The following describes the three kinds of Intel®810 chipset combination and their added features. Please identify which kind of mainboard you purchased.

- 1. Intel®810 DC-100:** GMCH (Intel®82810-DC100) + ICH (Intel®82801AA)
Added features:
 - Includes 4MB, 32-bit 100MHz Display Cache.
 - Supports Ultra ATA/66.
- 2. Intel®810:** GMCH0 (Intel®82810) + ICH (Intel®82801AA)
Added features:
 - Supports Ultra ATA/66.
- 3. Intel®810L:** GMCH0 (Intel®82810) + ICH0 (Intel®82801AB)
This is the basic system combination.

All information contained in this manual applies to all three kinds of system, unless otherwise specified.



Key Features

Form factor

- MicroATX form factor of 244mm x 194mm.

Microprocessor

- Supports all Intel®Celeron™PPGA processors at 300/300A/333/366/400/433/466/500MHz and future processors.
- Supports 66/100MHz host bus speed.
- The CPU core voltage adjustable from 1.3V to 3.5V automatically through onboard switching voltage regulator with VID(Voltage ID).
- Provides onboard 1.5V, 1.8V, 2.5V and 3.3V standby regulator.

System memory

- Provides two 168 pin 3.3V unbuffered DIMM sockets.
- Supports 64-bit wide DIMM modules with 100MHz SDRAM devices.
- Supports 8MB to 256MB SDRAM using 16Mb/64Mb technology.
- Supports 512MB SDRAM using 128Mb technology.
- Supports suspend to RAM.

Onboard IDE

- Supports two PCI PIO and Bus Master IDE ports.
- Two fast IDE interfaces supporting four IDE devices including IDE hard disks and CD-ROM drives.
- Supports up to PIO Mode 4 timing.
- Supports "Ultra ATA/33" Synchronous DMA modes, transferring data up to 33MB/s.
- Supports "Ultra ATA/66" Synchronous DMA modes, transferring data up to 66MB/s. (for Intel®810 and Intel®810 DC-100 only)
- Integrated 16x32bit buffer for IDE PCI Burst Transfers.

Onboard I/O

- Winbond W83627HF LPC I/O chip.
- One floppy port supporting up to two 3.5" or 5.25" floppy drives with 360K/720K/1.2M/1.44M/2.88M format.
- Two high speed 16550 compatible UART (COM1/COM2/COM3/COM4 selective) with 16-byte send/receive FIFOs.
- USB host interface supporting 2 USB ports.
- One joystick port.



- Infrared interface.
- All I/O ports can be enabled/disabled in the BIOS setup.

Onchip AGP

- Integrated 2D/3D Graphics Controller.
- Integrated H/W Motion Compensation Engine.
- Provides 4MB SDRAM Display Cache (for Intel®810 DC-100 only).

Onboard Sound

- Intel AC' 97 2.1 Specification Compliant.
- 18bit stereo codec.
- Multiple stereo input mixer.
- Mono and stereo volume control.
- Provides onboard Line-in Jack, Microphone-in Jack, Speaker-out Jack and MIDI/ Joystick Connector.

Advanced features

- PCI 2.2 Specification Compliant.
- Provides Trend ChipAwayVirus®On Guard.
- Supports Windows 95/98 software power-down.
- Supports Wake-on-LAN and Wake-on-Modem.
- Supports Keyboard Password Power-on function.
- Onboard I/O Winbond 83627HF supports system monitoring (monitors CPU and system temperatures, system voltages, chassis intrusion and fan speed).
- Supports management applications such as LDCM (LANDesk Client Manager) or ManageEasy. (manufacturing option)
- Provides onboard 3.3V regulator to support ATX power supply without 3.3V output.
- System status resumes after AC power failure.
- Supports QDI' s innovation such as SpeedEasy.
- Protects the system BIOS from being attacked by severe virus such as CIH.
- Supports suspend to RAM.

BIOS

- Licensed advanced AWARD BIOS, supports flash ROM with 4Mb memory size, plug and play ready.
- Supports IDE CD-ROM or SCSI boot up.



Green function

- Supports ACPI (Advanced Configuration and Power Interface) and ODPM (OS Directed Power Management).
- Supports four ACPI power states: Full-on, Stop Grant, Suspend to RAM, and soft-off.

Expansion slots

- 3 PCI slots.
- 1 AMR.

Introduction to New Features

FWH(Firmware Hub) Protection

The BIOS of the mainboard is inside the FWH. Some severe viruses such as CIH virus are so dangerous that it may overwrite the BIOS of the mainboard. If the BIOS has been damaged, the system will be unable to boot. We provide the following solution which protects the system BIOS from being attacked by such viruses.

Here are two choices which implements this function.

1. Set the jumper (JAV) as closed, the BIOS can not be overwritten.
2. Set the jumper (JAV) as open, meanwhile set "Flash Write Protect" as Enabled in AWARD BIOS CMOS Setup. In this way, the BIOS can not be overwritten, but the DMI information can be updated.

Refer to page 16 for detailed information on jumper setting, and page 26 for related BIOS setting.

Suspend to RAM

Suspend to RAM is a cost-effective, optimal implementation of the Advanced Configuration and Power Interface (ACPI) 1.0 specification, which makes a PC's power consumption drop to the lowest possible level and enables quick wakeup. When the system is in Suspend-to-RAM status, the system context is maintained in system memory, the system consumes only a small fraction of the power used for full operation. Instead of shutting down the system to save power when not in use and then having to reboot later, Suspend-to-RAM solution enables the system to quickly wake up, restoring all applications and features, enabling operation in a few seconds.

To implement this function, the following requirements are essential:

1. Power supply requirements: The current of 5VSB line of the power supply should be more than 0.75A.



2. The BIOS option “ACPI function” should be enabled, and “ACPI Suspend Type” should be set as S3 in AWARD BIOS CMOS setup. Refer to page 28 for detailed information.
3. An ACPI-enabled operating system such as Windows 98 or Windows 2000 family is needed. In order to install ACPI-enabled Windows 98 operating system, the setup command should be typed as shown below:

```
D:\SETUP /P J
```

For the operating system already installed, you can enable ACPI function through the Microsoft HCT (Hardware Compatibility Test) installation process.
4. Two ways to enter Suspend-to-RAM status:
 - Under Windows 98/Windows 2000, clicking Start–Shut down–Standby enables the system to enter Suspend-to-RAM status.
 - Under Windows 98/Windows 2000, from Power Management Properties in Control Panel, set the continuous idle time before suspend, the system will enter Suspend-to-RAM status when time out.

The same ways used to power up the system can be used to wake up the system from Suspend-to-RAM status. For example, pushing the power button, through the Wake-on-LAN, Wake-on-Modem function or RTC Alarm. If the keyboard password power-on function is enabled, the keyboard password should be used to wake up the system instead of pushing the power button.

Ultra ATA/66 (for Intel®810 and Intel®810 DC-100 only)

According to the previous ATA/IDE hard drive data transfer protocol, the signaling way to send data was in synchronous strobe mode by using the rising edge of the strobe signal. The Ultra ATA/33 protocol doubles the burst transfer rate from 16.6MB/s to 33.3MB/s, by using both the rising and falling edges of the strobe signal, this time Ultra ATA/66 doubles the Ultra ATA burst transfer rate once again (from 33.3MB/s to 66.6MB/s) by reducing setup times and increasing the strobe rate. The faster strobe rate increases EMI, which cannot be eliminated by the standard 40-pin cable used by ATA and Ultra ATA. To eliminate this increase in EMI, a new 40-pin, 80-conductor cable is needed. This cable adds 40 additional ground lines between each of the original 40 ground and signal lines. The additional 40 lines help shield the signal from EMI, reduce crosstalk and improve signal integrity.



Ultra ATA/33 introduced CRC (Cyclical Redundancy Check), a new feature of IDE that provides data integrity and reliability. Ultra ATA/66 uses the same process. The CRC value is calculated by both the host and the hard drive. After the host-request data is sent, the host sends its CRC to the hard drive, and the hard drive compares it to its own CRC value. If the hard drive reports errors to the host, then the host retries the command containing the CRC error.

Ultra ATA/66 technology increases both performance and data integrity. However there are basically five requirements for your system to run in Ultra ATA/66 mode:

1. The system board must have a special Ultra ATA/66 detect circuit, such as WinneX 1 mainboard.
2. The system BIOS must also support Ultra ATA/66.
3. The operating system must be capable of DMA transfers. Win95 (OSR2) and Win98 are capable.
4. An Ultra ATA/66 capable, 40-pin, 80-conductor cable is required.
5. Ultra ATA/66 compatible IDE device such as a hard drive or CD-ROM drive.



Chapter 2

Installation Instructions

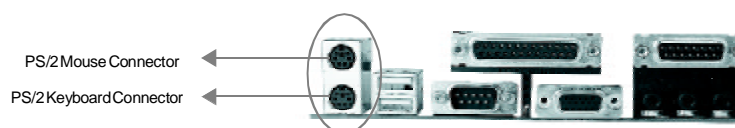
This section covers External Connectors and Jumper Settings. Refer to the mainboard layout chart for locations of all jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pin assignments for your reference. The particular state of the jumpers, connectors and ports are illustrated in the following figures. Before setting the jumpers or inserting these connectors, please pay attention to the directions.

Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, otherwise your mainboard and expansion cards might be seriously damaged.

External Connectors

PS/2 Keyboard Connector, PS/2 Mouse Connector

PS/2 keyboard connector is for the usage of PS/2 keyboard. If using a standard AT size keyboard, an adapter should be used to fit this connector. PS/2 mouse connector is for the usage of PS/2 mouse.



USB1, USB2

Two USB ports are available for connecting USB devices.

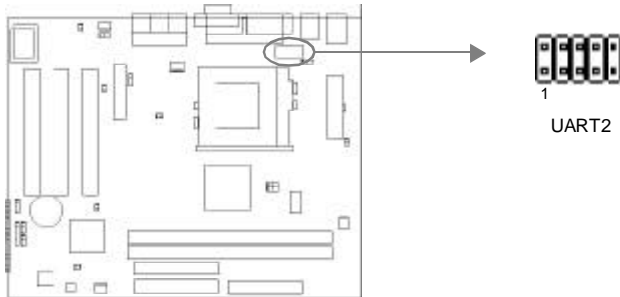


Parallel Port Connector and Serial Port Connector (UART1, UART2)

The parallel port connector can be connected to a parallel device such as a printer, while the serial port connectors can be connected to serial port devices such as a serial port mouse. You can enable/disable them and choose the IRQ or I/O address in "Integrated Peripherals" from AWARD BIOS SETUP.



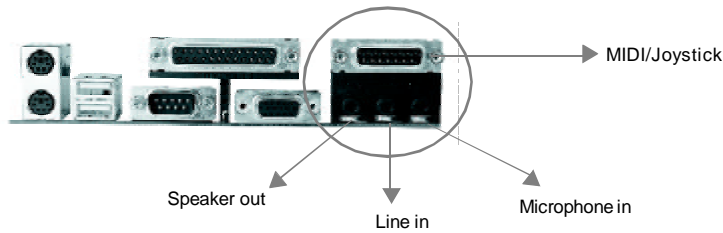
The serial port UART2 is not available on the back panel. Therefore, we provide a 9-pin ribbon cable with bracket for UART2 port. (manufacturing option)



Line-in jack, Microphone-in jack, Speaker-out jack and MIDI/Joystick connector

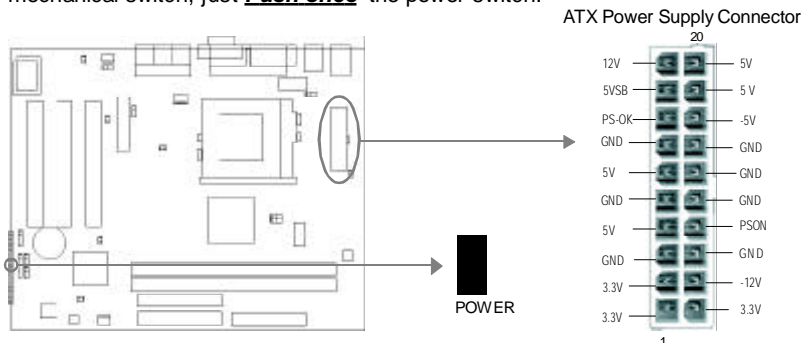
The Line-in jack can be connected to devices such as a cassette or minidisc player for playback or recording. The Microphone-in jack can be connected to a microphone for voice input. The Speaker-out jack allows you to connect speakers or headphones for audio output from the internal amplifier.

The MIDI/Joystick connector allows you to connect a game joystick or a MIDI device.



ATX Power Supply Connector & Power Switch (POWER)

Be sure to connect the power supply plug to this connector in its proper orientation. The power switch (POWER) should be connected to a momentary switch. When powering up your system, first turn on the mechanical switch of the power supply (if one is provided), then push once the power switch. When powering off the system, you needn't turn off the mechanical switch, just ***Push once*** the power switch.



**Note:**

If you change “Soft-off by PWR-BTTN” from default “Instant-off” to “Delay 4 Secs” in the “POWER MANAGEMENT SETUP” section of the BIOS, the power switch should be pressed for more than 4 seconds before the system powers down.

Hard Disk LED Connector (HDLED)

The connector connects to the case's IDE indicator LED indicating the activity status of IDE hard disk. The connector has an orientation. If one way doesn't work, try the other way.

Reset Switch (RESET)

The connector connects to the case's reset switch. Press the switch once, the system resets. However, press the switch for more than 4 seconds, the system will be powered off.

Speaker Connector (SPEAKER)

The connector can be connected to the speaker on the case.

Power LED Connector (PWR_LED)

The power LED has two status. When the system is in power-off status, the LED is off. When the system is powered up, the LED is on. The connector has an orientation.

Key-Lock Connector (KEY_L)

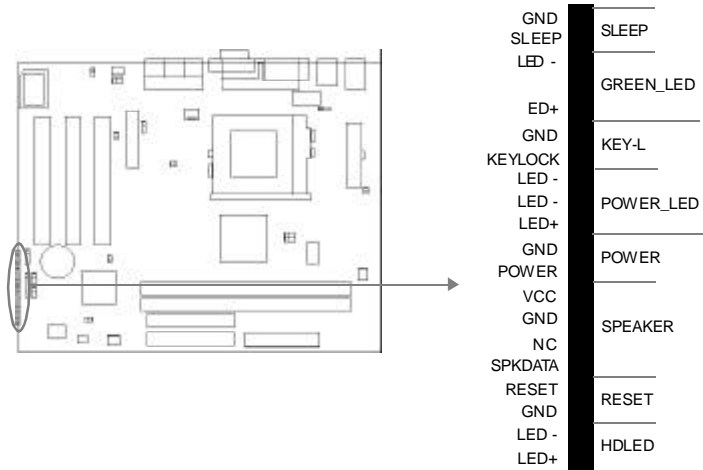
The connector can be connected to the keyboard lock switch on the case for locking the keyboard.

ACPI LED Connector (GREEN_LED)

The ACPI LED has three status. When the system is in power-off status, the LED is off. When the system is powered up, the LED is on. When the system enters suspend mode, the LED will flash. The connector has an orientation.

Hardware Green Connector (SLEEP)

Push once the switch connected to this header, the system enters suspend mode.



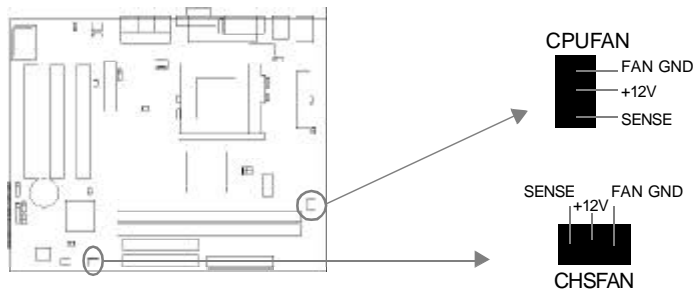
Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. When using this function, configure the settings for IR Address, IR Mode and IR IRQ from the “INTEGRATED PERIPHERALS” section of the BIOS.



Fan Connector (CPUFAN, CHSFAN)

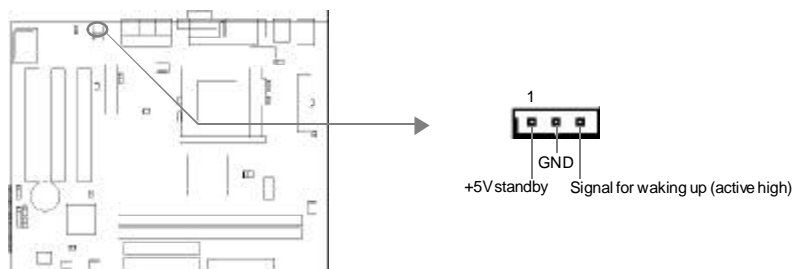
The fan speed of these two fans can be detected and viewed in “PC Health” section of the BIOS. These two fans will be automatically turned off after the system enters suspend mode.





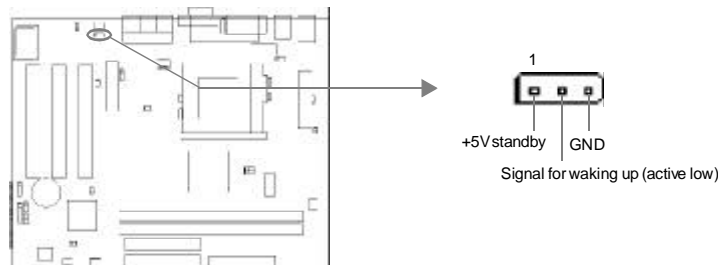
Wake-Up On LAN (WOL)

Through the Wake-Up On LAN function, a wake event occurring from the network can wake up the system. If this function is to be used, please be sure an ATX 2.01 power supply of which 5VSB line is capable of delivering 720mA, and a LAN adapter which supports this function is used. Then connect this header to the relevant connector on the LAN adapter, set "Wake-Up by LAN/Ring" as Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.



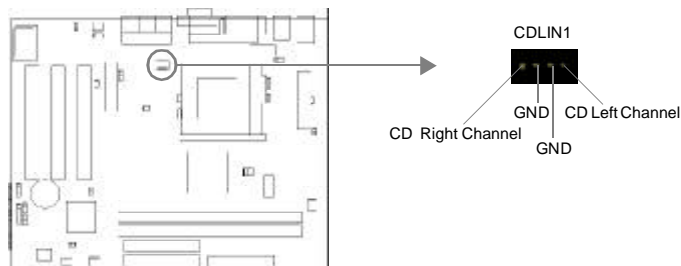
Wake-Up On Internal Modem (WOM)

Through the Wake-Up On Internal Modem function, the system which is in the power-off status can be powered on by a ring signal received from the internal modem. If this function is to be used, be sure an internal modem card which supports this function is used. Then connect this header to the relevant connector on the modem card, set "Wake-Up by LAN/Ring" to Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.



Digital Audio Connector (CDLIN1)

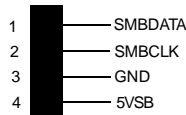
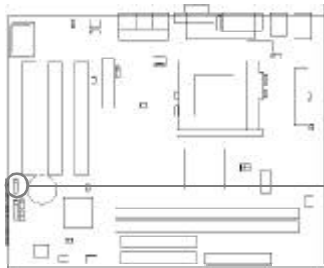
CDLIN1 is a Sony standard CD audio connector, it can be connected to a CD-ROM drive through a CD audio cable.





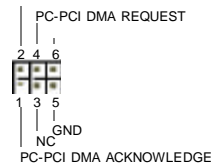
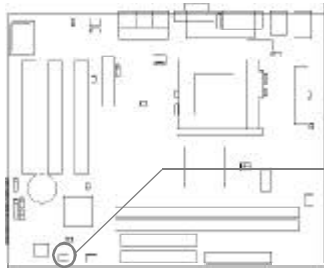
4 pin SMBus Connector(SMBUS)

This connector allows you to connect SMBus devices. SMBus devices communicate by means of the SMBus with an SMBus host and/or other SMBus devices. The SMBus or System Management Bus is a serial implementation of an I²C bus, which is a multi-master bus, however, multiple hosts can be connected to the same bus and each can act as a master bit at any time.



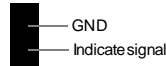
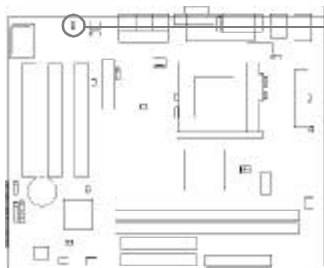
6 pin PCI connector (P -P I)

This connector provides bidirectional data on a PCI bus and a data transfer rate of up to 133 MB/s.



Chassis security lock (C -S S C)

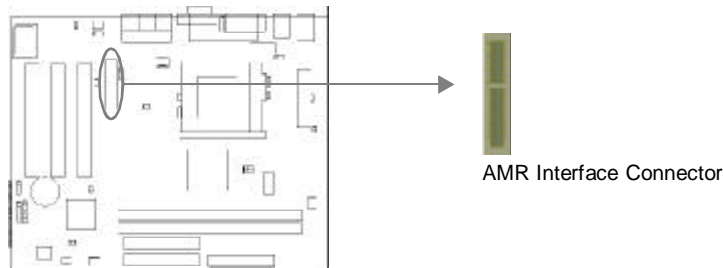
This connector is used to connect the chassis security lock. This system can be locked when the lock is inserted. If the lock is inserted, the system will not boot and the hard drive will not spin. You can remove the lock from the Q-Lock as follows.





Audio Modem Riser Interface Connector (AMR)




The AMR Interface Connector is the interface between the mainboard and the Audio/Modem Riser card. The connector provides all necessary signals which supports several different configurations of audio and modem in the system, such as audio and modem on the Riser, audio on the mainboard and modem on the Riser, or no audio with modem on the Riser. WinneX 1 mainboard provides you with audio onboard solution, onboard audio can be enabled/disabled. Either AMR (Audio/Modem Riser) card or MR (Modem Riser) card can be used on this system. If you choose to use the audio on AMR card, the onboard audio can be set as disabled. This software configurable AC'97 audio and modem system gives customers an advanced, multimedia solution at an extremely low price.



Expansion Slots & I/O Ports description

Slot / Port	Description
PCI1	First PCI slot.
PCI2	Second PCI slot.
IDE1	Primary IDE port.
IDE2	Secondary IDE port.
AMR	AMR slot.
FLOPPY	Floppy Drive Port.

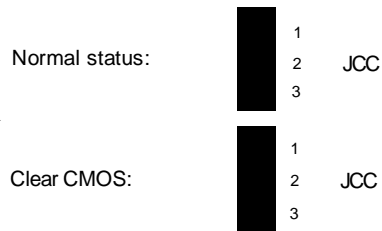
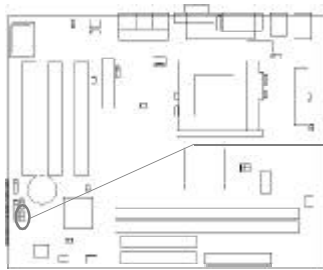
Jumper Settings

Jumpers are located on the mainboard, they represent, clear CMOS jumper JCC, enable keyboard password power-on function jumper JKB, and enable/disable onboard audio jumper JSD etc. Pin 1 for all jumpers are located on the side with a thick white line (Pin1→ ), referring to the mainboard's silkscreen. Jumpers with three pins will be shown as  to represent pin1 & pin2 connected and  to represent pin2 & pin3 connected.



Clear CMOS (JCC)

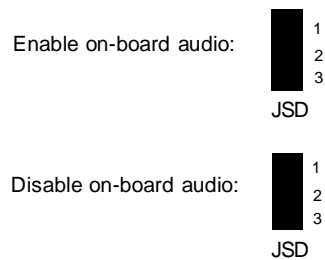
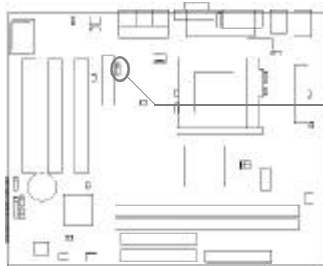
If you want to clear CMOS, unplug the AC power supply first, close JCC (pin1 & pin2) once, set JCC back to the normal status with pin2 & pin3 connected, then power on the system.



(Unplug the AC power supply)

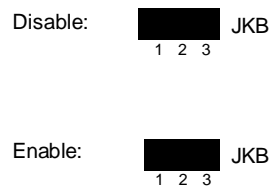
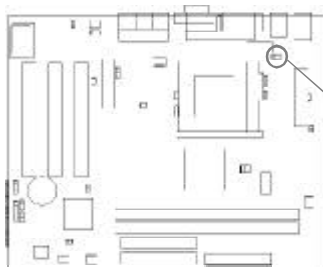
Enable/Disable on-board audio(JSD)

If you want to use the on-board audio, set JSD with pin2 & pin3 closed (default). Otherwise, set JSD with pin1 & pin2 closed for disabling this function.



Enable keyboard password power-on function (JKB)

The mainboard provides the advanced keyboard password power-on function. Before using this function, set JKB with pin1 & pin2 closed. Otherwise, set JKB with pin2 & pin3 closed for disabling.





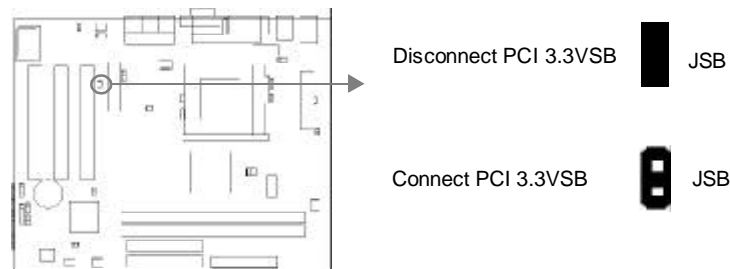
Furthermore in order to implement this function, set “POWER ON Function” to Password and enter the keyboard power-on password in the “INTEGRATED PERIPHERALS” section of the BIOS. Save and exit, then power off your system. In this case, the power button’s power-on function has been disabled.

Note:

1. If using this function, 5VSB line of the power supply should be capable of delivering enough current (eg. 200mA) for all the devices connected to the keyboard port, if not, you will be unable to power up the system using the keyboard.
2. If you set JKB with pin2 & pin3 closed, set “POWER ON Function” to **BUTTON ONLY**, don’t set it to Password, or you’ll be unable to power up your system by the keyboard or the power button.
3. If you encounter the above problems, clear CMOS and set the jumper and BIOS option again.

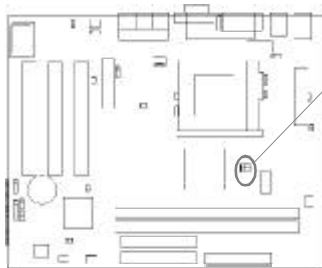
Connector PCI 3.3VSB Voltage Jumper (JSB)

Setting JSB open(default) can disconnect the 3.3VSB voltage to PCI slots. This can prevent the mainboard from being damaged if you add or remove expansion cards without unplugging the AC power supply. However, if you want to use the PCI 2.2 specification compliant expansion cards to wake up the system, for example, a network card which supports wake-up on LAN function but without the WOL header, set JSB as closed. In order to implement this function, “Wake-Up by PCI card” should also be enabled in “Power Management” section of the BIOS.



Overclocking Jumper Setting (JFS0, JFS1)

Jumpers labeled JFS0 and JFS1 are located on the mainboard providing users with CPU overclocking feature. The host bus speed can be set as 66/100/133MHz or AUTO select. Refer to the chart below for the location of these jumpers, and the table for information on how to set them.



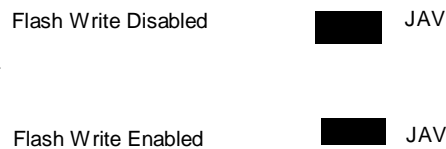
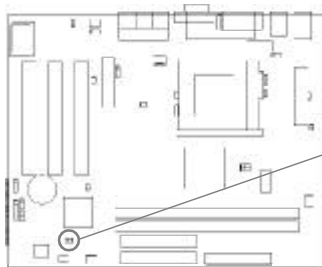
CPU FSB	66MHz	100MHz	133MHz	AUTO
JFS0	2-3	OPEN	OPEN	1-2
JFS1	2-3	2-3	1-2	2-3

'1-2' represents pin1 & pin2 closed.
 '2-3' represents pin2 & pin3 closed.

If CPU FSB is set as default setting Auto, the system detects the CPU front side bus automatically. If CPU FSB is set as 100MHz, the system will run at 100MHz even if a processor with 66MHz FSB is installed. Setting up to 133MHz is also allowable, for a processor with 100MHz FSB. Please note, whether or not the system can be overclocked depends on your processor's capability. We do not guarantee the overclocking system to be stable.

FWH Protection Jumper (JAV)

The BIOS of the mainboard is inside the FWH. If the jumper JAV is set as closed, you will be unable to flash the BIOS to the mainboard. However in this status, the system BIOS is protected from being attacked by serious virus such as CIH virus.



Setting the jumper JAV as open (default), meanwhile disabling the "Flash Write Protect" item in AWARD BIOS CMOS Setup, allows you to flash the BIOS to the flash ROM in FWH.

The DMI (Desktop Management Interface) system information such as the CPU type/speed, memory size, and expansion cards will be detected by the onboard BIOS and stored in the flash ROM in FWH. Whenever the system hardware configuration is changed, DMI information will be updated automatically. However, setting jumper JAV as closed makes flashing BIOS and updating DMI information impossible.

Refer to page 4 for the two choices to implement FWH Protection function.



Installation of All Drivers

A QDI Mainboard Utility CD-ROM is supplied with each mainboard. All drivers can be installed from this CD-ROM. Before installing all the drivers, check the system requirements such as the enough system memory (at least 32MB for Windows 95/98 system or 64MB for Windows 2000 system) and enough disk space. Windows 95 or Windows 98 must be fully installed and running on the system. All running applications should be closed before installing these drivers.

1. Install INF File for Intel 810 Chipset

The INF Files for Intel®Chipset 810 contains Windows device installation (*.INF) files that outline to the operating system how the chipset components shall be configured for the proper functionality. Under Windows 95/98, run `\ChipDrv\Intel\Whitney\inf\Setup.exe` for installation. Please refer to README.TXT in the directory `\ChipDrv\Intel\Whitney\inf\` for more information.

2. Install INF Utility Files for Intel 810 Chipset

Under Windows 95/98, run `\ChipDrv\Intel\Whitney\inf utility\Setup.exe` for installation. Please refer to README.TXT in the directory `\ChipDrv\Intel\Whitney\inf utility\` for more information.

3. Install VGA Drivers

Under Windows 95/98 English version, run `\ChipDrv\Intel\Whitney\Display\win9x\Graphics\Setup.exe` for installation.

Under Windows 95/98 Chinese version, the VGA driver should be installed manually from the **Display Properties** Window. Locate the directory to `\ChipDrv\Intel\Whitney\Display\win9x\Graphics\Win9x` when prompted.

Please refer to README.TXT in the directory `\ChipDrv\Intel\Whitney\Display\win9x` for more information.

Under Windows NT 4.0, run `\ChipDrv\Intel\Whitney\Display\NT40\Graphics\Setup.exe` for installation.

Please refer to README.TXT in the directory `\ChipDrv\Intel\Whitney\Display\NT40\` for more information.

Under Win2000, the VGA driver should be installed manually. For installation guide, refer to README.TXT in the directory `\ChipDrv\Intel\Whitney\Display\win2k`.

4. Install Sound Drivers

Under Windows 95, run `\DevDrv\Codec\ad1881\95\driver\Setup.exe` for installation.

For WaveSynth MIDI function under Windows 95, `ich.inf` is contained in the directory `\DevDrv\Codec\ad1881\95\95synth` should be installed. (Point to the file `ich.inf` --- Right click the mouse --- select install).

Under Windows 98, run `\DevDrv\Codec\ad1881\98\Setup.exe` for installation.



Under Windows NT 4.0, run \DevDrv\Codec\ad1881\nt40\driver\Setup.exe for installation. Regarding the WaveSynth MIDI function under Windows NT 4.0, please refer to README.TXT in the directory \DevDrv\Codec\ad1881\nt40\MIDI.

PC-cillin 98

New viruses are appearing frequently; the chance of your PC being infected increases; antivirus softwares are becoming a must. PC-cillin 98 offers you full-time active virus protection as well as manual scans, plus virus clean capability. Keeping up to date on the latest threats and updating significant files are crucial in keeping antivirus software effective. PC-cillin 98 provides Free Virus Pattern File Updates from the Trend Micro Website:

<http://www.trend.com/download/pattern.htm> or

<http://www.antivirus.com/download/pattern.htm>.

Installation of PC-cillin 98

For Windows 95/98 English version, run Setup.exe for installation from the utility CD directory \Pccillin\Win9x.

For Windows 95/98 Chinese version, run Setup.exe for installation from the utility CD directory \Pccillin\PWin9x.

For Windows NT 4.0, run Setup.exe for installation from the utility CD directory \Pccillin\WinNT4.0.

S/N is PN EF-9991-6558-5857-5535.

QDI ManageEasy

It is well known that guaranteeing the computer's security and reliability is essential. Especially today, effectively managing and monitoring the computer's hardware is even more important; because processing and exchanging critical data through computer and network are happening everyday.

Moving with the computer's development, the system of the computer will become more and more complex; at the same time, the control computer's hardware will be strengthened. Today, it is possible to monitor and manage your complex hardware from Windows 9X and Windows NT. QDI ManageEasy is a system tool, like a bridge between the complex hardware and OS, used to access hardware status and to execute some control functions. It supports stronger functions for Windows 9X and Windows NT.

These functions enables you to view more than one hundred of the basic information about their computer and monitor some key reference data about computer health in real time. QDI ManageEasy also helps you to use remote access and control computers in your local area network. With QDI ManageEasy, you can improve your management level.

Installation of QDI ManageEasy V2.0

Run Setup.exe from the utility CD directory \QME2 to install the QDI ManageEasy V2.0. The QDI ManageEasy Setup Wizard will guide you through the installation process.

For detailed information on how to use QDI ManageEasy V2.0, please refer to the QDI ManageEasy V2.0 online help.



Chapter 3

BIOS Description

Utility Support:

AWDFLASH.EXE

This is a flash memory write/read utility used for the purpose of upgrading your BIOS when necessary. Before doing so, please note:

- **W s r o g l r c o m e d o u o n y p g a d B O S w h n n c u n e r p r b l m s**
- **B f o e p g a d n g y o r I O , e v e w t h d s c i p i o b l o t a o i m k i g m s t k e , e s r o i n t e I O a d e s l t n g i n a o n w o k i g y s e m**

Wh n ou en ou te p obem , or ex mpe, yo fnd yo r ysem do s ot su po t he at st CP r le se a te o r ur en m in oa d, yo m y he ef re up ra e he BI S.

olow th s ep e ac ly fo a su ce sf l pg ad .

1 Cr at a bo ta lesy te f op y is et e y yp ng Fo ma A/s fr m he DO pr mp u de D S6 xx or Wi do s x nv ro me t.

. C py AW FL SH EX (er io >7 0) fr m he di ec or \ ti it l ca ed on QD Manb ar U il ty CD on o ou n w oo abe is et e.

. D w noa t e pd te B O S fie ro t e eb it (tt :/ww .q ig p. om . Pl as be su e o ow lo d he suta le BI S il f r ou m in oa d.

. U co pr ss th fle do nl ad c py th B O S fie xx bi) nt t e oo abe dsk tt , nd no e he ch ck um of ths IO w ic i l ca ed i r ad e il .

5 Re oo t e ysem fr m he bo ta le di ke te cr at d.

. T en ru t e WD LA H ti it a t e : \pr mp a s ow b lo :

A \A DF AS xx .bn

F ll w he in tr ct on th ou h he pr ce s. Do 't tu n ff po er or re et th sy te u ti t e IO u gr de ha b en co pl te .

l y u eq ir m re de aied in or at on co ce ni g WD LA H ti it , or ex mpe, th di fe en u ag o p ra et rs pea e yp A \> WD LA H ?

N te A DF AS .E E ve si n> .0 u il ty mu t e se t u gr de th W nn X manb ar B O S in te d f D l fl shut li y. Sofa Q l la h ti it —**F AS .E E** (1.) oe n t up or t e la h PR M n in eX 1 ai bo rd



AWARD BIOS Description

Entering Setup

Power on the computer, when the following message briefly appears at the bottom of the screen during the POST (Power On Self Test), press key or simultaneously press the <Ctrl> + <Alt> + <Esc> keys, to enter the AWARD BIOS CMOS Setup Utility.

Press to enter SETUP

Once you have entered, the Main Menu (Figure 1) appears on the screen. The main menu allows you to select from eleven setup functions and two exit choices. Use the arrow keys to select among the items and press the <Enter> key to accept or enter the sub-menu.

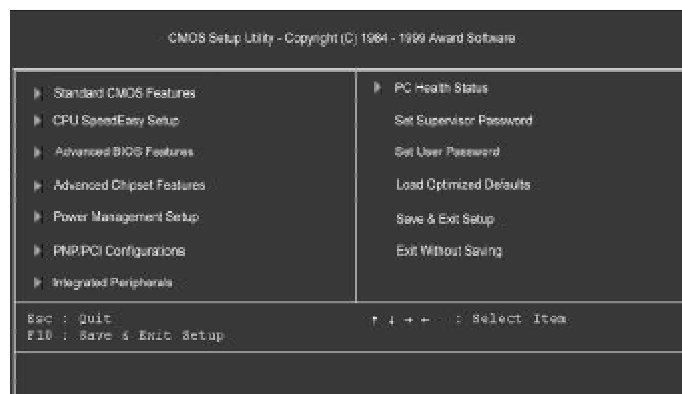


Figure-1 Main Menu

Load Optimized Defaults

The Optimized Defaults are common and efficient. It is recommended users load the optimized defaults first, then modify the needed configuration settings.

Standard CMOS Features Setup

The basic CMOS settings included in "Standard CMOS Features" are Date, Time, Hard Disk Drive Types, Floppy Disk Drive Types, and VGA etc. Use the arrow keys to highlight the item, then use the <PgUp> or <PgDn> keys to select the value desired in each item.

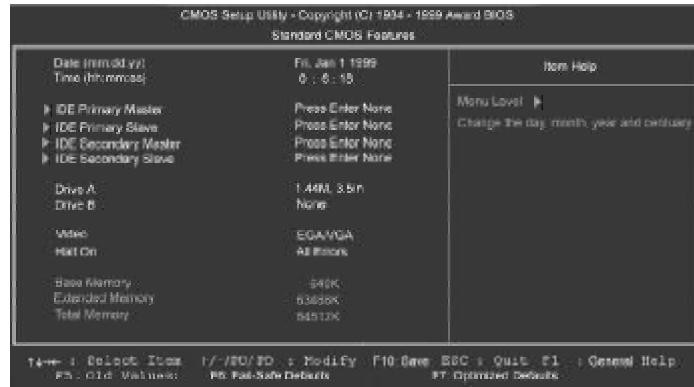


Figure-2 Standard CMOS Setup Menu

For the items marked, press enter, a window will pop up as shown below. You can view detailed information or make modifications.

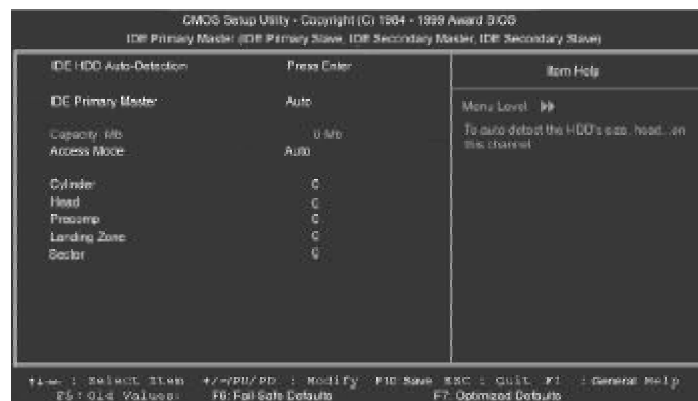


Figure-2-1 IDE Primary Master Setup Menu

Hard Disk

Primary Master/Primary Slave/Secondary Master/Secondary Slave

These categories identify the HDD types of 2 IDE channels installed in the computer system. There are three choices provided for the Enhanced IDE BIOS: None, Auto, and User. 'None' means no HDD is installed or set; 'Auto' means the system can auto-detect the hard disk when booting up; by choosing 'user', the related information should be entered regarding the following items. Enter the information directly from the keyboard and press <Enter>:

CYLS	number of cylinders	HEAD	number of heads
PRECOMP	write pre-compensation	LANDZ	landing zone
SECTOR	number of sectors	MODE	HDD access mode



AWARD BIOS Description

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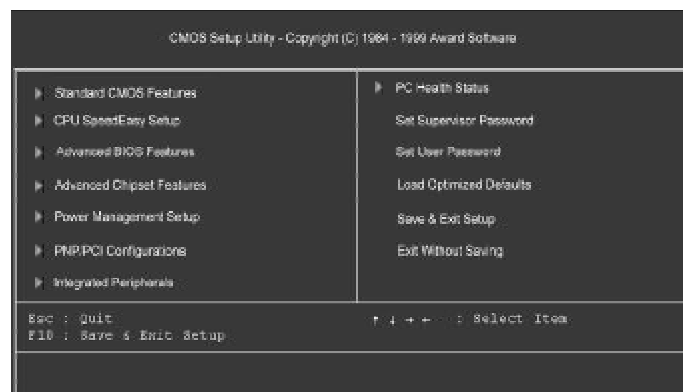


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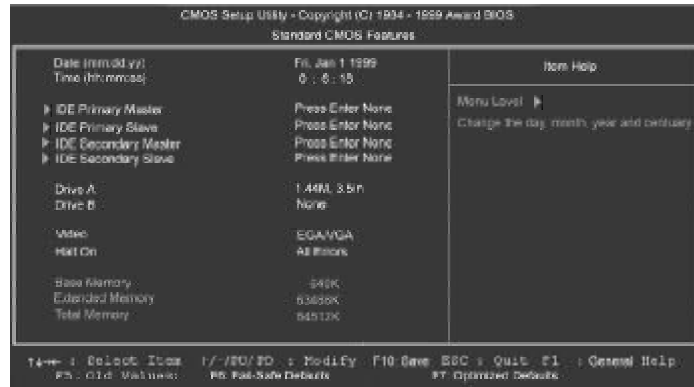


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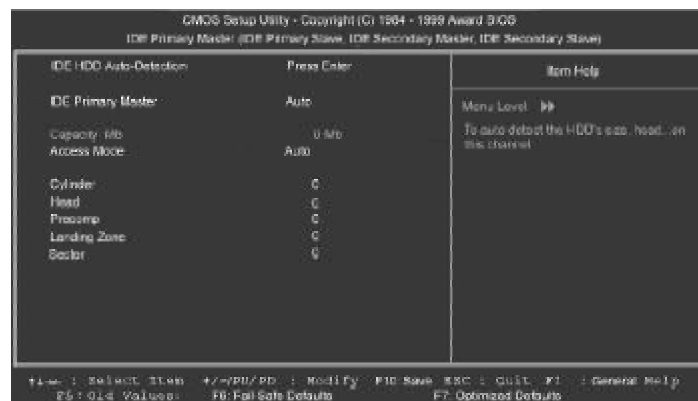


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CYLS	number of cylinders	HEAD	number of heads
PRECOMP	write pre-compensation	LANDZ	landing zone
SECTOR	number of sectors	MODE	HDD access mode



The Award BIOS supports 3 HDD modes: NORMAL, LBA and LARGE.

NORMAL

Generic access mode in which neither the BIOS nor the IDE controller will make any transformation during accessing. The maximum number of cylinders, heads and sectors for NORMAL mode are 1024,16 and 63.

If the user sets his HDD to NORMAL mode, the maximum accessible HDD size will be 528 megabytes even though its physical size may be greater than that.

LBA (Logical Block Addressing) mode

A new HDD accessing method to overcome the 528 Megabyte bottleneck. The number of cylinders, heads and sectors shown in setup may not be the number physically contained in the HDD.

During HDD accessing, the IDE controller will transform the logical address described by sector, head and cylinder number into its own physical address inside the HDD. The maximum HDD size supported by LBA mode is 8.4 Gigabytes.

LARGE mode

Some IDE HDDs contain more than 1024 cylinder without LBA support (in some cases, users do not want LBA). The Award BIOS provides another alternative to support these kinds of HDD.

BIOS tricks DOS (or other OS) into dividing the number of cylinders is less than 1024 by dividing it by 2. At the same time, the number of heads is multiplied by 2. A reverse transformation process will be made inside INT13h in order to access the right HDD address.

If using Auto detect, the BIOS will automatically detect the IDE hard disk mode and set it as one of the three modes.

Remark

To support LBA or LARGE mode of HDDs, there must be some softwares involved which are located in Award HDD Service Routine(INT13h).It may fail to access a HDD with LBA (LARGE) mode selected if you are running under an Operating System which replaces the whole INT 13h.



Video

Set this field to the type of video display card installed in your system.

EGA/ VGA	Enhanced Graphics Adapter / Video Graphic Array. For EGA, VGA, SEGA, SVGA, or PGA monitor adapters.
CGA 40	Color Graphic Adapter, powering up in 40 column mode.
CGA 80	Color Graphic Adapter, powering up in 80 column mode.
MONO	Monochrome adapter, including high resolution monochrome adapters.

Halt On

This category determines whether or not the computer will stop if an error is detected during powering up.

No errors	The system boot will not stop for any errors that may be detected.
All errors	Whenever the BIOS detects a non-fatal error, the system will stop and you will be prompted.
All, But Keyboard	The system boot will not stop for a keyboard error; but it will stop for all other errors.
All, But Diskette	The system boot will not stop for a disk error; but it will stop for all other errors.
All, But Disk/Key	The system boot will not stop for a keyboard or disk error, but it will stop for all other errors.

Memory

This is a Display-Only Category, determined by POST (Power On Self Test) of the BIOS.

Base Memory	The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.
Extended Memory	The BIOS determines how much extended memory is presented during the POST.
Other Memory	This is the memory that can be used for different applications. Shadow RAM is most used in this area.
Total Memory	Total memory of the system equals the sum of the above memory.



CPU SpeedEasy Setup

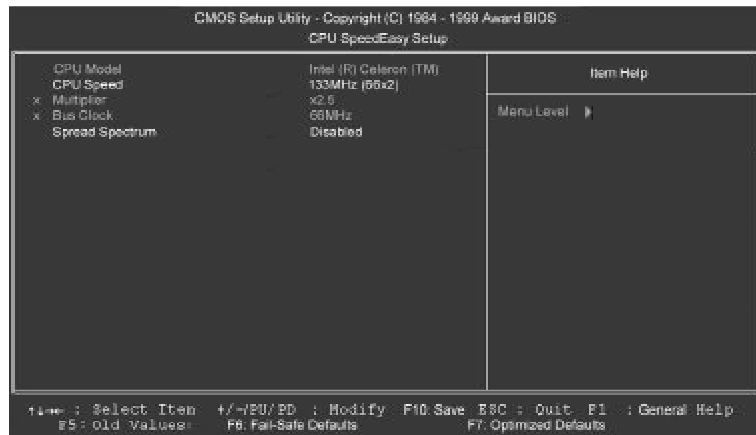


Figure-3 CPU SpeedEasy Setup Menu

The following indicates the options for each item and describes their meaning.

<u>Item</u>	<u>Option</u>	<u>Description</u>
• CPU Speed	<i>Jumper Emulation</i>	This item is only for users who understand all the CPU parameters, i.e. system bus frequency, "66MHz" and multiplication of processor core frequency for system bus frequency "x2.5, x3, x3.5, x4, x4.5, x5, x5.5".
	133MHz(66x2)	Selects the CPU speed according to your CPU brand and type.
	166MHz(66x2.5)	
	.	
	.	
	.	
	533MHz(66x8)	
	200MHz(100x2)	
	250MHz(100x2.5)	
	.	
• Spread Spectrum	800MHz(100x8)	
	Enabled	Enables Spread Spectrum to reduce EMI.
	Disabled	Disables Spread Spectrum.



Advanced BIOS Features Setup

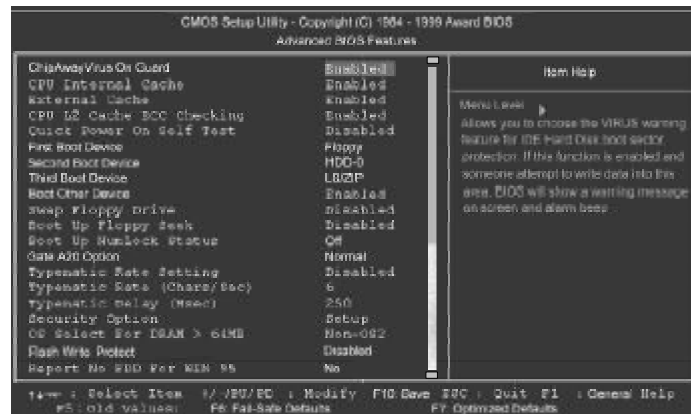


Figure-4 Advanced BIOS Features Menu

The following indicates the options for each item and describes their meaning.

<u>Item</u>	<u>Option</u>	<u>Description</u>
• ChipAwayVirus On Guard	<i>Enabled</i>	Guards against boot virus threats early in the boot cycle, before they have a chance to load into your system, ensuring your computer boots to a clean operating system.
	<i>Disabled</i>	Disables this function.
• CPU Internal Cache	<i>Enabled</i>	Enabling this option speeds up memory access.
	<i>Disabled</i>	However, it depends on CPU/chipset design.
• External Cache	<i>Enabled</i>	Enables external L2 cache. This allows better performance.
	<i>Disabled</i>	Disables external cache.
• CPU L2 Cache ECC Checking	<i>Enabled</i>	Enables CPU L2 Cache ECC (Error Checking and Correction) function.
	<i>Disabled</i>	Disables CPU L2 Cache ECC function.
• Quick Power On Self Test	<i>Enabled</i>	Allows the system to skip certain tests while booting. This will decrease the time needed to boot the system.
	<i>Disabled</i>	Normal POST.
• First (Second, Third) Boot Device	<i>Disabled</i>	Select Your Boot Device Priority. It could be Disabled, Floppy, LS/ZIP, HDD-0, HDD-1, HDD-2, HDD-3, SCSI, CDROM, LAN.
• Boot Other Device	<i>Floppy</i>	



• Swap Floppy Drive	<i>Enabled</i> <i>Disabled</i>	If the system has two floppy drives, choose enable to assign physical drive B to logical drive A and vice-versa.
• Boot Up Floppy Seek	<i>Enabled</i> <i>Disabled</i>	Tests floppy drives to determine whether they have 40 or 80 tracks.
• Boot Up NumLock Status	<i>On</i> <i>Off</i>	Select power on state for NumLock.
• Gate A20 Option	<i>Normal</i> <i>Fast</i>	Lets chipset control GateA20 and Normal - a pin in the keyboard controller controls GateA20. Default is Fast.
• Typematic Rate Setting	<i>Enabled</i> <i>Disabled</i>	Keystrokes repeat at a rate determined by the keyboard controller - when enabled, the typematic rate and typematic delay can be selected.
• Typematic Rate (chars/sec)	<i>6-30</i>	The rate at which character repeats when you hold down a key.
• Typematic Delay (Msec)	<i>250-1000</i>	The delay before keystrokes begin to repeat.
• Security Option	<i>Setup</i> <i>System</i>	Select whether the password is required every time the system boots or only when you enter setup.
• OS Select For DRAM>64MB	<i>Non-OS2</i> <i>OS2</i>	Select OS2 only if you are running OS/2 operating system with more than 64MB of RAM.
• Flash Write Protect	<i>Enabled</i> <i>Disabled</i>	Flash program is allowed. Does not allow flash program.
• Report NO FDD for WIN 95	<i>Yes</i> <i>No</i>	Reports NO Floppy Disk Drive for WIN 95 to release IRQ6. Does not report No Floppy Disk Drive for WIN 95.



Advanced Chipset Features Setup

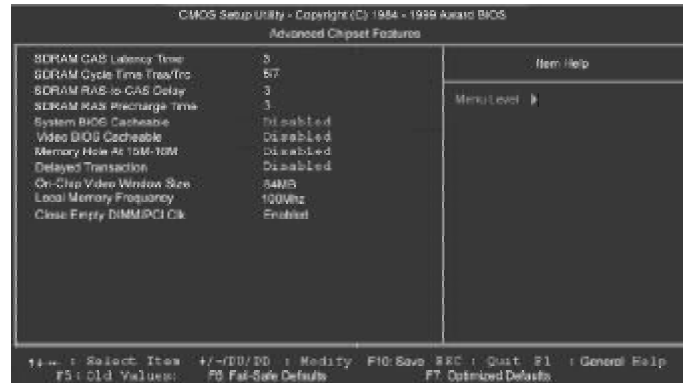


Figure-5 Advanced Chipset Features Menu

The following indicates the options for each item and describes their meaning.

<u>Item</u>	<u>Option</u>	<u>Description</u>
• SDRAM CAS Latency Time	3 2	Contains the information for SDRAM initialization procedure.
• SDRAM Cycle Time Tras/Trc	5/7 6/8	
• SDRAM RAS To CAS Delay	2 3	Adds a delay time between the assertion of RAS and CAS. Without additional delay time.
• SDRAM RAS Precharge Time	2 3	Default setting is suggested.
• System BIOS Cacheable	<i>Enabled</i> <i>Disabled</i>	Besides conventional memory, the system BIOS area is also cacheable.
• Video BIOS Cacheable	<i>Enabled</i> <i>Disabled</i>	Besides conventional memory, video RAM area is also cacheable. Video RAM area is not cacheable.
• Memory hole at 15M-16M	<i>Enabled</i> <i>Disabled</i>	Memory hole at 15-16M is reserved for expanded ISA card. Does not set this memory hole.
• Delayed Transaction	<i>Enabled</i> <i>Disabled</i>	Default setting is suggested.
• On-Chip Video Window Size	32/64MB <i>Disabled</i>	Selects graphic display cache window size. Does not select it.
• Local Memory Frequency	100MHz 133MHz	Defines the local memory frequency, 100MHz or 133MHz.
• Close Empty DIMM/PCI Clk	<i>Enabled</i> <i>Disabled</i>	Closes empty DIMM clock or PCI clock to reduce EMI. Does not close empty DIMM/PCI clock.



Power Management Setup

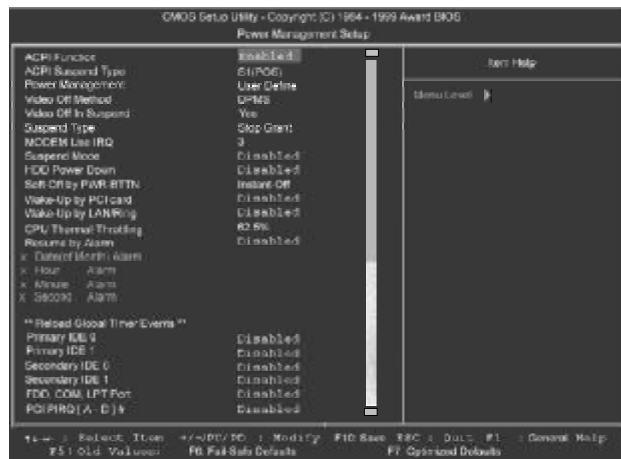


Figure-6 Power Management Setup Menu

The following indicates the options for each item and describes their meaning.

<u>Item</u>	<u>Option</u>	<u>Description</u>
• ACPI function	<i>Disabled</i>	Invalidates ACPI function.
	<i>Enabled</i>	Validates ACPI function.
• ACPI Suspend Type	<i>S1</i>	Selects the ACPI suspend type.
	<i>S3</i>	
• Power Management	<i>Disabled</i>	Global Power Management (PM) will be disabled.
	<i>User Define</i>	Users can configure their own Power Management Timer.
	<i>Min Saving</i>	Pre - defined timer values are used. All timers are in their MAX values.
	<i>Max Saving</i>	Pre - defined timer values are used. All timers are in their MIN values.
• Video Off Method	<i>Blank Screen</i>	The system BIOS will only blank off the screen when disabling video.
	<i>V / H SYNC +</i>	In addition to Blank Screen, BIOS will also turn off the V-SYNC & H - SYNC signals from VGA card to monitor.
	<i>DPMS</i>	This function is enabled only for VGA cards supporting DPMS. Note: When the green monitor does not detect the V/H-SYNC signals, the electron gun will be turned off.
• Video Off In Suspend	<i>Yes</i>	The system will disable video when entering suspend mode.



	<i>No</i>	Does not turn off video when entering suspend mode.
• Suspend Type	<i>Stop Grant PwrOn Suspend</i>	Selects the Suspend type.
• MODEM Use IRQ	<i>3, 5, 7, 9, 10, 11 NA</i>	Special wake-up event for Modem.
• Suspend Mode	<i>Disabled Min ~ 1Hr</i>	The system never enters Suspend mode by timer. Defines the continuous idle time before the system enters Suspend mode. If any items defined in "PM Events" are on and activated, the system will be woken up.
• HDD Power Down	<i>Disabled 1 - 15 Min</i>	HDD's motor will not be off by timer. Defines the continuous HDD idle time before the HDD enters power saving mode (motor off).
• Soft-Off by PWR-BTTN	<i>Instant-Off Delay 4 secs</i>	They system will immediately power off once the power button is pressed. The system will power off when power button is pressed for 4 seconds.
• Wake-Up by PCI card	<i>Enabled</i>	Allows the system to be woken up by PCI card. Does not allow the system to be powered on by PCI card.
• Wake-Up by LAN/Ring	<i>Enabled</i>	Allows the system to be powered on when a Ring indicator signal comes up to UART1 or UART2 from external modem (to LAN Wake-up Header from LAN adapter or to modem Ring on Header from internal modem card).
• CPU Thermal-Throttling	<i>Disabled 12.5%, 25%, 50%, 37.5%, 62.5%, 75%, 87.5%</i>	Does not allow Ring/LAN wake up. Selects the duty cycle of the STPCLK# signal, slowing down the CPU speed when the system enters green mode.
• Resume by Alarm	<i>Enabled</i>	RTC alarm can be used to generate a wake-up event to power up the system.
• Primary IDE 0/1, Secondary IDE 0/1	<i>Disabled Enabled Disabled</i>	RTC has no alarm function. Reloads global timer, when there' s an IDE event. Does not reload global timer.
• FDD/COM/LPT Port	<i>Enabled</i>	Reloads global timer, when there' s a FDD/COM/ LPT event.
• PCI IRQ [A - D] #	<i>Disabled Enabled Disabled</i>	Does not reload global timer. Reloads global timer, when there' s an PCI event. Does not reload global timer.



PNP/PCI Configuration Setup

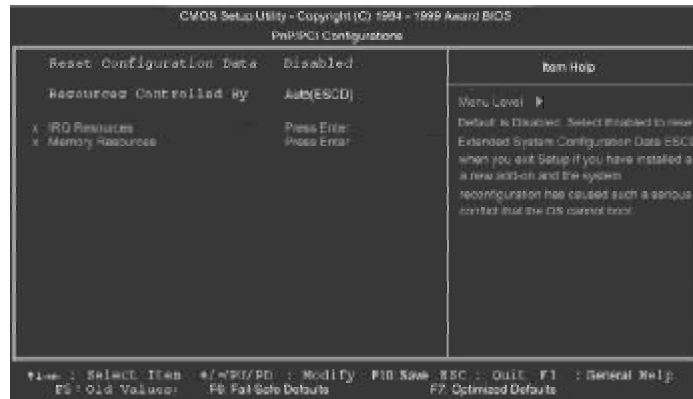


Figure-7 PNP/PCI Configuration Setup Menu

The following indicates the options for each item and describes their meaning.

<u>Item</u>	<u>Option</u>	<u>Description</u>
<ul style="list-style-type: none"> Reset Configuration Data 	<i>Enabled</i>	Default is Disabled. Select Enabled to reset Extended System Configuration Data ESCD when you exit Setup, if you have installed a new add-on and the system reconfiguration has caused serious conflicts preventing the OS from booting.
<ul style="list-style-type: none"> Resources Controlled By 	<i>Disabled</i> <i>Auto(ESCD)</i> <i>Manual</i>	Disables the configuration data function. BIOS can automatically configure all boot and Plug and Play compatible devices. If you choose Auto, you cannot select IRQ DMA and memory base address fields, because BIOS automatically assigns them.



• Power On Function	<i>BUTTON ONLY</i>	Uses the power button to power up the system.
	<i>Password</i>	Enables the Keyboard Password Power-On.
• Onboard FDC Controller	<i>Enabled</i>	Onboard floppy disk controller is enabled.
	<i>Disabled</i>	Onboard floppy disk controller is disabled.
• Onboard Serial Port 1/2	<i>3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Auto</i>	Defines the onboard serial port address and required interrupt number.
	<i>Disabled</i>	Onboard serial port address and IRQ are automatically assigned.
• UART Mode Select	<i>Normal</i>	Onboard serial port is disabled.
		This option is used to configure UART Mode.
• Onboard Parallel Port	<i>378/IRQ7, 278/IRQ5, 3BC/IRQ7</i>	Defines onboard parallel port address and IRQ channel.
	<i>Disabled</i>	Onboard parallel port is disabled.
• Parallel Port Mode	<i>SPP</i>	Defines the parallel port mode as standard Parallel Port(SPP), Enhanced Parallel Port(EPP), or Extended Capabilities Port(ECP).
	<i>EPP</i>	
	<i>ECP</i>	
	<i>ECP+EPP</i>	
• PWRONAfter PWR-Fail	<i>OFF</i>	The system remains OFF when the AC power supply resumes.
	<i>ON</i>	The system will be powered up when the AC power supply resumes.
	<i>Former-Sts</i>	Whatever the system status is before the AC power supply cuts off, the system resumes in the previous status (ON/OFF) when the AC power supply resumes.
• GamePort Address	<i>Disabled</i>	This option is used to configure Game Port Address.
	<i>201</i>	
	<i>209</i>	
• Midi Port Address	<i>Disabled</i>	This option is used to configure Midi Port Address.
	<i>300</i>	
	<i>330</i>	



PC Health Status

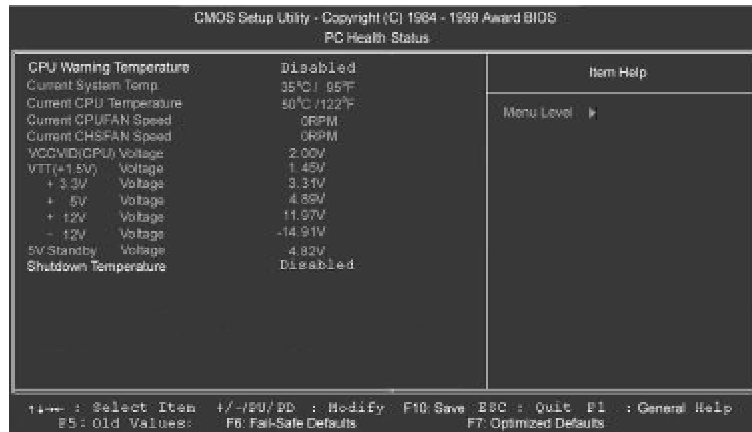


Figure-9 PC Health Status Menu

The following indicates the options for each item and describes their meaning.

<u>Item</u>	<u>Option</u>	<u>Description</u>
• CPU Warning Temperature	50°C/122°F 53°C/127°F 56°C/133°F 60°C/140°F 63°C/145°F 66°C/151°F 70°C/158°F Disabled	An alarm will beep when the CPU temperature reaches the previous setting, 50°C/122°F, 53°C/127°F, 56°C/133°F, 60°C/140°F, 63°C/145°F, 66°C/151°F, 70°C/158°F. No alarm beep.
• Current System Temp.		The temperature inside the chassis.
• Current CPU Temperature		The temperature near CPU.
• Current CPUFAN Speed Current CHSFAN Speed		RPM (Revolution Per Minute) Speed of fan which is connected to the fan header, CPUFAN or CHSFAN. Fan speed value is based on an assumption that tachometer signal is two pulses per revolution. In other cases, you should regard it relatively.
• VCCVID(CPU) Voltage, VTT(+1.5V) Voltage,		Displays current voltage value including all significant voltages of the mainboard. +3.3V, +5V, +12V, -12V are voltages from the ATX power supply, VTT(+1.5) Voltage is GTL



+3.3V,
+5 V,
+12 V,
-12 V,
5V Standby Voltage

- Shutdown Temperature

60°C/140°F
65°C/149°F
70°C/158°F
75°C/167°F
Disabled

Termination voltage from the on board regulator and VCCVID (CPU) Voltage is the CPU core voltage from the on board switching Power Supply.

The system will shut down automatically when the CPU temperature reaches the previous setting, 60°C/140°F, 65°C/149°F, 70°C/158°F, 75°C/167°F.

The system remains on regardless of how much the CPU temperature is.



Password Setting

When this function is selected, the following message appears at the center of the screen to assist you in creating a password.

ENTER PASSWORD

Type the password, up to eight characters, and press <Enter>. The password typed 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.

To disable password, just press <Enter> when you are prompted to enter password. A message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter BIOS Setup freely.

PASSWORD DISABLED

If you have selected "**System**" in "Security Option" of "BIOS Features Setup" menu, you will be prompted for the password every time the system reboots or any time you try to enter BIOS Setup.

If you have selected "**Setup**" at "Security Option" from "BIOS Features Setup" menu, you will be prompted for the password only when you enter BIOS Setup.

Supervisor Password has higher priority than User Password. You can use Supervisor Password when booting the system or entering BIOS Setup to modify all settings. Also you can use User Password when booting the system or entering BIOS Setup but can not modify any setting if Supervisor Password is enabled.

Boot with BIOS defaults

If you have made all the changes to CMOS values and the system can not boot with the CMOS values selected in setup, clear CMOS after power-down, then power on again. System will boot with BIOS default settings.



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Appendix A

QDI Mainboard Utility CD-ROM

A QDI Motherboard Utility CD-ROM is supplied with each motherboard. The contents used for this motherboard are:

1. Intel®810 Chipset Drivers

A. INF Files for Intel 810 Chipset

Contained in the directory \ChipDrv\Intel\Whitney\inf for Windows 95/98.

B. INF Utility Files for Intel 810 Chipset

Contained in the directory \ChipDrv\Intel\Whitney\inf utility for Windows 95/98.

C. VGA Drivers

Contained in the directory \ChipDrv\Intel\Whitney\display for Windows 9x, Windows 2000 and Windows NT4.0 respectively.

2. Sound Drivers

Contained in the directory \DevDrv\Codec\ad1881 for Windows 95, Windows 98 and Windows NT 4.0 respectively.

3. PC-cillin 98 Anti-Virus software:

Contained in the directory \Pccillin\Win9x for Windows 95/98 English version.

Contained in the directory \Pccillin\PWin9x for Windows 95/98 Chinese version.

Contained in the directory \Pccillin\WinNT4.0 for Windows NT 4.0.

4. QDI ManageEasy V2.0:

Contained in the directory \QME2.

5. QDI Mainboard Utilities:

AWDFLASH.EXE

CBLOGO.EXE

LF.EXE

Please refer to the online help for information on how to use these utilities.

6. Documents

The files included in the directory \Doc are:

Adobe Acrobat Reader V3.0 —ar32e301.exe

QDI ManageEasy (V1.2) Manual —QMEV12.PDF.



The Patent for SpeedEasy

Board Layout of WinneX 1 V1.0

P/N: 430-01016-801-00
Manual WinneX 1 Ver 1.0