

# Declaration of conformity



**QUANTUM DESIGNS(HK) LTD.**  
**20th Floor, Devon House, Taikoo Place, 979 King's Road,**  
**Quarry Bay, Hong Kong**

declares that the product

## **Motherboard** **Advance 12**

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 SYSTEM HANDEL GMBH

QDI COMPUTER(FRANCE) SARL

LEGEND QDI SPAIN S.L

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QDI EUROPE B.V

QDI COMPUTER HANDELS GMBH

QDI COMPUTER(SWEDEN)AB

Signature : 

Place / Date : HONG KONG/2001

Printed Name : Lv Yan

Position/ Title : Assistant President



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## Declaration of conformity

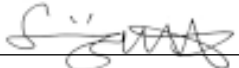


Trade Name: QDI Computer ( U. S . A. ) Inc.  
Model Name: Advance 12  
Responsible Party: QDI Computer ( U. S. A.) Inc.  
Address: 41456 Christy Street  
Fremont, CA 94538  
Telephone: (510) 668-4933  
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Equipment Classification: FCC Class B Subassembly  
Type of Product: Motherboard  
**Manufacturer: Quantum Designs (HK) Inc.**  
Address: 20th Floor, Devon House, Taikoo Place  
979 King's 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 : 2001





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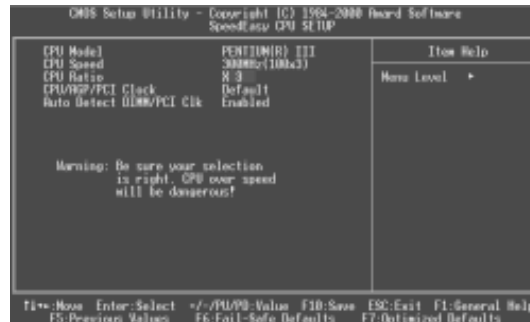
## SpeedEasy Quick Setup

### Procedures :

1. Correctly insert the Intel® Pentium III FC-PGA, Celeron FC-PGA or Celeron PPGA 370 processors.
2. Plug in other configurations and restore the system.
3. Switch on power to the system and press the <Del> key to enter BIOS Setup.
4. Enter "CPU SpeedEasy Setup" menu to set up the CPU 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:



CPU SpeedEasy SetupMenu

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.

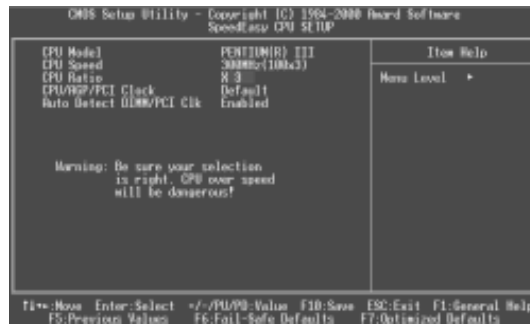
## SpeedEasy 快速安装指南

### 程序：

1. 正确地插入 Intel® Pentium III FC-PGA, Celeron FC-PGA 或 Celeron PPGA 370 中央处理器。
2. 插入其他配件，组装成完整的微机系统。
3. 开启系统电源，并且按住 <Del> 键，进入 BIOS 设置程序。
4. 进入“CPU SpeedEasy Setup”菜单，以调节中央处理器的速度。
5. 存储设定值，退出 BIOS，系统就可以按你设定的速度运行了。

## SpeedEasy 中央处理器设定菜单

从主设置菜单中选择<CPU SpeedEasy Setup>项，然后进入子菜单：



SpeedEasy 中央处理器设定项目单

BIOS 为您的中央处理器提供一组基本选项，以代替传统的跳线方式，使您可以通过“CPU SpeedEasy Setup”菜单，为中央处理器选择正确的工作频率。

### 警告：

请勿将中央处理器的频率调节至高于其正常工作频率，否则本公司将不会负责由此而产生的任何损毁。



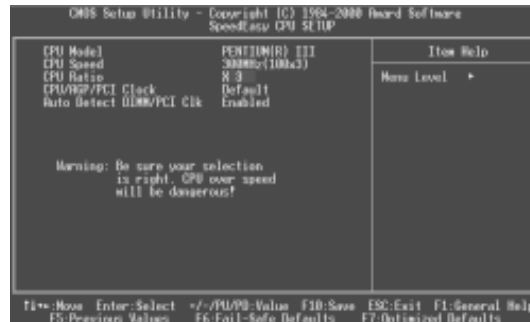
## SpeedEasy Quick Setup

### Procédure :

1. Insérer correctement le processeur que vous avez choisi.
2. Connecter les autres composants.
3. Allumer le système et appuyer sur la touche « Suppr » pour entrer dans le BIOS.
4. Entrer dans le menu « SpeedEasy CPU SETUP » afin de régler la vitesse du FSB du CPU.
5. Enregistrer et quitter le BIOS, votre système va maintenant démarrer avec succès.

## Menu du SpeedEasy CPU Setup

Sélectionner la ligne « SpeedEasy CPU SETUP » à partir du menu principal et entrer dans le sous menu.



SpeedEasy CPU Setup Menu

Le BIOS vous offre la possibilité de régler directement la vitesse du FSB du CPU afin de configurer les différents processeurs sans avoir à positionner des cavaliers. La vitesse du FSB du CPU peut être sélectionnée à partir du menu « SpeedEasy CPU SETUP ».

### Attention :

Ne pas régler la fréquence du processeur sur une fréquence plus élevée que celle prévue par le constructeur. Si cela est fait, nous ne serons pas responsables des dommages causés. En fait cela dépend des capacités du processeur à être « overclocké ». Nous ne garantissons pas la stabilité d'un système « overclocké ».

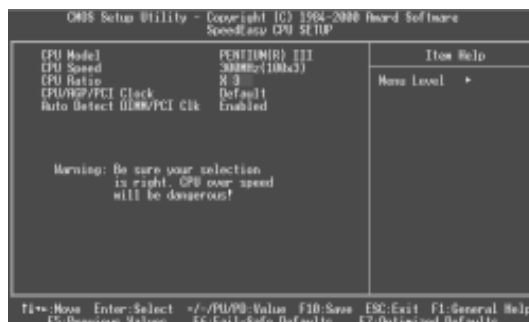
## SpeedEasy Instalación Rápida

### Procedimientos:

1. Insertar correctamente el procesador escogido.
2. Instalación de otros dispositivos y reinicio del sistema.
3. Presionar la tecla <Del> para entrar en la configuración de la BIOS.
4. Entrar en el menú "SpeedEasy CPU Setup" para seleccionar la velocidad de la CPU.
5. Guardar cambios y abandonar el menú de configuración de la BIOS, el sistema se reiniciará automáticamente.

## Menú de Configuración de CPU SpeedEasy

Seleccionar <SpeedEasy CPU Setup> en el menú principal y entrar en el submenú.



SpeedEasy CPU Setup Menu

BIOS le proporciona una lista de valores para la selección del procesador en lugar de la configuración de jumpers. La velocidad del procesador puede seleccionarse a través de la opción de menú "SpeedEasy CPU Setup".

### ¡ ATENCIÓN! Cuidado:

No seleccione una frecuencia de CPU superior a la frecuencia de funcionamiento para la que está diseñada su cpu. Si usted lo hace, no seremos responsables de ningún daño y/o perjuicio causado. La posibilidad de "overclock" de su cpu depende en cualquier caso de la capacidad de esta para funcionar por encima de la frecuencia a la que está diseñada. QDI no garantiza que el overclock de cpu no cause problemas de estabilidad en su sistema.

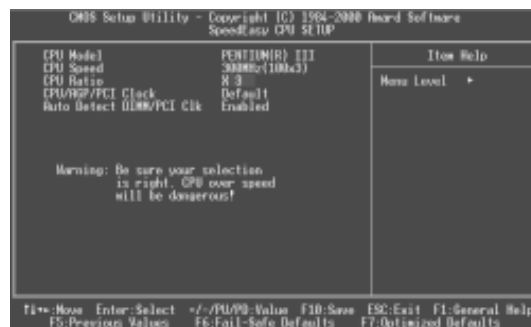
## SpeedEasy Installation

### Vorgehensweise:

1. Installieren Sie den Prozessor
2. Installieren Sie die weiteren PC Peripherie – Komponenten
3. Schalten Sie den Rechner ein und drücken Sie die „Entf“ – Taste, um ins Bios zu gelangen
4. Steigen Sie in das Menü „SpeedEasy CPU Setup“ ein, um die korrekte Taktfrequenz der CPU einzustellen
5. Wählen Sie „Save & Exit“, um die Einstellungen zu speichern und den Rechner neu zu starten.

## SpeedEasy CPU Setup Menü

Wählen Sie "SpeedEasy CPU Setup", um in das Untermenü des CPU SpeedEasy Setup Menü zu gelangen"



SpeedEasy CPU Setup Menü

Im Bios haben Sie die Möglichkeit den Frontside Bus der installierten CPU zu verändern, sofern die Spezifikation der CPU dies erlaubt. Sie benötigen keine Jumpereinstellungen mehr.

### Achtung:

Stellen Sie die CPU Taktfrequenz nicht höher als spezifiziert ein, ansonsten verlieren Sie die Garantieansprüche. Die Möglichkeit eine CPU zu übertakten ist von der CPU abhängig, daher kann die Gewährleistung nicht ermöglicht werden, sofern versucht wird, den Prozessor zu übertakten. Die Stabilität des PC Systems kann bei Übertaktung ebenfalls nicht garantiert werden.

## QDI BootEasy

BootEasy is a new member of legend QDI Easy series, which is the latest innovation comes from legend QDI.



BootEasy Setup Menu

BootEasy technology enormously improves the long BOOT process time of computers. Reducing the wait time every user has to suffer when starting their computer. BIOS without BootEasy has to perform many routines every times when the system starts, such as checking system core of the computer and initializing system peripherals. Now with the BootEasy, BIOS will not run these repetitive Processes any longer , PC can boot-up without any redundant waiting for the displaying of starting OS. BootEasy is quite easy to use , choose the right option in CMOS SETUP, ( refer to Advanced BIOS Features) it can be easily booted quickly. BootEasy save all the information when PC first normally boot-up, and it restores all the parameters for the system and thus let the PC boot freely and rapidly.

### Note:

- Under the following conditions, PC will boot-up in normal way.
  - PC boot-up for the first time after set option as Enabled.
  - the system information saved by BIOS was damaged.
  - PC fail to boot-up continually over three times.
- Don't power off or reset system while BootEasy initializing.
- Set "QDI BootEasy Feature" as "Disabled" before you replace system equipment.  
Set "QDI BootEasy Feature" as "Enabled" after you accomplished replacing.

## **Installation de la carte mère Advance 12**

1. Assurez-vous que votre ensemble est complet: carte mère, câbles IDE et FLOPPY, notice d'utilisation et CD-ROM d'installation.
2. Vérifiez que l'alimentation est débranchée et reliez-vous à la terre par une courroie à votre poignet. A défaut, maintenez le contact de vos deux mains avec un objet lui-même relié à la terre, ou une partie en métal de votre système.
3. Fixez la carte mère dans le boîtier grâce aux vis fournies avec celui-ci.
4. Si votre carte mère est munie de cavaliers, placez les en fonction des options que vous souhaitez utiliser: réglage de la fréquence du processeur si votre carte n'est pas SpeedEasy, fonction allumage par saisie du mot de passe... (voir le manuel, rubrique «configuration des cavaliers» pages 13 à 16)
5. Insérez le processeur dans son logement avec son ventilateur que vous brancherez au connecteur «CPUFAN».
6. Insérez la/les barrette(s) mémoire dans les slots DIMM.
7. Installez vos éventuelles cartes PCI et AMR dans les slots prévus à cet effet (voir page centrale du manuel).
8. Branchez vos périphériques IDE et FLOPPY sur les connecteurs prévus à cet effet grâce aux nappes fournies avec la carte. Vérifiez que le sens de branchement est correct (liseré rouge du câble sur la broche 1 du connecteur).
9. Reliez les câbles du boîtier aux connecteurs prévus à cet effet (Connecteur d'alimentation, LED de marche/arrêt, disque dur, haut-parleur... voir manuel pages 9 à 12). Refermez le boîtier.
10. Branchez les périphériques externes sur les sorties du fond de panier: clavier, souris PS/2, périphériques USB, moniteur, imprimante... (voir manuel pages 7-8)
11. Lorsque tous les éléments du système sont installés physiquement, rebranchez l'unité centrale.

## **Installation du système.**

1. Démarrez votre système en pressant le bouton «POWER».
2. Pressez la touche «Suppr» pour entrer dans le setup du BIOS.
3. Dans le menu «SpeedEasy CPU Setup», réglez la vitesse de votre processeur (ATTENTION: il est recommandé de ne pas sélectionner une fréquence supérieure à celle de votre processeur, nous déclinons toute responsabilité pour les dommages qui en résulteraient)
4. Effectuez les autres réglages du BIOS selon votre configuration (nous vous conseillons fortement de maintenir les réglages par défaut afin d'éviter toute manipulation hasardeuse pouvant résulter en un dysfonctionnement). Pour plus d'informations sur les fonctions du BIOS, vous pouvez consulter la version



française du manuel sur le CD-ROM.

5. Pressez la touche F10 ou choisissez «Save and exit» pour enregistrer vos paramètres et relancer la machine.
6. Installez votre système d'exploitation
7. Après installation, assurez-vous qu'il ne subsiste aucun conflit ou périphérique inconnu dans votre système.
8. Installation des pilotes:

1. Chipset:

Les pilotes des chipsets VIA du répertoire \ChipDrv\Via peuvent être utilisés sur cette carte mère.

Insérez le CD-ROM dans votre lecteur et cliquez sur « Chipset Driver » pour installer les pilotes

2. QDIManageEasy:

Lancez le setup.exe du répertoire \QME pour installer le ManageEasy. Pour des informations détaillées sur le ManageEasy, référez-vous au manuel ManageEasy du répertoire \Doc.

N'oubliez pas de redémarrer votre système pour que les changements soient pris en compte.

3. RecoveryEasy

RecoveryEasy™ permet de protéger le système des destructions en créant une «partition miroir» de la partition courante du disque dur et en sauvegardant toutes les données dans ce «miroir».

Cette utilitaire fournit partition du disque, récupération/sauvegarde des données, récupération/sauvegarde des réglages du CMOS et fonctions multi-boot.

RecoveryEasy permet également la protection du système contre les divers types de virus de boot tels que CIH. Dans le cas où le système est perdu soit par erreur, soit à cause d'un virus, il peut être récupéré depuis la partition miroir. Cette innovation utilise la technologie du Bios intégré qui n'occupe ni l'espace disque, ni la mémoire du système. C'est la solution idéale pour l'utilisateur.

Il faut presser les touches Ctrl + Bksp et F12 pour entrer dans les interfaces «Recovery» et «Partition» durant le démarrage du Bios.

**ATTENTION** : lisez attentivement le manuel du RecoveryEasy traduit sur le CD-ROM QDI avant d'installer cette fonction.

**Très important : n'oubliez pas votre mot de passe, faute de quoi vous n'auriez plus accès au RecoveryEasy, même après avoir effectué un Clear CMOS.**

## **QDI BootEasy**

BootEasy est la dernière née des technologies Legend QDI.

Voir figure page 14 du manuel en anglais.

BootEasy permet au PC de démarrer plus rapidement lorsqu'on allume, reset ou relance le PC.

Avec le BootEasy, le PC peut démarrer en un instant, sans attente redondante pour afficher le démarrage du système d'exploitation.

BootEasy est facile à utiliser, il suffit de choisir l'option correcte dans le menu «Advanced Bios Features Setup».

BootEasy sauvegarde toutes les informations lorsque le PC boote et restaure les paramètres pour le système, permettant ainsi au PC de démarrer rapidement.

Note:

1. Le PC démarre de manière classique dans les cas suivants:
  - Premier démarrage après activation de l'option BootEasy
  - Informations sauvegardées endommagées
  - Echec au démarrage du PC à 3 reprises
2. N'arrêtez pas ou ne redémarrez pas le système lorsque BootEasy s'initialise
3. Placez «QDI BootEasy Feature» sur «Disabled» avant de changer un composant du système  
Placez «QDI BootEasy Feature» sur «Enabled» après avoir effectué le changement.

## **Le menu SpeedEasy**

- I. Insérez le processeur correctement.
- II. Connectez les autres éléments du système (voir Installation).
- III. Au démarrage du système, pressez la touche <Suppr> pour entrer dans le Bios
- IV. Entrez dans le menu «CPU SpeedEasy setup»

**Note: si vous ne déterminez pas la vitesse de votre unité centrale, votre système fonctionnera par défaut**

V. Sauvegardez et quittez le Bios.

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**CMOS Setup Utility – Copyright© 1984-1999 Award Software**  
**SpeedEasy CPU Setup**

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CPU Host/PCI Clock:	66/33MHz	Item Help
Close empty DIMM/PCI Clk:	Enabled	
Spread Spectrum	Disabled	Menu Level >

---

Le menu SpeedEasy vous fournit un ensemble de valeurs. Vous pouvez sélectionner manuellement la vitesse de CPU dans ce menu soit en mode "SpeedEasy" soit en mode "Jumper Emulation" (voir manuel).

**ATTENTION: Ne pas sélectionner une fréquence de fonctionnement du CPU supérieure à celle indiquée par le constructeur. Nous déclinons toute responsabilité pour tout dégât qui en résulterait.**

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# Chapter 1

## Introduction

### Overview

The Advance 12 series are high performance, cost-effective and energy efficient motherboards from 66MHz, 100MHz and 133MHz FSB based on Socket-370 processors. They utilize the Apollo Pro 266 chipset consisting of VIA VT8633 and VT8233. They support the UltraDMA-33/66/100, DDR SDRAM and AGP 4x. They also provide the AGP Pro slot, ACR slot and SCR(Smart Card Reader) interface connector. In addition, advanced features are supported such as Keyboard Password Power-on function, wake-up on LAN, wake-up on internal/external modem, ACPI power management and hardware monitoring.

**IMPORTANT:** Onboard Audio( AC97 codec ), Onboard LAN and Onboard SoundBlaster( Creative®CT5880 ) are Optional. Please take note of the difference.

### Key Features

#### Form factor

- ATX form factor of 305mm x244mm

#### Microprocessor

- Supports 66/100/133MHz FSB speed
- Supports all Intel®Pentium III(Coppermine) FC-PGA processors at 533/600EB/667/733/800EB/866/933MHz/1GHz and future processors with 133MHz FSB speed
- Supports all Intel®Pentium III(Coppermine) FC-PGA processors at 500/550/600/650/700/750/800/850MHz and future processors with 100MHz FSB speed
- Supports all Intel®Celeron™ FC-PGA processors at 533/566/600/633/667/700/733/766MHz and future processors with 66MHz FSB speed
- Supports all Intel®Celeron™ FC-PGA processors at 800MHz and future processors with 100MHz FSB speed
- Supports all Intel®Celeron™ PPGA processors at 300/300A/333/366/400/433/466/500/533MHz with 66MHz FSB speed
- Supports later processors Cyrix-III at 533/550/600/667/733MHz and future processors

#### Chipset

- VIA Apollo Pro266 chipset: VT8633( North Bridge ), VT8233( South Bridge )
- Adopts ITE IT8712F I/O chip

#### System memory

- Provides three 2.5V SSTL-2, 184-pin, 64-bit data width DDR DIMMs
- Supports PC1600/2100 DDR SDRAM
- Supports DDR SDRAM CL 2/2.5/3 and 1T/per command

### **Onboard IDE**

- Supports two PCI PIO and Bus Master IDE ports
- Two fast IDE interfaces supporting four IDE devices including IDE hard disks and CDROM drives
- Supports up to mode 4 timing
- Supports "Ultra DMA/33" Synchronous DMA mode transferring up to 33 MB/sec
- Supports "Ultra DMA/66" Synchronous DMA mode transferring up to 66 MB/sec
- Supports "Ultra DMA/100" Synchronous DMA mode transferring up to 100 MB/sec
- Integrated 16x32bit buffer for IDE PCI Burst Transfers

### **Onchip I/O**

- 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 fast compatible UARTs (COM1/COM2/COM3/COM4 selective) with 16-byte send/receive FIFOs
- One enabled parallel port at the I/O address 378H/278H/3BCH with additional bi-direction I/O capability and multimode as SPP/EPP/ECP (IEEE 1284 compliant)
- Provides Six USB ports and One IrDA connector
- Provides One SCR interface connector and One ACR slot
- Supports PS/2 mouse and PS/2 keyboard
- Supports LS-120 floppy disk drive and Zip drive
- All I/O ports can be enabled/disabled in the BIOS setup

### **AGP Pro slot**

- Provides one AGP Pro slot
- AGP v2.0 compliant
- Supports AGP 4x mode

### **Onboard Audio( Available on Advance 12-A/-AL )**

- Built in VIA VT8233
- Standard AC97 Codec interface

### **Creative® CT5880 PCI Hardware Sound ( Available on Advance 12-C/-CL )**

- PCI 2.2 compliant
- 3D audio effects
- 32-voice XG wavetable synthesizer
- Direct Sound/Music Hardware Accelerator
- Full-Duplex stereo
- Supports four speakers output based on Speaker-out jack and Line-in jack

### **Onboard LAN( Available on Advance 12-L/-AL/-CL )**

- Provides One 10/100M LAN interface
- 10/100 Mbit/sec Ethernet support

**Advanced features**

- PCI 2.2 compliant
- Provides Trend ChipAwayVirus® On Guard
- Supports PC99 color- coding connector Specification
- Supports wake-up on LAN
- Supports wake-up on internal/external modem
- Supports system monitoring (monitors system temperature, CPU temperature, voltages and fan speed)
- Supports QDI innovations: SpeedEasy, BootEasy, LogoEasy, RecoveryEasy, BIOS-ProtectEasy and ManageEasy
- Protects the system BIOS from being attacked by severe virus such as CIH, by enabling "Flash Write Protect" in CMOS setup or closing the Jumper "JAV"

**BIOS**

- Licensed advanced AWARD BIOS
- Supports Flash ROM with 2M-bit memory size, plug and play ready
- Supports IDE CDROM or SCSI bootup

**Green function**

- Supports ACPI (Advanced Configuration and Power Interface) and ODPM (OS Directed Power Management)
- Supports ACPI power status: S0( Full-on ), S1( power on Suspend ), S4(STD)( Windows Me, Windows 2000 ), S5(Soft-off)

**Main Expansion slots and Connectors**

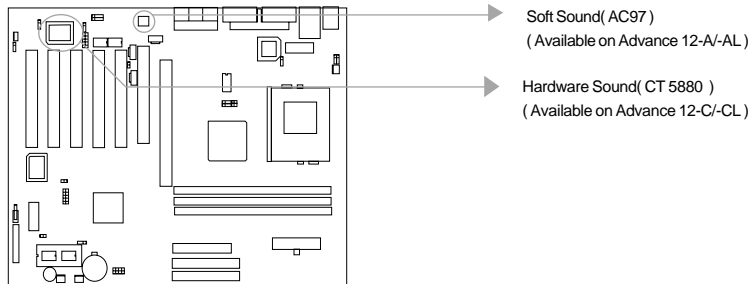
Slot/Port (Quantity)	Description
PCI(5)	PCI slots
IDE(2)	IDE ports
FLOPPY(1)	Floppy Drive port
DDR(3)	DDR DIMMs
USB(6)	USB connectors
ACR(1)	ACR slot
AGP Pro(1)	AGP Pro slot
SCR(1)	SCR connector
IrDA(1)	IrDA connector

### **Creative CT5880 chip (Available on Advance 12-C/-CL)**

The CT5880 provides high-quality audio performance and low CPU utilization for you. Featuring 128-voice wave-table synthesis with very high sample rate converters. In addition, CT5880 supports localized three-dimensional sound immersion in headphone and four-speaker environments. The four-speaker based on speaker-out and line-in jack. the CT5880 also supports multiple algorithm levels of reverb and chorus effects on the wave-table sounds as well as spatial sound enhancement on MIDI and wave sounds in two speakers. Full duplex operation also allows simultaneous audio recording and play-back.

The motherboard has two solutions for onboard audio.

**Please refer to Appendix A to install the Audio driver.**



### **AGP Pro Connector**

The AGP Pro specification is a connector definition for high-end servers and workstations. It is specifically designed for 4x mode operation, although it will support 1x and 2x mode operation with either 1.5V or 3.3V signalling. AGP Pro will electrically, mechanically, and thermally support up to 110 Watts through the connector.

**Note:Do not remove the “Small Card” in the AGP Pro slot when using normal AGP Card. We will not be responsible for any damages caused.**



## Chapter 2

### Installation Instructions

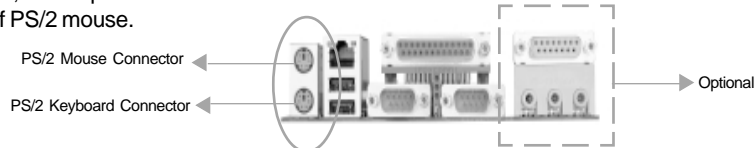
This section covers External Connectors and Jumper Settings. Refer to the motherboard layout chart for the locations of all jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pin assignments for your reference. The particular states of the jumpers, 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 motherboard and expansion cards might be seriously damaged.**

#### External Connectors

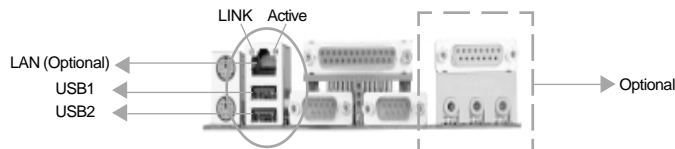
##### PS/2 Keyboard Connector, PS/2 Mouse Connector

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.



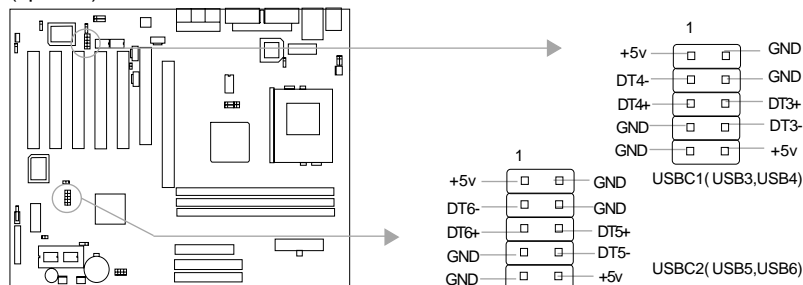
##### USB1, USB2 and LAN Connectors ( Available on Advance 12-L/AL/CL )

Two USB ports are for connecting USB devices. The RJ-45 connector is for onboard LAN.



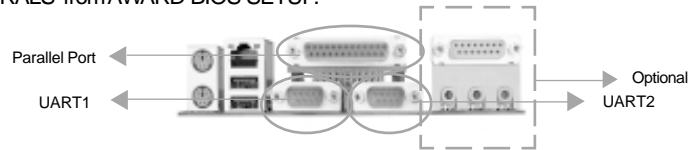
##### USB3, USB4 and USB5, USB6 Connectors

Four USB ports are not available on the back panel. Therefore, we provide a 10-pin cable (optional) to connect onboard USB headers and USB devices.



### Parallel Port, Serial Port Connectors (UART1, UART2)

The parallel port connector can be connected to a parallel device such as a printer. The serial ports UART1,2 connectors can be connected to serial port devices such as serial port mice. You can enable/disable them and choose the IRQ or I/O address in "INTEGRATED PERIPHERALS" from AWARD BIOS SETUP.

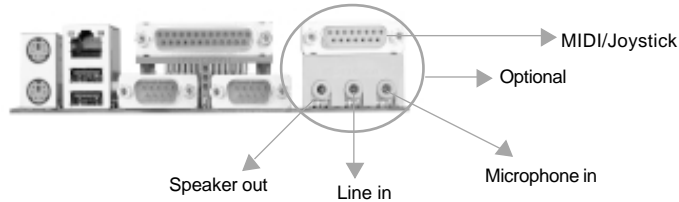


### Line-in jack, Microphone-in jack, Speaker-out jack and MIDI/Joystick connector ( Available on Advance 12-A/-AL/-C/-CL )

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 to speakers or headphones for audio output from the internal amplifier.

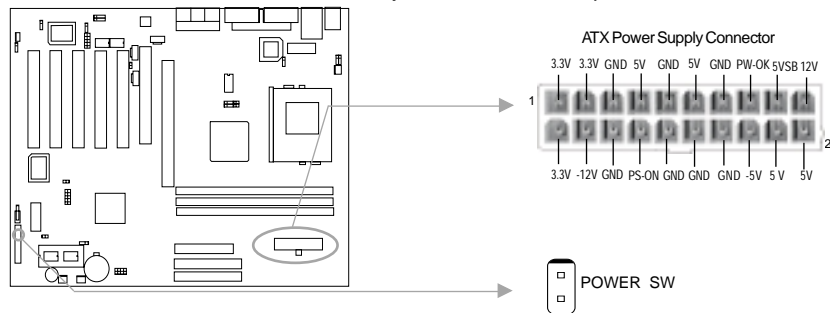
The MIDI/Joystick connector allows you to connect a game joystick or a MIDI device.

**Note: For the Advance 12-C/-CL motherboard, the Rear out jack replaces Line-in jack to connect powered speakers for audio output.**



### ATX Power Supply Connector & Power Switch (POWER SW)

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



**Note:** \* If you change "soft-off by PWRBTN" from default "Instant-off" to "Delay 4 Secs" in the "POWER MANAGEMENT SETUP" section of the BIOS, the power button should be pressed for more than 4 seconds before the system powers down.

### Hard Disk LED Connector (HD\_LED)

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.

### Speaker Connector (SPEAKER)

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

### Power LED Connector (PWE LED)

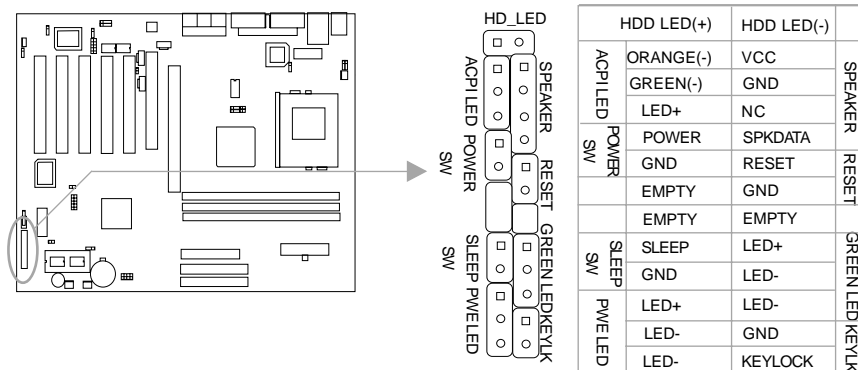
When the system is in S0( full-on ) status, the LED is on. When the system is in S1( power on suspend ) status, the LED is blink. When the system is in S5( soft-off ) status, the LED is off. The connector has an orientation.

### ACPI LED Connector (ACPI LED)(Reserved)

The ACPI LED is a double-color light with three pins. Pin1 and Pin2 drive different color lights. If Pin1 drives the orange light , then, Pin2 drives the green light, the following status will come out. When the system is in S0 status, the LED is green on. When the system is in S1 status, the LED is green blink. When the system is in S5 status, the LED is off.

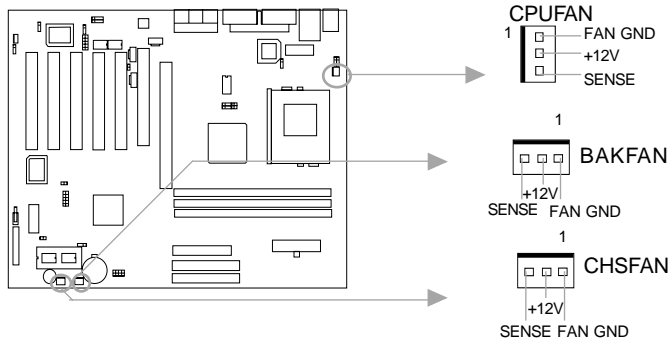
### Hardware Green Connector (SLEEP SW)

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



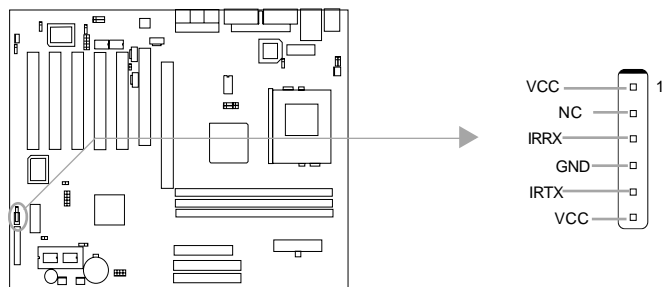
### Fan Connector (CPUFAN, CHSFAN, BAKFAN)

The fan speeds of CPUFAN, CHSFAN and BAKFAN can be detected and viewed in “PC Health” section of the BIOS.



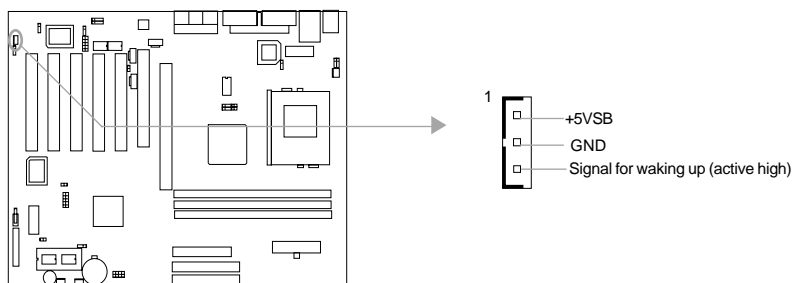
### Infrared Header (IrDA)

This connector supports Infrared transmitting and receiving. If using this function, set “UART Mode Select” to IrDA or ASKIR and configure the settings from the “INTEGRATED PERIPHERALS” section of the BIOS.



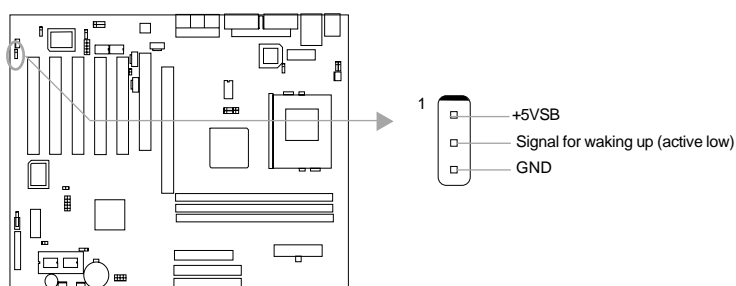
### Wake-Up On LAN (WOL)

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 on 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.



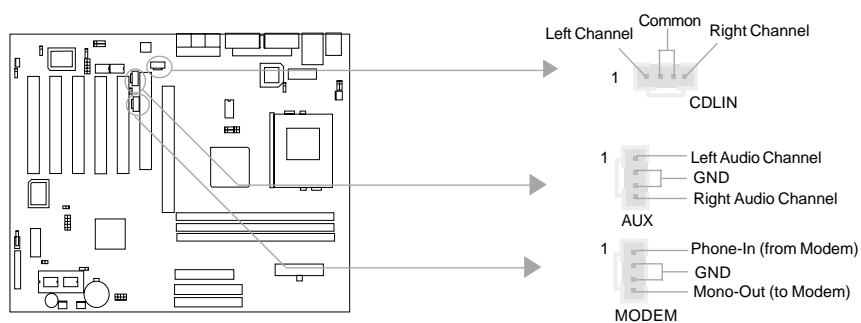
### Wake-Up On Internal Modem (WOM)

Through the Wake-Up On Internal Modem function, the system which is in the suspend or soft-off status can be waked up by a ring signal received from internal modem. If this function is to be used, be sure an internal modem card which supports the function is used. Then connect this header to the relevant connector on the modem card, set "Wake up on 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.



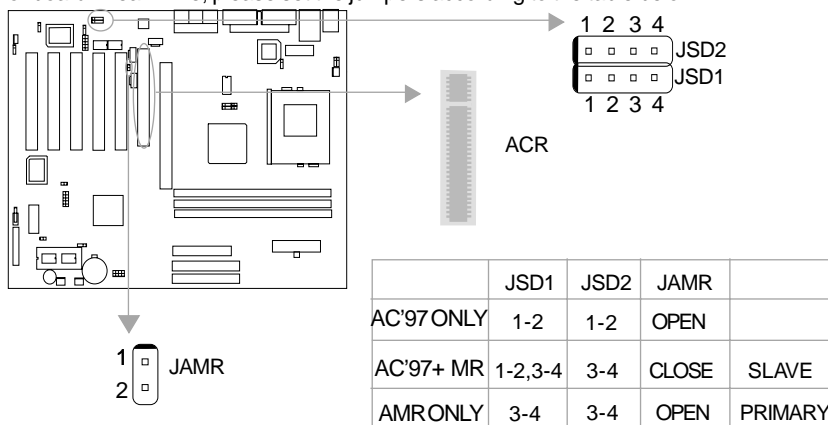
### Internal Audio Connectors (AUX, CDLIN, MODEM) ( Available on Advance 12-A/-AL/-C/-CL )

AUX and CDLIN connectors allow you to receive stereo audio input from such sound sources as a CDROM, TV tuner, or MPEG card. The MODEM connector allows the onboard audio to interface with a voice modem card with a similar connector. It allows connecting the mono\_in (such as a phone) or mono\_out (such as a speaker) between the onboard audio and the voice modem card.



### Advanced Communications Riser Interface Connector( ACR ) Enable/Disable onboard Audio( JSD1, JSD2 ) & AMR Sound Option( JAMR )( Available on Advance 12-A/-AL )

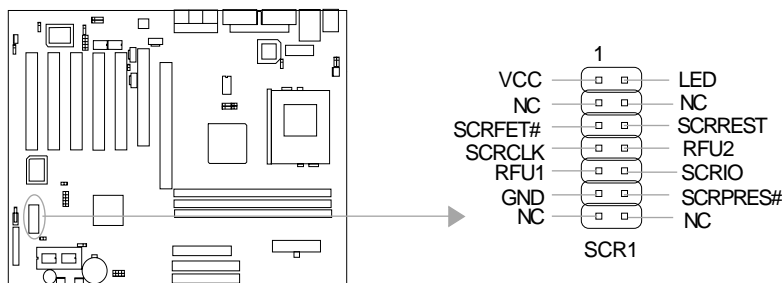
The ACR connector uses a standard 120-pin PCI connector that is reversed and offset. Legacy AMR card can be plugged into the ACR slot and works without modification. ACR provides a common architecture for analog modem, Ethernet, phoneline networking and so on. It supports legacy AMR riser designs for modem and audio Codecs. If you use onboard audio, the AC'97 Codec onboard takes effect. If you use Audio/Modem Riser card, to avoid conflict, you should set the Audio/Modem Riser card as slave when use onboard audio or set the Audio/Modem Riser card as primary when use the audio on the card and disuse the audio onboard. Meanwhile, please set the jumpers according to the table below.






**Note:** For the Advance 12-A/-AL, the usage of ACR slot accord with the description above. For the Advance 12-C/-CL, the PCI1 slot can only use Slave card, the ACR slot can only use AMR Primary card.

### Smart Card Reader Connector( SCR )

The SCR Interface Connector is the interface between the motherboard and the Smart Card. The SCR is built in IT8712F I/O chip and includes a standard UART to control Smart Card interface handshaking and then performs data transfers. The SCR can be used for a broad range of applications in GSM, ID, pay TV, banking and so forth. It also provides a Smart Card clock divider for those ICC (Integrated Circuit Card) without internal clocks. If use this function, set "UART Mode Select" to SCR in the "INTEGRATED PERIPHERALS" section of the BIOS.

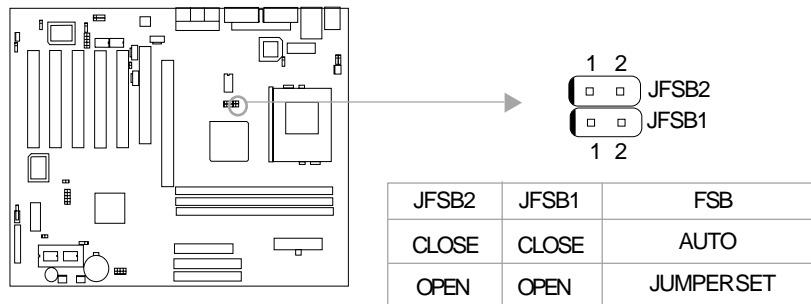


### Jumper Settings

Jumpers are located on the motherboard, they represent, clear CMOS jumper JCC, enable BIOS ProtectEasy function jumper JAV etc. Pin 1 of all jumpers are located on the side with a thick white line ( Pin1→  ), refer to the motherboard's silkscreen. Jumpers with three pins will be shown as  to represent pin1 & pin2 connected and  to represent pin2 & pin3 connected.

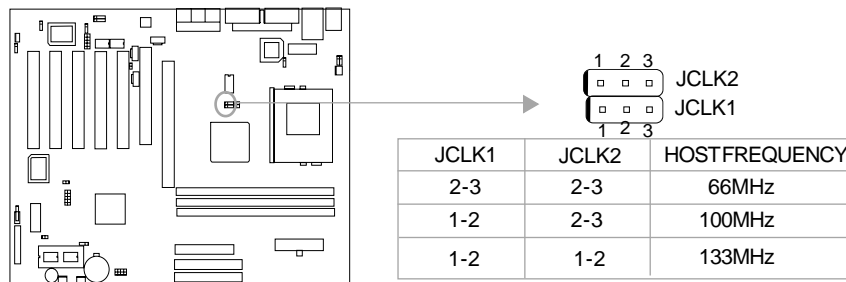
### FSB Frequency Selection(JFSB1, JFSB2)

The jumper labeled JFSB1 and JFSB2 are located on the motherboard providing users with FSB frequency selection. If it is set as Auto with JFSB1 and JFSB2 closed, the system detects the CPU front side bus automatically. If it is set as Jumper setting with JFSB1 and JFSB2 opened, the CPU front side bus can be set manually.



### Overclocking Jumper Setting (JCLK1, JCLK2)

Jumpers labeled JCLK1, JCLK2 are located on the motherboard providing users with CPU overclocking feature. The host bus speed can be set as 66/100/133MHz. The table below for your reference.

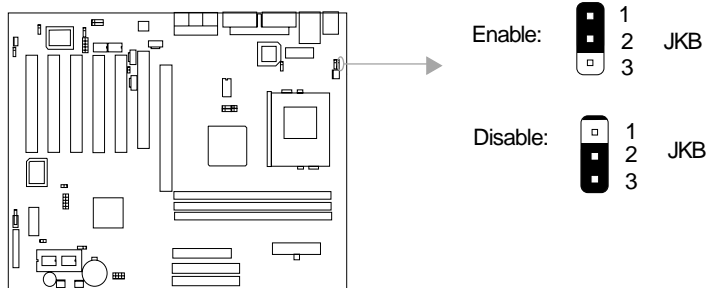


Note: "1-2" represents pin1 & pin2 closed;  
 "2-3" represents pin2 & pin3 closed.

If CPU FSB is set as 66MHz, the system only runs at 66MHz front side bus even if a processor with 100MHz or higher. If CPU FSB is set as 100MHz, the system can run at 100MHz front side bus even if a processor with 66MHz FSB installed. Setting up to 133MHz FSB is also supported. However, whether or not your system can be overclocked depends on your processor's capability. We do not guarantee the overclocking system to be stable.

### Enable Keyboard Password Power-on function (JKB)

The motherboard 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 By Keyboard" 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.

#### Note:

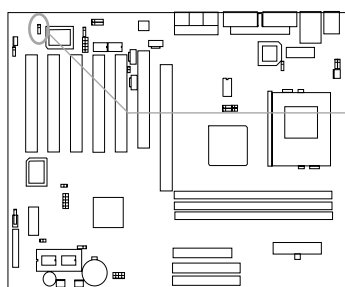
1. If the characters of your password are more than one, you must press "Enter" key to power on after entering the password.
2. If using this function, 5VSB line of the power supply should be capable of delivering enough current (eg. 200mA) for all the devices connected to the keyboard port, if not, you will be unable to power up the system using the keyboard.
3. If you set JKB with pin2 & pin3 closed, set "POWER ON by Button" to Enabled ONLY, or you'll be unable to power up your system by the keyboard or the power button.
4. If you encounter the above problems, clear CMOS and set the jumper and BIOS option again.




### Enable/Disable onboard SoundBlaster(JSB)

( Available on Advance 12-C/-CL )

If you want to use the onboard SoundBlaster( Creative® CT5880 PCI Hardware Sound ), set JSB as pin1&pin2 closed. Otherwise, set JSB as pin2&pin3 closed for disabling this function. Please set JSB as pin2&pin3 closed when using PCI or ISA sound card.




Enable onboard  
SoundBlaster:



JSB

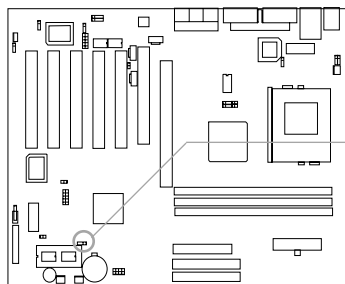
Disable onboard  
SoundBlaster:



JSB

### 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.




Normal status:



JCC

Clear CMOS:



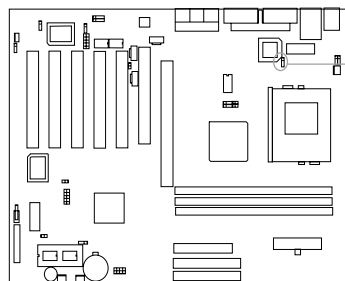
JCC

(Unplug the AC power supply)


### Enable/Disable onboard Ethernet(JLAN)

( Available on Advance 12-L/-CL/-AL )

If you want to use the onboard Ethernet, set JLAN with pin1&pin2 closed. Otherwise, set JLAN with pin2&pin3 closed for disabling this function.




Enable onboard  
Ethernet



JLAN

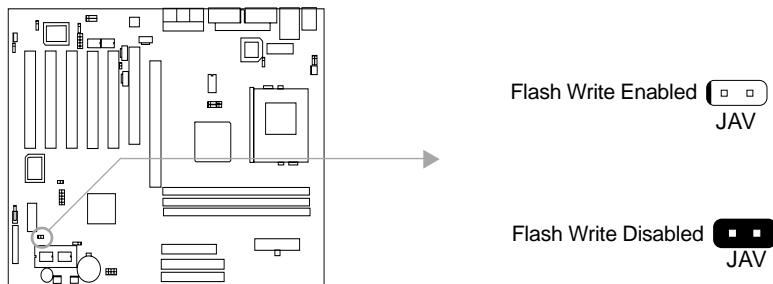
Disable onboard  
Ethernet



JLAN

### BIOS-ProtectEasy Jumper (JAV)

The BIOS of the motherboard is contained inside the Flash ROM. If the jumper JAV is set as closed, you will be unable to flash the BIOS to the motherboard. 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 from “Advanced BIOS Features” in AWARD BIOS CMOS Setup, allows you to flash the BIOS to the Flash ROM.

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. 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. Therefore, set JAV as closed when changing the system hardware configuration, or the error message “Unknown Flash Type” will be displayed on the screen, and DMI information update will be fail.

Setting the jumper JAV as closed, the Pentium® III Processor Number can not be read whatever disabling or enabling “Processor Number Feature” item from “Advanced BIOS Features” in AWARD BIOS CMOS Setup.

## 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:

- **We strongly recommend you only upgrade BIOS when encounter problems.**
- **Before upgrading your BIOS, review the description below to avoid making mistakes, destroying the BIOS and resulting in a non-working system.**

When you encounter problems, for example, you find your system does not support the latest CPU released after our current motherboard, you may therefore upgrade the BIOS, please don't forget to set JAV as open and disable the "Flash Write Protect" item in AWARD BIOS CMOS Setup first .

Follow the steps exactly for a successful upgrade.

1. Create a bootable system floppy diskette by typing Format A:/s from the DOS prompt under DOS6.xx or Windows 9x environment.
2. Copy AWDFLASH.EXE ( Version7.95 ) from the directory \Utility located on QDI Driver CD 2000 to your new bootable diskette.
3. Download the updated BIOS file from the Website (<http://www.qdigrp.com>). Please be sure to download the suitable BIOS file for your motherboard.
4. Uncompress the file download, copy the BIOS file (xx.bin) onto the bootable diskette, and note the checksum of this BIOS which is located in readme file.
5. Reboot the system from the bootable diskette created.
6. Then run the AWDFLASH utility at the A:\ prompt as shown below:

```
A:\AWDFLASH xxxx.bin
```

Follow the instruction through the process. Don't turn off power or reset the system until the BIOS upgrade has been completed.

If you require more detailed information concerning AWDFLASH Utility, for example, the different usage of parameters, please type A:\>AWDFLASH /?

## 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 <Del> key to enter the AWARD BIOS CMOS Setup Utility.

**Press <Del> to enter SETUP**

Once you have entered, the Main Menu (Figure 1) appears on the screen. The main menu allows you to select from twelve 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 Fail-Safe Defaults

The Fail-Safe Defaults are secure and useful for system. It is recommended users load the Fail -Safe Defaults when the system is in trouble.

### 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.

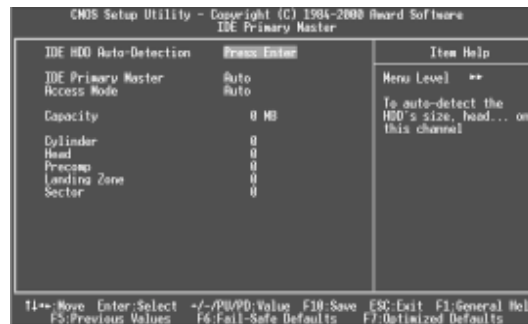


Figure-2-1 IDE Primary Master Setup Menu

**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 Manual. 'None' means no HDD is installed or set; 'Auto' means the system can auto-detect the hard disk when booting up; by choosing 'Manual', 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

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.

### **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.
Total Memory	Total memory of the system equals the sum of the above memory.

## SpeedEasy CPU Setup

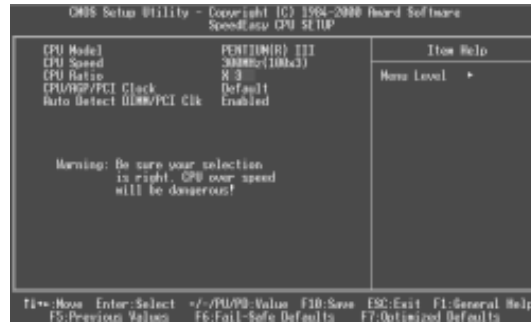


Figure-3 SpeedEasy CPU Setup Menu

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

<u>Item</u>	<u>Option</u>	<u>Description</u>
• CPU Model	<i>Pentium(R)III</i>	BIOS can automatically detect the CPU model, therefore this item is shown only.
• CPU Speed	<i>300MHz (100x3)</i>	CPU frequency should be set according to the CPU type. For processors with 66MHz FSB, you can choose from 200MHz (66X3) to 533MHz(66X8) or 466MHz (66X7) to 800MHz(66X12). For processors with 100MHz FSB, you can select from 300MHz (100X3) to 800MHz(100X8) or 700MHz (100X7) to 1200MHz(100X12). For processors with 133MHz FSB, you can select from 400MHz(133X3)to1064MHz (133X8 ) or 933MHz( 133X7 ) to 1600MHz( 133X12 ).
• CPU Ratio	<i>3~8 7~12</i>	The multiplier can be chosen from 3~8 or7~12. The BIOS will detect the CPU type and show one of the choices from 3 to 8 or 7 to 12. However, the multiplier setting will not function for bus ratio locked processor,only for bus ratio unlocked processor.
• CPU/AGP/PCI Clock	<i>Default 133 / 33MHz (±0.5% spd) ..... 150 / 37MHz (spd off)</i>	Sets CPU/PCI Clock as default. SelectsCPU/PCI Clock manually. Spd: enables Spread Spectrum to reduce EMI.
• Auto Detect DIMM/PCI Clk	<i>Enabled Disabled</i>	Spd off: disables Spread Spectrum. Closes empty DIMM or PCI clock to reduce EMI. Does not close empty DIMM or PCI clock.

### Warning:

**Be sure your selection is right. CPU over speed will be dangerous! We will not be responsible for any damages caused.**



## Advanced BIOS Features Setup

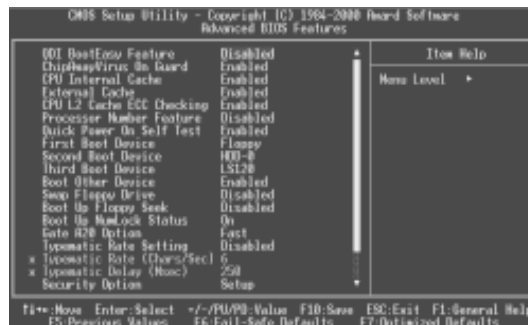


Figure-4 BIOS Features Setup Menu

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

<u>Item</u>	<u>Option</u>	<u>Description</u>
• QDI BootEasy Feature	<i>Enabled</i>	PC boots in rapid speed, without any redundant waiting for the displaying of starting OS.
	<i>Disabled</i>	PC boots in the legacy BIOS way.
• ChipAway Virus On Guard	<i>Enabled</i>	Allows you to choose the virus warning feature for IDE hard disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.
	<i>Disabled</i>	Invalidates this function.
• CPU Internal Cache	<i>Enabled</i>	Enables CPU internal cache.
	<i>Disabled</i>	Disables CPU internal cache.
• External Cache	<i>Enabled</i>	Enables CPU external cache.
	<i>Disabled</i>	Disables CPU external cache.
• CPU L2 Cache ECC Checking	<i>Enabled</i>	Enables CPU L2 Cache ECC function.
	<i>Disabled</i>	Disables CPU L2 Cache ECC function.
• Processor Number Feature	<i>Enabled</i>	Pentium®III Processor Number is readable.
	<i>Disabled</i>	Pentium®III Processor Number is unreadable.
• Quick Power On Self Test	<i>Enabled</i>	Enables quick POST. BIOS will shorten or skip some check items during POST to speed up POST after you power on the computer.
	<i>Disabled</i>	Normal POST.
• First (Second, Third) Boot Device	<i>Disabled</i>	Selects Your Boot Device Priority. It could be Disabled, Floppy, LS/ZIP, HDD-0, HDD-1, HDD-2, HDD-3, SCSI, CDROM, LAN.
	<i>Floppy</i>	
• Swap Floppy Drive	<i>Enabled</i>	Exchanges the assignments of A&B floppy drives.
	<i>Disabled</i>	The assignments of A&B floppy drives are normal.

## Award BIOS Description

• 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>	Keypad is used as number keys. Keypad is used as arrow keys.
• Gate A20 Option	<i>Normal</i>  <i>Fast</i>	The A20 signal is controlled by the keyboard controller. The A20 signal is controlled by Port92.
• 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>	Selects whether the password is required every time the system boot or only when you enter setup.
• 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.
• OS Select For DRAM>64MB	<i>Non-OS2</i> <i>OS2</i>	Selects OS2 only if you are running OS/2 operating system with more than 64MB of RAM.
• Video BIOS Shadow	<i>Enabled</i>  <i>Disabled</i>	Video BIOS will be copied to RAM. Video Shadow will increase the video speed. Invalidates this feature.
• Show Bootup Logo	<i>Enabled</i> <i>Disabled</i>	The logo will be shown when system boots up. The logo will not be shown when system boots up.
• Flash Write Protect	<i>Enabled</i>  <i>Disabled</i>	This option is for protecting the system BIOS from being attacked by severe virus such as CIH. Disables you to upgrade the BIOS. Enables you to upgrade the BIOS.

## Advanced Chipset Features Setup

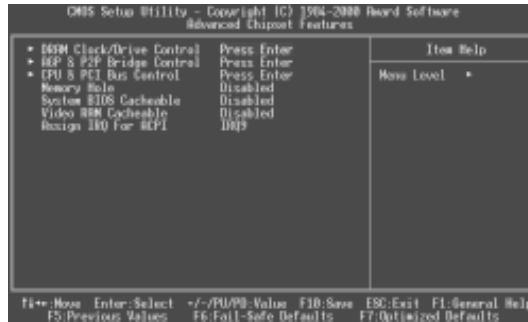


Figure-5 Advanced Chipset Features Setup Menu

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

<u>Item</u>	<u>Option</u>	<u>Description</u>
• DRAM Clock/Drive Control	<i>Press Enter</i>	Enters to set the items about DRAM.
• DRAM Clock	<i>Host Clk</i>	DDR clock is the double of host clock.
	<i>Hclk+33M</i>	DDR clock is faster than the double of host clock by 66MHz.
	<i>Hclk-33M</i>	DDR clock is slower than the double of host clock by 66MHz.
	<i>By SPD</i>	DDR clock is defined by SPD.
• DRAM Timing	<i>By SPD</i>	DDR Timing is defined by SPD.
	<i>Manual</i>	Sets DDR Timing manually.
• SDRAM Cycle Length	<i>2</i>	Defines the CLT parameter of DDR.
	<i>2.5</i>	
	<i>3</i>	Latency Time = 2 /2.5/3 clocks.
• Bank Interleave	<i>Disabled</i>	Disables DDR Bank Interleave.
	<i>4Bank</i>	Sets Bank Interleave as 4 bank.
	<i>2Bank</i>	Sets Bank Interleave as 2 bank.
• AGP&P2P Bridge Control	<i>Press Enter</i>	Enters to set the following items.
• AGP Aperture Size	<i>4-256M</i>	Sets the effective size of the Graphics Aperture to be used in the particular PAC Configuration.
• AGP Mode	<i>1x,2x</i>	Supports AGP 1x, 2x or 4x mode.
	<i>4x</i>	
• AGP Driving Control	<i>Auto</i>	The default setting is recommended.
	<i>Manual</i>	
• AGP Driving Value	<i>0000-00FF</i>	Sets this item when the AGP 4x card runs incorrectly.

## Award BIOS Description

● AGP Fast Write	<i>Enabled</i>	Enables AGP Fast Write.
	<i>Disabled</i>	Disables AGP Fast Write.
● AGP Master 1 WS Write	<i>Enabled</i>	Enables AGP Master 1 WS Write.
	<i>Disabled</i>	Disables AGP Master 1 WS Write.
● AGP Master 1 WS Read	<i>Enabled</i>	Enables AGP Master 1 WS Read.
	<i>Disabled</i>	Disables AGP Master 1 WS Read.
● CPU&PCI Bus Control	<i>Press Enter</i>	Enters to set the items about CPU&PCI Bus.
● CPU to PCI Write Buffer	<i>Enabled</i>	Enables CPU to PCI Write Buffer.
	<i>Disabled</i>	Disables CPU to PCI Write Buffer.
● PCI Master 0 WS Write	<i>Enabled</i>	Enables PCI Master 0 WS Write.
	<i>Disabled</i>	Disables PCI Master 0 WS Write.
● PCI Delay Transaction	<i>Enabled</i>	Enables PCI Delay Transaction.
	<i>Disabled</i>	Disables PCI Delay Transaction.
● Delay Transaction	<i>Enabled</i>	Enables PCI Buffer Delay Transaction.
	<i>Disabled</i>	Disables PCI Buffer Delay Transaction.
● Memory Hole	<i>15M-16M</i>	Memory Hole at 15-16M is reserved for expanded ISA card.
	<i>Disabled</i>	Does not set this memory hole.
● System BIOS Cacheable	<i>Enabled</i>	Besides conventional memory, system BIOS area is also cacheable.
	<i>Disabled</i>	System BIOS area is not cacheable.
● Video RAM Cacheable	<i>Enabled</i>	Besides conventional memory, video RAM is also cacheable.
	<i>Disabled</i>	Video RAM area is not cacheable.
● Assign IRQ For ACPI	<i>IRQ9/10/11</i>	Selects IRQ for ACPI.

## 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>Enabled</i>	Validates ACPI function.
	<i>Disabled</i>	Validates APM function.
• Power Management Option	<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.
• HDD Power Down	<i>1Min~15Min</i>	Defines the continuous HDD idle time before the HDD entering power saving mode (motor off).
	<i>Disable</i>	Invalidates this function.
• Suspend Mode	<i>1Min~1Hour</i>	Defines the continuous idle time before the system entering suspend mode.
	<i>Disable</i>	Invalidates this function.
• Video Off Option	<i>Suspend -&gt; Off</i>	Screen blanks after the system enters either standby mode or suspend mode.
	<i>Always On</i>	Screen is always on.
• Video Off Method	<i>Blank Screen</i>	The system BIOS will only blank off the screen when disabling video.
	<i>V / H SYNC + Blank</i>	In addition to Blank Screen, BIOS will also turn off the V-SYNC & H - SYNC signals from VGA cards to monitor.
	<i>DPMS Support</i>	This function is enabled only for the VGA card supporting DPMS.
• MODEM Use IRQ	3,4,5,7,9,10,11	Special Wake-up event for Modem.
	NA	This function is not applied.

## Award BIOS Description

• Soft-off by PWRBTN	<i>Instant-off</i>	The system will power off immediately once the power button is pressed.
	<i>Delay 4 Sec</i>	The system will not power off until the power button has been pressed continuously for more than 4 seconds.
• CPU Fan In Suspend	<i>On</i>	CPU fan keeps running when system in suspend state.
	<i>Off</i>	CPU fan stops running when system in suspend state.
• IRQ/Event Activity Detect	<i>Press Enter</i>	Enters to set the following items.
• VGA	<i>On</i>	VGA active reloads global timer.
	<i>Off</i>	VGA active has no influence to global timer.
• LPT&COM HDD&FDD PCI Master	<i>LPT/COM On/Off On/Off</i>	Sets the options of these items to reload global timer.
• Power On by PCI Card	<i>Enabled</i>	Enables to wake up by PCI card.
	<i>Disabled</i>	Disables to wake up by PCI card.
• Wake Up On LAN/Ring	<i>Enabled</i>	Allows the system to be powered on when a ring indicator signal comes up to UART1 or UART2 from an external modem or comes up to WOM header from an internal modem card, or when a remote wake-up signal comes up to the WOL header from LAN adapter.
	<i>Disabled</i>	Does not allow wake up on LAN or wake up from internal/external modem.
• RTC Alarm Resume	<i>Enabled</i>	RTC alarm can be used to generate a wake event to power up the system which is in power-off status. You can set any date or any time to power up the system.
	<i>Disabled</i>	RTC has no alarm function.
• IRQs Activity Monitoring	<i>Press Enter</i>	Reloads global timer.
• Primary INTR	<i>On</i>	Allows wake-up from IRQ.
	<i>Off</i>	Does not allow wake-up from IRQ.
• IRQ3~IRQ15	<i>Enabled</i>	Enables IRQ3~IRQ15 to wake up.
	<i>Disabled</i>	Disables IRQ3~IRQ15 to wake up.

## PnP/PCI Configurations Setup

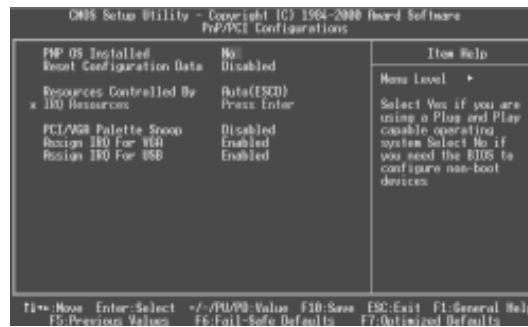


Figure-7 PnP/PCI Configurations Setup Menu

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

<u>Item</u>	<u>Option</u>	<u>Description</u>
• PNP OS Installed	Yes No	Device resources assigned by PnP OS. Device resources assigned by BIOS.
• Reset Configuration Data	Enabled Disabled	The system BIOS will reset configuration data once then automatically set this item as disabled. Disables this function.
• Resources Controlled By	Manual Auto(ESCD)	Assigns the system resources (IRQ and DMA) manually . Assigns system resources (IRQ and DMA) automatically by BIOS.
• IRQ-3-IRQ-15 assigned to	PCI Device Reserved	The specified IRQ-x will be assigned to PCI only. The specified IRQ-x reserved.
• PCI/VGA Palette Snoop	Enabled Disabled	Enables PCI/VGA Palette Snoop. Disables PCI/VGA Palette Snoop.
• Assign IRQ For VGA	Enabled Disabled	Assigns the needed IRQ for the VGA card. Does not assign an IRQ for the VGA card, in order to release the IRQ.
• Assign IRQ For USB	Enabled Disabled	Assigns an IRQ for USB device. Does not assign an IRQ for USB.

## Integrated Peripherals



Figure-8 Integrated Peripherals Menu

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

<u>Item</u>	<u>Option</u>	<u>Description</u>
• VIA OnChip IDE Device	<i>Press Enter</i>	Enters to set the following items.
• OnChip IDE Channel 0/1	<i>Enabled</i> <i>Disabled</i>	Enables OnChip IDE First/Second Channel. Disables OnChip IDE First/Second Channel.
• IDE Prefetch Mode	<i>Enabled</i> <i>Disabled</i>	Enables IDE Prefetch Mode. Disables IDE Prefetch Mode.
• Primary/ Secondary Master/Slave PIO	<i>Mode 0 ~ 4</i> <i>Auto</i>	Defines the IDE primary/secondary master/slave PIO mode. The IDE PIO mode is defined by auto-detection.
• Primary/ Secondary Master/Slave UDMA	<i>Auto</i> <i>Disabled</i>	Ultra DMA mode will be enabled if an ultra DMA device is detected. Disables this function.
• VIA OnChip PCI Device	<i>Press Enter</i>	Enters to set the following items.
• VIA-3058 AC97 Audio	<i>Auto</i> <i>Disabled</i>	Enables the AC97 Audio. When CT5880 onboard, this item will hide. Disables the AC97 Audio.
• VIA-3068 MC97 Modem	<i>Auto</i> <i>Disabled</i>	Enables the MC97 Modem. When CT5880 onboard, this item will hide. Disables the MC97 Modem.
• VIA-3043 OnChip LAN	<i>Enabled</i> <i>Disabled</i>	Enables Onchip LAN. Disables Onchip LAN.
• Init Display First	<i>PCI SLOT</i> <i>AGP</i>	Initializes the PCI VGA first. If a PCI VGA card and an AGP card are installed together in the system, the one initialized first functions. Initializes the AGP first.



● OnChip USB Controller	<i>All Enabled</i>	Enables all Onchip USB controller.
	<i>All Disabled</i>	Disables all Onchip USB controller.
	<i>1&amp;2/2&amp;3/1&amp;3</i>	Enables USB 1&2,2&3 or 1&3 controller.
	<i>USB Port</i>	
● USB Keyboard Support	<i>1/2/3USB Port</i>	Enables USB 1,2, or 3 controller. USB1 controller controls USB1&USB2 connectors. USB2 controller controls USB3&USB4 connectors. USB3 controller controls USB5&USB6 connectors.
	<i>Enabled</i>	Supports USB keyboard under legacy OS.
	<i>Disabled</i>	Does not support USB keyboard under legacy OS.
	● IDE HDD Block Mode	<i>Enabled</i>
<i>Disabled</i>		IDE HDD only reads/writes a sector once.
● KBC Input Clock	<i>8/12MHz</i>	Sets the keyboard input clock as 8/12MHz.
● Power On By Button	<i>Enabled</i>	Enables to power on by power button.
	<i>Disabled</i>	Disables to power on by power button.
● Power On By Keyboard	<i>Password</i>	Enables to power on by keyboard.
	<i>Disabled</i>	Enables to power on by power button and disables keyboard password to power on.
● KB Power On Password	<i>Enter</i>	Enters the keyboard power on password. Note:If the characters of your password are more than one, you must press "Enter" key to power on after entering the password.
	● Onboard FDC Controller	<i>Enabled</i>
<i>Disabled</i>		Onboard floppy drive controller is disabled.
● Onboard Serial Port 1/2	<i>3F8/IRQ4</i>	Defines the onboard serial port address and required interrupt number.  Onboard serial port address and IRQ are automatically assigned.
	<i>2F8/IRQ3</i>	
	<i>3E8/IRQ4</i>	
	<i>2E8/IRQ3</i>	
	<i>Auto</i>	
● UART Mode Select	<i>Disabled</i>	Onboard serial port is disabled.
	<i>Normal</i>	Defines Serial Port as standard serial port.
	<i>IrDA</i>	Supports IrDA mode.
	<i>ASKIR</i>	Supports SHARP ASK-IR protocol with maximum baud rate up to 57600bps.
● UR2 Duplex Mode	<i>SCR</i>	Supports SCR mode.
	<i>Full</i>	Sets UR2 as full duplex mode.
	<i>Half</i>	Sets UR2 as half duplex mode.
● Onboard Parallel Port	<i>378/IRQ7</i>	Defines onboard parallel port address and IRQ channel.
	<i>278/IRQ5</i>	
	<i>3BC/IRQ7</i>	
	<i>Disabled</i>	

## Award BIOS Description

• Parallel Port Mode	<i>SPP EPP,ECP ECP+EPP</i>	Defines the parallel port mode as Standard Parallel Port (SPP), Enhanced Parallel Port (EPP), or Extended Capabilities Port (ECP).
• ECP Mode Use DMA	<i>1, 3</i>	Sets DMA for ECP mode use.
• PWRON After PWR-Fail	<i>On Off Former-Sts</i>	The system remains On/Off/Former state when AC power supply resumes.
• Game Port Address	<i>201/209 Disabled</i>	Sets Game Port address. Disables Game Port.
• Midi Port Address	<i>300/330 Disabled</i>	Sets Midi Port address. Disables Midi port.
• Midi Port IRQ	<i>5, 10</i>	Sets Midi Port IRQ.

## PC Health Status

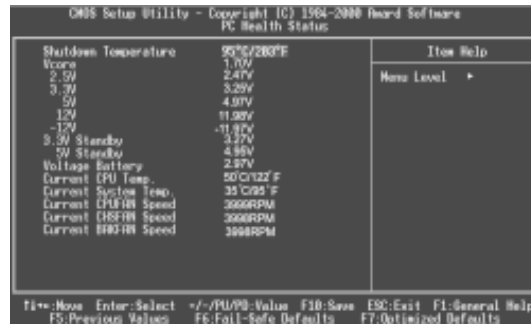


Figure-9 System Monitor Menu

The following describes the meaning of each item.

<u>Item</u>	<u>Current</u>	<u>Description</u>
● Shutdown Temperature	<b>Data Shown</b> 95°C/203°F	The system will shut down automatically under the ACPI OS when the CPU temperature reaches the previous setting.
● Vcore	1.70V	Displays current Voltage values including all significant voltages of the motherboard. 3.3V, 2.5V, 5V, 12V, -12V, 3.3V Standby and 5V Standby are voltages from the ATX power supply. Vcore Voltage is the CPU core voltage from the onboard switching Power Supply. The Voltage Battery is the voltage of the onboard battery.
2.5V	2.47V	
3.3V	3.25V	
5V	4.97V	
12V	11.98V	
-12V	-11.97V	
3.3V Standby	3.27V	
5V Standby	4.95V	
Voltage Battery	2.97V	
● Current CPU Temp.	50°C/122°F	Temperature of the CPU.
● Current System Temp.	35°C/95°F	Temperature inside the chassis.
● Current CPUFAN Speed	3999RPM	Speed of fan(RPM: Revolution Per Minute) connected to the fan header CPUFAN,
● Current CHSFAN Speed	3998RPM	CHSFAN or BAKFAN. Fan speed value is based on an assumption that tachometer signal is two pulses per revolution. In other cases, you should regard it relatively.
● Current BAKFAN Speed	3998RPM	

## Supervisor/ User Password

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 "Advanced BIOS Features" 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**" in "Security Option" of "Advanced BIOS Features" 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 "CMOS Setup" to modify all settings. Also you can use User Password when booting the system or entering "CMOS Setup" but can not modify any setting if Supervisor Password is enabled.

## Appendix A

### QDI Driver CD 2000

The QDI Driver CD 2000 is supplied with this motherboard. The contents contained in it are showed as below:

#### 1. Express Install

Using this choice, you can install all the drivers for your motherboard easily. You should install the drivers in order, and you need to restart your computer after all the drivers are installed.

- A. Chipset Software  
VIA chipset driver's directory: \ChipDrv\Via428Va
- B. Network Driver  
If your motherboard is Advance 12-L/-AL/-CL, please install this driver.  
VIA Network driver's directory: \DevDrv\Net\8233v19
- C. Audio Driver  
For Advance 12-A/-AL motherboard, the Audio Driver's directory is:  
DevDrv\Sound\ Via 8233  
For Advance 12-C/-CL motherboard, the Audio Driver's directory is:  
DevDrv\Sound\Creative
- D. DirectX

#### 2. Accessory

A: QDI ManageEasy

#### 3. Browse CD

You could read all the contents contained in this CD, including Utility and Documents.

The files included in **Utility** are:

- A. Awdflash.exe
- B. Lf.exe
- C. Cblog.exe

The files included in **Documents** are:

- A. Adobe Acrobat Reader V3.0 - Ar32e301.exe
- B. French Manual - AD11M FR.doc, etc.
- C. Handbuch\_ManageEasy

## Appendix B

### Boot Logo

When you power on or reset your system, the picture shown below will be displayed on the screen.



You can use **"CBLOGO.EXE"** (included in the QDI Driver CD 2000) to replace it by any other logo which you prefer.

Please follow the steps to use CBLOGO.EXE Utility:

1. Copy "CBLOGO.EXE" and "AWDFLASH.EXE" from the directory \Utility located on QDI Driver CD 2000 to your hard disk.
2. Get the BIOS file from "AWDFLASH.EXE" or Download the BIOS file from the Website (<http://www.qdigrp.com>) and copy the BIOS file (xxxxxx.bin) to your hard disk.
3. Boot the system into DOS environment, Put your favor picture into BIOS file by "CBLOGO.EXE" command. For example: CBLOGO.EXE xxxxxx.bin myphoto.bmp
4. Flash the BIOS to motherboard by "AWDFLASH.EXE". For example: AWDFLASH xxxxxx.bin

Reboot the system, you can see the new picture displayed on the screen. If you require more parameters information concerning "CBLOGO.EXE", please refer to the online help. If you don't prefer the logo displayed on the screen during bootup, set the "Show Bootup Logo" option as Disabled in the "ADVANCED BIOS FEATURES" section of the BIOS.

**\* We reserve the right of modifying the default full-logo of QDI without further notification.**

## RecoveryEasy

### Introduction:

RecoveryEasy™, the latest QDI innovation, is able to protect the system from being destroyed, by creating a so-called “mirror partition” for a current hard disk partition and backing up all the data to the mirror area. This ideal utility provides disk partition, disk data backup/recovery, CMOS settings backup/recovery and multi-boot functions. RecoveryEasy is also able to prevent the system from being attacked by different kinds of boot virus or other severe virus such as CIH. In case the system is ruined either by mistake or virus, the system can be recovered from the mirror partition. It applies the build-in BIOS technology that does not occupy either the hard disk space or the system memory. It's the best choice for both corporations and PC users.

### Operation Process:

There are two hotkeys – Ctrl+Bksp and F12 for RecoveryEasy to enter “Partition” and “Recovery” user interfaces accordingly during BIOS booting up. If two or more hard disks are installed, use F5 key to choose the hard disk.

#### 1. Partition Interface (see figure-1)

Users can create and delete partitions/mirror partitions, activate partitions, and uninstall RecoveryEasy in Partition User Interface.

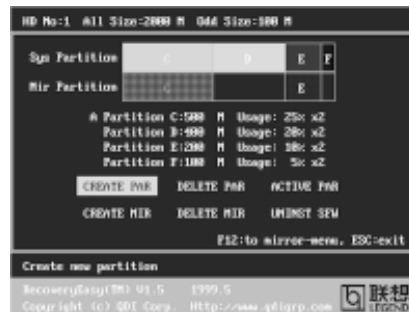


figure-1 Partition Interface

#### 1.0 Install RecoveryEasy for the first time

- a. The utility checks the previous disk partition at first, and displays the status of the first four partitions. If there are more than four disk partitions, users will be asked to delete the redundant disk partitions, since only four partitions that can be activated are allowed to exist. However, if there're only four or fewer partitions, users can follow the system prompt and choose to install RecoveryEasy based on the previous disk partitions. In this way, the original extension partitions will be changed to normal ones, and probably the sequence of the partitions will be changed also, but the contents contained in each partition will remain the same.

- b. If choosing to install RecoveryEasy on an absolutely clear disk, the utility will delete all the previous partitions.
- c. The password is set as default setting “qdiqdi” after installing RecoveryEasy.

### 1.1 CREATE PAR

**Function** : Creates a new partition.

**Limitation** : When no disk space remains or 4 partitions already exist, this button is disabled.

**Steps** : After pressing the “CREATE PAR” button.

- a. The system will prompt whether users want to create a mirror partition for it or not.
- b. If answering “Y”, input the new partition size in Megabyte. Notice that the maximum partition size that can be assigned is half of the left disk space, which is also displayed in the status line. Another half is for the mirror partition. If answering “N”, the whole disk space left can be assigned. See figure-2.

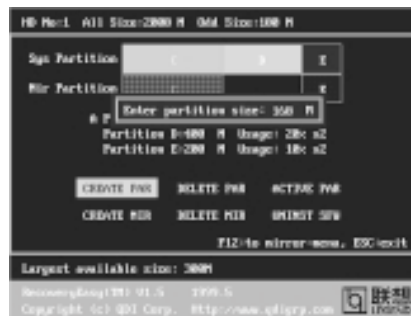


figure-2 Create Partition

**Note:**

- a. The system will prompt “Insert system floppy, then reset” when the first partition on the first hard disk is created.
- b. After using DOS6.xx boot disk to format C partition, the system should be reset in order to access the partition.
- c. In Windows system 1,048,576 bytes equal 1 Megabyte, while in RecoveryEasy 1,000,000 bytes equal 1 Megabyte, therefore a smaller size will be displayed in Windows system compared with the size displayed in RecoveryEasy.

### 1.2 DELETE PAR

**Function** : Deletes the last partition and its mirror partition.

**Limitation** : When no partition exists, this button is disabled.

**Steps** : After choosing this function, only the final partition can be deleted in order to keep the continuous disk space. If the warning message is confirmed, the partition will be deleted. By pressing “N” or “ESC” key, the system quits.



### 1.3 ACTIVE PAR

**Function** : Implements multi-boot function by activating one of the partitions.

**Limitation** : When no partition exists, this button is disabled.

**Steps** : If there're two or more partitions, choose one of them by pressing F5 key.

**Note** : After setting active partition, a letter "A" will be shown in front of this partition.

### 1.4 CREATE MIR

**Function** : Adds mirror partition for the disk partition that has no mirror.

**Limitation** : This function should be performed by order, for example, from partition 1 to 4. If no disk space remains or the last partition has its mirror partition already, this button is disabled.

**Steps** : After pressing the "CREATE MIR" button, use F5 key to choose the partition to create mirror. The partition of which the size is bigger than the left disk space will be ignored.

### 1.5 DELETE MIR

**Function** : Deletes the mirror partition.

**Limitation** : If there is no mirror partition, this button is disabled. This function should be performed in reverse order, for example, from partition 4 to 1.

**Steps** : After pressing the "DELETE MIR" button, only the final mirror partition can be deleted in order to keep the continuous disk space. If the warning message is confirmed, the mirror partition will be deleted. By pressing "N" or "ESC" key, the system quits.

### 1.6 UNINST SFW

**Function** : Uninstall RecoveryEasy.

**Limitation** : None.

**Steps** : After pressing the "UNINST SFW" button and the warning message is confirmed, RecoveryEasy will be uninstalled. By answering "N", the system quits.

**Note** : After RecoveryEasy is uninstalled, all the mirror areas have been disconnected with the relate partitions. If no partition is deleted or changed in size, or no other partition is created, users have chance to "Recover existing RecoveryEasy settings" when next time entering RecoveryEasy partition interface, meanwhile the password will be set as default setting "qdiqdi".

### 1.7 OTHERS

**F12** : Switches to Recovery User Interface.

**ESC** : Exits from the Partition User Interface. If users made some mistakes, for example, wrongly delete a partition, do not press the "ESC" key, press the reset button on your system at once, in this way users can save their system.

**F5:**

- When two or more than two hard disks are installed on the system, use F5 key to choose the hard disk. Every time users use F5 key to switch the hard disk, the operation result for the previous hard disk is saved. When processing a certain hard disk, F5 key can be used to choose the partition.
- In addition, when two or more than two hard disks are installed, the sign of partitions will be changed from C, D, E, F to 1, 2, 3, 4 accordingly.

**2. Recovery Interface (see figure-3)**

Users can backup the partition to its mirror area, and recover the partition from its mirror area from Recovery User Interface. This interface also provides users with CMOS settings backup or recovery, and changing password functions.

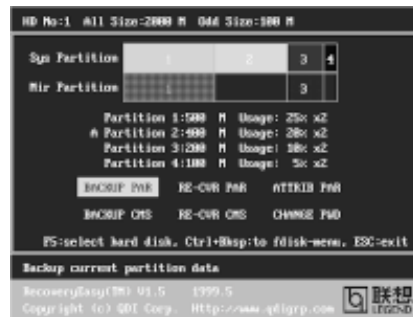


figure-3 Recovery User Interface

**2.1 BACKUP PAR**

**Function** : Backups the content of the partition to its mirror area.

**Limitation** : If no mirror partition exists, this button is disabled.

**Steps:**

- Use F5 key to choose the partition with mirror area existed.
- If the partition chosen has been backed up before, a warning message will be shown, and the time when last backup was done will be displayed in the status line. After confirming the warning message, the system performs the backup. By pressing "N" or "ESC" key, the system quits.

**2.2 RE-CVR PAR**

**Function** : Recovers the content from the mirror area to the relate partition.

**Limitation** : If users didn't backup any partitions before, this button is disabled.

**Steps:**

- Use F5 key to choose the backed up partition.
- The time when the latest backup was done will be displayed in the status line. After confirming the warning message, the system performs the content recovery. By pressing "N" or "ESC" key, the system quits.

**Note:**

- a. During the process of partition backup or recovery, a gauge will be shown as below, the backup or recovery speed is about 4-5Mbyte/s. See figure-4.

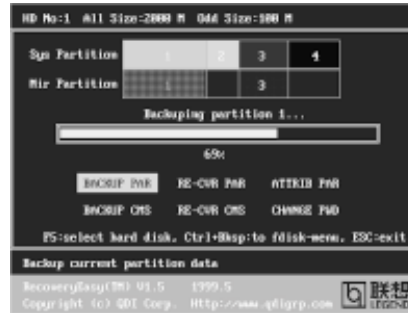


figure-4 Backup Partition

- b. If a disk I/O error occurs during the process of partition backup or recovery, this means there's physical damage on the hard disk, however users can ignore it and continue the process.

**2.3 ATTRIB PAR**

**Function** : Allows users to modify the properties of the partition (eg. FAT16 -> FAT32) after entering OS.

**Limitation** : None.

**Steps** : After pressing this button, turn on/off the switch.

**Note:**

- a. The switch resets to the default setting "disable" every time the system reboots.  
 b. In order to implement this function, users need to enable the switch when installing the OS or modifying the partition properties. Please note: Do not create or delete partitions or change the partition size when modifying the partition properties.

**2.4 BACKUP CMS**

**Function** : Backups all CMOS settings.

**Limitation** : None.

**Steps** : After choosing this function, the current CMOS settings will be saved.

**2.5 RE-CVR CMS**

**Function** : Recovers all CMOS settings.

**Limitation** : None.

**Steps** : After choosing this function, the latest backup of the CMOS settings will be recovered. The system needs reboot in order to validate the new CMOS settings.

**Note** : If users have never backed up the CMOS settings, a wrong message will be shown after choosing this function.

## 2.6 CHANGE PWD

**Function** : Changes the password to enter RecoveryEasy Partition or Recovery User Interface.

**Limitation** : None.

**Steps** : Follow the system prompt, input the password no more than 6 characters twice. To delete the password, follow the system prompt and press the "Enter" key twice.

**Note:**

- a. The password should be no more than 6 characters, only digital and alphabetic letters are valid.
- b. Once the password is enabled, users will be asked to input the password every time they try to enter the RecoveryEasy user interfaces, and up to 3 times try is permitted.

## 2.7 Others

**Ctrl+Bksp** : Switches to Partition User Interface.

**ESC** : Exits from the Partition User Interface.

**F5** : When two or more than two hard disks are installed on the system, use F5 key to choose the hard disk. When processing a certain hard disk, F5 key can be used to choose the partition.

## FAQ:

### 1. What does RecoveryEasy do?

RecoveryEasy creates a so-called "mirror partition" with same size for the hard disk partition on the same hard disk, and then completely backups all the data sector by sector to the mirror area. This mirror partition is reserved to OS. When the OS ruins either by mistakes or virus, users can recover the partition from its mirror.

### 2. Does RecoveryEasy occupy the system resources?

Although some hard disk data protection applications can automatically protect the disk data in runtime, it lowers the system performance. Unlike these applications, RecoveryEasy need users to backup or restore data manually when needed, but it DOES NOT lower the system performance when the system is running. It does not occupy either hard disk space or system memory, additional floppy disk or ISA/PCI cards are unnecessary.

### 3. RecoveryEasy utilizes Build-in BIOS skill, what is build-in BIOS?

RecoveryEasy build-in BIOS means all functions of RecoveryEasy including creating partition, backuping and restoring partition are built in BIOS. Users just need to download the latest BIOS from our Website (<http://www.qdigrp.com>) when wanting to upgrade (It's free!).

- 4. Are there any hard disk limitations of RecoveryEasy?**  
RecoveryEasy supports all kinds of current IDE hard disks and has no limitation on the hard disk capacity. RecoveryEasy can not provide its function for some special hard disk types such as SCSI, but it will not affect their usage.
- 5. Are there any OS limitations of RecoveryEasy?**  
RecoveryEasy supports current operating systems such as DOS, Windows 95/98. However in Windows NT, Windows 2000, Unix and OS2 systems, users should notice that the disk tools bundled in the OS could change the mirror partition. On the other hand, since users can create partition with RecoveryEasy, it is unnecessary to use other disk tools.
- 6. Why does the system halt when HDD access mode is changed (eg. LBA->LARGE)?**  
This is a way to protect the system from the errors of data accessing caused by changing HDD access mode. When RecoveryEasy detects such things, the system will be locked, users could reboot the system and set the HDD access mode as the original one in BIOS SETUP.
- 7. Why does the remainder size plus partitions size not match the total size shown in RecoveryEasy sometimes?**  
When the location of partitions is not continuous, the above problem exists.
- 8. Are there any other disk partition tools that can modify the partition table made by RecoveryEasy?**  
RecoveryEasy provides a write-protect function, so the disk tools such as Fdisk, Partition Magic, BootMenu, SmartDisk and BootStar can not modify the partition table created by RecoveryEasy. Some of the applications even terminate during operation. However the disk tools bundled in the OS such as Windows NT, Windows 2000, Unix and OS2 could change the mirror partition.
- 9. Why does it happen that a prompt “*installation can not continue*” pops up when installing Windows98 or a yellow exclamation mark shown beside IDE device in system properties?**  
During Windows 98 installation, the installation program will write to MBR (Master Boot Record) which is protected by RecoveryEasy, therefore the installation will be terminated. To avoid this problem, a “ATTRIB PAR” button is provided in Recovery User Interface. Enable this switch before installing Windows 98, then the installation will be successfully completed. In order to remove the yellow question mark before IDE devices in Device Manager, enable this switch once more after system reboot.
- 10. Why does the converting of FAT16->FAT32 in PQ Magic go wrong?**  
MBR will be accessed when converting FAT16 to FAT32 with PQ Magic, which is protected by RecoveryEasy, therefore the conversion will be invalidate. Enabling the “ATTRIB PAR” switch from Recovery User Interface

before converting can avoid this problem. It's the same situation as "FAT32 Converter" provided in Windows98.

**11. What if partitions be wrongly deleted in RecoveryEasy?**

If users delete a partition in RecoveryEasy by mistake, they can save it by pressing the Reset button on their system at once. Do not press the "ESC" key to quit RecoveryEasy, this will save the change. Do not try to create the partition again, since creating partition will clear all the content of the partition.

**12. What is multi-boot?**

RecoveryEasy can implement the multi-boot function by activating different partition. For example on the hard disk, partition C contains DOS, partition D contains Windows 95 version, partition E contains Windows 98 version, when activating partition C in RecoveryEasy, the system enters DOS, when activating partition E, the system enters Windows 98 version. At the same time, the sequence of the partitions is adjusted accordingly, partition E becomes C:, partition C becomes D: and partition D becomes E:. This function is the same as that of fdisk.exe, but the system needs reboot in order to make the change validate for fdisk.exe.

**13. What if computer accidentally power off when backuping (recovering)?**

The partition should be completely backuped or recovered. If the computer accidentally powers off, the partition should be backuped or recovered once again.

**14. What if users lose the password?**

To make sure the security, the password is saved in the hard disk. **It's very important for users to remember the password.** If forgetting the password, contact us, clearing CMOS is useless.

**15. Does RecoveryEasy protect hard disk against CIH?**

RecoveryEasy can strongly protect the hard disk from boot-virus, as well as the attack of CIH. If the system is attacked by CIH, RecoveryEasy will automatically recover the MBR and each partition boot record before system boots up, and try to recover the FAT. In this way the system can basically boot up, then users can use some anti-virus application to kill the virus. However this depends on how CIH virus affects the system. CIH normally outbreaks on 26<sup>th</sup> every month, if the system cannot boot up that day, power off the computer instantly, and use the second safe way to recover the system, that is, recover the partition from its mirror area from Recovery User Interface. Remember to create a mirror partition and backup before virus attacks the system.

### **Item Checklist**

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

- Advance 12 series motherboard
- QDI Driver CD 2000
- I/O shield(manufacturing option)
- 1 IDE ribbon cable
- 1 floppy ribbon cable
- 2 10-pin ribbon cables with bracket for USB3,4,5,6(manufacturing option)
- 1 Smart Card Reader cable
- User's manual

### **Notice**

The information in this document is subject to change in order to improve reliability, design, or function without prior notice and does not represent a commitment on the part of this company. In no event will we be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or the possibility of such damages.

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If you need any further information, please visit our web-site: "[www.qdigrp.com](http://www.qdigrp.com)".

# **Motherboard Layout**

**Note:**  
**This layout is just for your reference.**



### **Caution 1**

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

The power status of the system is indicated by the red LED onboard. If the LED is on, adding or removing devices like SDRAM memory is prohibited.

### **Caution 2**

**Be sure to add some Silicone Grease between the PentiumIII (Coppermine) CPU and the FAN to keep them fully contact, meanwhile to meet the heat sink requirement.**

### **Caution 3**

**Do not remove the “Small Card” in the AGP Pro slot when using normal AGP Card. We will not be responsible for any damages caused.**

 **Note:**

**This manual is suitable for Advance 12 series of motherboards. Each motherboard is carefully designed for the PC user who wants different features.**

**Advance 12: without onboard Audio, onboard LAN and onboard SoundBlaster**

**-A: with onboard Audio**

**-L: with onboard LAN**

**-C: with onboard SoundBlaster(Creative® CT5880)**

**-AL: with onboard Audio and onboard LAN**

**-CL: with onboard SoundBlaster(Creative® CT5880) and onboard LAN**