Item Checklist

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

- ☑ KinetiZ 7E/KinetiZ 7E-A/KinetiZ 7E-C mainboard
- ☑ QDI Driver CD 2000
- ☐ I/O shield(optional)
- ☑ 1 IDE ribbon cable
- ☑ 1 floppy ribbon cable
- ☐ 1 10-pin ribbon cable with bracket for USB3 and USB4(optional)
- ☑ User's manual

Notice

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

Declaration of conformity

CE

QUANTUM DESIGNS(HK) LTD.

20th Floor, Devon House, TaiKoo Place 979 Kings Road,

Quarry Bay, Hong Kong

declares that the product

Mainboard

KinetiZ 7E/KinetiZ 7E-A/KinetiZ 7E-C

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 EUROPE B. V.
QDI COMPUTER (FRANCE) SARL	QDI COMPUTER HANDELS GMBH
LEGEND QDI SPAIN S.L.	QDI COMPUTER (SWEDEN) AB

Signature : _____   Place / Date :   HONG KONG/2001

Printed Name :   Lv Yan   Position/ Title :   Assistant President

Declaration of conformity

FC

Trade Name:	QDI Computer (U. S . A.) Inc.
Model Name:	KinetiZ 7E/KinetiZ 7E-A/KinetiZ 7E-C
Responsible Party:	QDI Computer (U. S. A.) Inc.
Address:	41456 Christy Street
	Fremont, CA 94538
Telephone:	(510) 668-4933
Facsimile:	(510) 668-4966
Equipment Classification:	FCC Class B Subassembly
Type of Product:	Mainboard
Manufacturer:	**Quantum Designs (HK) Inc.**
Address:	20/F, 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_____

CONTENTS

CONTENTS

⚠ Note:

This manual is suitable for KinetiZ 7E/KinetiZ 7E-A/KinetiZ 7E-C mainboard. Each mainboard is carefully designed for the PC user who wants different features.

KinetiZ 7E-A mainboard: The model with AC'97 Codec

KinetiZ 7E-C mainboard: The model with CT5880 PCI Hardware Audio

KinetiZ 7Emainboard: The model without Audio.

⚠ Caution

1. Be sure to add some Silicone Grease between the Socket A processor and FAN to keep them fully contact, meanwhile to meet the heat sink requirement.

2. because the processor could overheat and damage both the processor and the motherboard, we recommend that you should have an AMD authorized fan to prevent overheating.

3. Never run the processor without the heatsink properly and firmly
 attached.

4. The AC power status of the system is indicated by the red LED under the three DIMM sockets. If the LED is on , adding or removing device like SDRAM memory is porhibited.

QDI BootEasy

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

```
CMOS Setup Utility - Copyright (C) 1984-2000 Award Software
                        Advanced BIOS Features

QDI BootEasy Feature        Enabled          │      Item Help
ChipAwayVirus On Guard      Enabled          │
CPU Internal Cache          Enabled          │  Menu Level  ▶
External Cache              Enabled          │
CPU L2 Cache ECC Checking   Enabled          │
Quick Power On Self Test    Enabled          │
First Boot Device           Floppy           │
Second Boot Device          HDD-0            │
Third Boot Device           LS120            │
Boot Other Device           Enabled          │
Swap Floppy Drive           Disabled         │
Boot Up Floppy Seek         Disabled         │
Boot Up NumLock Status      On               │
Gate A20 Option             Fast             │
Typematic Rate Setting      Disabled         │
x Typematic Rate (Chars/Sec) 6               │
x Typematic Delay (Msec)    250              │
Security Option             Setup            │
OS Select For DRAM > 64MB   Non-OS2          ▼

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

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 time 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:

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

QDI BootEasy

BootEasy ist eine Neuentwicklung von Legend QDI, die neue Innovation der QDI Easy – Technologien.
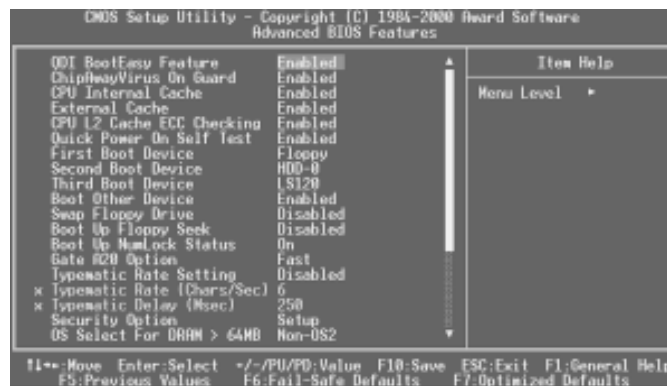
BootEasy Setup Menu

Mit der BootEasy- Technologie Technik wird der Bootvorgang nur noch vier bis fünf Sekunden in Anspruch nehmen, bis das Betriebssystem geladen wird. Der Grund für die lange Warterei liegt in den Routine-Abfragen, die das BIOS bei jedem Start abarbeitet. So wird beispielsweise jedes Mal die Taktfrequenz des Prozessors geprüft oder angeschlossene Geräte aktiviert.

Die BootEasy-Technik prüft diese Punkte nur beim erstmaligen Start des Rechners und speichert die Ergebnisse in einem Flash ROM. Beim nächsten Start ruft das System lediglich diese Informationen aus dem Speicher ab und kann so innerhalb von wenigen Sekunden den Boot-Prozess abschließen.

Bei Änderungen am System, beispielsweise nach dem Einbau eines neuen Prozessors, muss deshalb zuvor die BootEasy-Funktion deaktiviert werden, beim nächsten Start werden die neuen Informationen dann erneut abgespeichert.

Falls Fehler im Flash ROM den Bootvorgang behindern, versucht das System drei Mal den Rechner hochzufahren, bei Misserfolg schaltet

es auf die althergebrachte Art zu booten um, das heißt, es dauert wieder ebenso lang wie früher. Anschließend kann die BootEasy – Technik wieder aktiviert werden.

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QDI BootEasy

Boot Easy e il nuovo software membro della famiglia legend QDI Easy, quale innovazione da LEGEND-QDI.
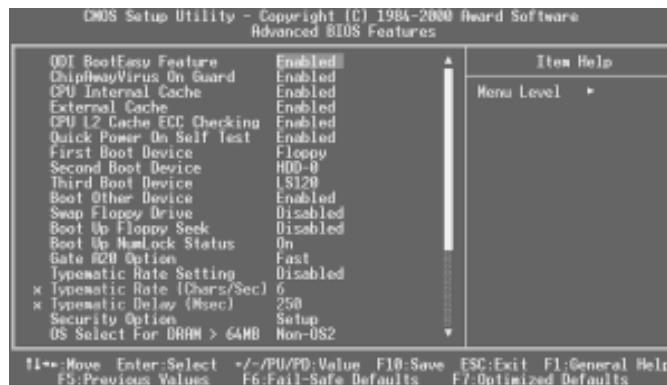
BootEasy Setup Menu

La tecnologia Boot Easy abbrevia gli enormi tempi del computer in fase di BOOT.

Riduce le attese d'ogni utente che accede al suo computer. Il BIOS senza Boot Easy deve eseguire molte routines ogni qualvolta il sistema parte, come controllo della sezione centrale del computer oltre che inizializare le varie periferiche esterne.

Ora con Boot Easy, il BIOS non eseguirà questi processi ripetitivi cosi lunghi , il Pc potrà partire senza attese ridondanti prima della presentazione del logo del sistema operativo.

Boot Easy e' facile da usare, basta scegliere la giusta opzione nel BIOS setup, (riferito al Advanced BIOS Features) ed il computer potrà velocemente ripartire.

Boot Easy salva tutte le informazioni al primo avvio normale, tutti i parametri saranno restituiti ai BOOT successivi

Nota:

1 Il Pc partira' normalmente se saranno rispettate le seguenti condizioni

(1) Il Pc fa' il primo BOOT con l'opzione Enable

(2) Le informazioni su i parametri salvati dal BIOS non erano DANNEGIATE

(3)Il PC fallisce l'avvio piu' di tre volte

Non spegnere o resetta il PC durante l'avvio di BOOT EASY

Disabilita il "QDI BootEasy Feature" prima di sostituire le periferiche ad esso collegate (HDD, CD-ROM, ecc.) solo dopo riabilita il "QDI BootEasy Feature".

QDI BootEasy

BootEasy es el nuevo miembro de la familia de "Easies" de Legend QDI , que se acaba de incorporar a los últimos modelos de placas base.

Menu de configuración de BootEasy

La tecnología BootEasy disminuye enormemente el tiempo dedicado al proceso de arranque del ordenador, reduciendo considerablemente el tiempo de espera que tiene que sufrir el usuario al arrancar su PC. Las BIOS normales, sin BootEasy, deben realizar multitud de rutinas repetitivas cada vez que el sistema se arranca, como verificar el "core" del sistema e inicializar periféricos. Ahora, con BootEasy, su BIOS no realizará estas tareas repetitivas nunca más, su PC podrá arrancar sin ninguna necesidad de repetir estas tareas antes de mostrar la pantalla de arranque de su sistema operativo. BootEasy es muy simple de utilizar, basta con escoger la opción correcta en CMOS SETUP, (refiérase al apartado Advanced BIOS Features) ; Así, conseguirá arrancar su sistema rápidamente. BootEasy guardará toda la información durante el primer arranque correcto, y, la próxima vez que arranque, restaurará esta información para permitir al sistema un arranque rápido y fiable.

Nota:

1. Bajo estas circunstancias, el PC arrancará en modo normal:
 (1) La primera vez que arranque su PC después de haber
    activado la opción BootEasy en BIOS ("Enabled").
 (2) La información guardada en BIOS es incorrecta.
 (3) El arranque de su PC falla por tres veces consecutivas.
2. No apague su ordenador mientras se inicia BootEasy.
3. Desactive "QDI BootEasy Feature" seleccionándolo como "Disabled" antes de cambiar algún componente de su PC. Puede restaurar la opción "QDI BootEasy Feature" como "Enabled" al terminar la instalación de nuevos componentes.

Installation de la carte mère KinetiZ 7E/7E-A/7E-C

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 17)

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. Express install
Il est recommandé que les utilisateurs installent ce programme avec les options de base
A. Pilote du chipset
B. Pilote Audio codec AC97
C. DirectX 8.0
2. Accessory
    Les logiciels contenus dans ce répertoire sont :
A. QDIManageEasy
3. Browse CD
    Vous pouvez voir le contenu du CD-ROM
    Dans le répertoire Utility :
A. AWDFLASH.EXE
B. LF.EXE
Dans le répertoire Documents :
A. Adobe Acrobat Reader V3.0 – Ar32e301.exe
B. Manuels français *.doc

Installation de QDI ManageEasy v2.0

Lancez Setup.exe depuis le répertoire du CD-ROM \QME2 pour installer QDI ManageEasy 2.0. L'assistant d'installation vous guidera pour le reste de l'installation.
Pour plus d'informations sur l'utilisation de QDI ManageEasy v2.0, référez-vous à l'aide en ligne de QDI ManageEasy v2.0.

QDI ManageEasy
Il est bien connu que garantir la sécurité et la fiabilité du PC est essentiel. Spécialement de nos jours, gérer et surveiller le matériel est encore plus important car les opérations et les échanges de données critiques entre ordinateurs et réseaux sont monnaie courante. Avec le développement de l'ordinateur, le système devient de plus en plus complexe, en même temps le contrôle du matériel doit être renforcé. Aujourd'hui il est possible de surveiller et contrôler votre matériel sous Windows 9x ou NT. QDI ManageEasy est un outil système, comme un pont entre l'OS et le matériel, utilisé pour accéder au statut du matériel et exécuter des fonctions de contrôle. Ces fonctions vous permettent de voir plus d'une centaine d'informations basiques sur votre ordinateur et de surveiller

des données clés sur la santé du PC en temps réel. QDI ManageEasy vous aide également à contrôler à distance des machines sous réseau local. Avec QDI ManageEasy, vous améliorez votre niveau de gestion.

QDI BootEasy

BootEasy est la dernière née des technologies Legend QDI.

Voir figure 1 page S.1 du manuel en anglais.

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

Gagnez du temps, plus facilement.

Il s'agit d'une véritable technologie «On Now» et «Instantly available PC», conforme aux spécifications PC2001.

Sans le BootEasy, le Bios démarre lentement, maintenant 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 normalement 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 BottEasy Feature» sur «Enabled» après avoir effectué le changement.

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Chapter 1
Introduction

Overview

The green mainboard utilizes the VIA Apollo KT-133A chipset, providing a cost-effective PC/ATX platform with perfect capability and high performance to support Socket A AMD® Duron™/Athlon™ processors. The VIA®VT686B chipset integrates software configurable AC'97 audio(Optional) and supports Ultra ATA/100 technology, also the mainboard integrates Creative CT5880 PCI hardware sound(Optional) to provide high quality 3D surrounding sound effect. The VIA®KT-133A chipset provides some new features such as AGP 4X mode and Ultra-Fast 200MHz/266MHz FSB. Equipped with three memory module sockets, 1.5GB PC100/133MHz SDRAM can be supported. It also provides advanced features such as wake-up on LAN and wake-up on internal/external modem function. 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. BootEasy, our new technology shorten the long BOOT process time of computer.

Key Features

Form factor
- ATX form factor of 305mm x225mm

Microprocessor
- Supports AMD Socket A Athlon™ "B" type (FSB is 200MHz)/"C" type (FSB is 266MHz)processors at 700MHz/750MHz/800MHz/850MHz/900MHz/950MHz/ 1GHz/1.1GHz/1.2GHz and further processors
- Supports AMD Socket A Duron™ processors at 600MHz/650MHz/700MHz/750MHz/ 800MHz/850MHz and further processors
- Supports 200MHz/266MHz FSB
- Multiphase power regulators for AMD Socket A Athlon™/Duron™ Processors

Chipset
- Apollo KT-133A chipset: VT8363A, VT82C686B

System memory
- Provides three 3.3V 168 pin DIMM sockets, supports PC100/133 SDRAM, VCM SDRAM
- Minimum memory size is 8MB, maximum memory size is 1.5GB

On-board 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 "Ultra DMA/100"Synchronous DMA mode transferring up to 100 Mbytes/sec

On-chip 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 joystick port
- All I/O ports can be enabled/disabled in the BIOS setup

On-chip Audio (Available for KinetiZ 7E-A mainboard only)
- Build in VT82C686B
- Direct Sound AC97 Audio
- AC97 2.1 Compliant

Creative® CT5880 PCI Hardware Sound (Available for KinetiZ 7E-C mainboard only)
- 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

AGP SLOT
- Supports 4X mode & AGP 2.0 compliant

Advanced features
- PCI 2.2 Specification compliant
- Provides Trend ChipAwayVirus® On Guard
- Provides four USB ports, on-board PS/2 mouse and PS/2 keyboard ports
- Provides infrared interface
- Supports software power-down (eg. Windows 98/Windows 2000)
- Supports wake-up on LAN and wake-up on internal/external modem
- Supports system monitoring(monitors CPU and system temperatures, system voltages and fan speed).
- Providing QDI's innovations such as RecoveryEasy, BIOS-ProtectEasy(to protect the system BIOS from being attacked by severe virus such as CIH), LogoEasy, ManageEasy and BootEasy(new feature)

BIOS

- Licensed advanced AWARD BIOS, supports flash ROM with 2M bit 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 ACPI power status: S0, S1, S3(STR), S4, S5(Soft-off)

Expansion slots

- 1 ISA slot
- 5 PCI slots
- 1 AGP slot
- 1 AMR slot

Introduction to New Features

BIOS-ProtectEasy

The BIOS of the mainboard is contained inside the Flash ROM. 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.

There are two choices which can implement this function.
1. Set the jumper (JAV) as closed, the BIOS can not be overwritten.
2. Set the jumper (JAV) as open, meanwhile set "BIOS-ProtectEasy" as Enabled in AWARD BIOS CMOS Setup. In this way, the BIOS can not be overwritten, but the DMI information can be updated.

Ultra ATA/100

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, and 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. In the same way, the burst transfer rate of Ultra ATA/100 is higher than ATA/66 (from 66.6MB/s to 100MB/s)by reducing the pulse width from 30ns to 20ns and increasing the strobe rate.

It can be added into existing systems without the need for termination devices, new cable, or other hardware changes, industry implementation of ATA/100 will provide an inexpensive, simple, non-proprietary, high-speed method of host to storage access.

The 80-conductor, 40-pin cable standard in ATA/66 has enhanced reliability and bee carried forward to ATA/100. of course, backwards compatible with ATA/33.

PC-133 Memory

PC133 SDRAM Unbuffered DIMM defines the electrical and mechanical requirements for 168-pin, 3.3 Volt, 133MHz, 64/72-bit wide, Unbuffered Synchronous DRAM Dual In-Line Memory Modules (SDRAM DIMMs). Relatively , the peak bandwidth of PC-133 memory is the 33% higher than PC-100 memory. These latest SDRAMs are necessary to meet the enhanced 133MHz bus speed requirement.

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 requirments are essential:

1. Power supply requirements: The current of 5VSB line of the power supply should be more than 0.75A.
2. Set the Jumper J12 with pin1&pin2 closed.
3. The BIOS option "ACPI function" should be enabled, and "ACPI Suspend Type" should be set as S3 in AWARD BIOS CMOS setup.
4. An ACPI-enabled operating system such as Windows 98 or Windows 2000 family is needed. Navigate to the CD-ROM drive from the MS-DOS Command Prompt and enter the following from the Win98 directory on the CD:

    D:\SETUP /P J

    (This manual assumes that your CD-ROM device driver letter is D:)
    Windows 98 will be installed with ACPI enabled.
    For Windows 98 SE and Windows 2000, just install them directly.
5. Three ways to enter Suspend-to-RAM status under ACPI-enabled Windows 98:
    - Click Start -> Shut down -> Standby to enable the system to enter Suspend-to-RAM status.
    - Click Start -> Setup -> Control Panel -> Power Management -> Advanced and choose Standby item, the system will enter Suspend-to-RAM status when you press power button.
    - From Power Management Properties in Control Panel, set the latency time in System Standby, 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.

Creative CT5880 chipset (Available for KinetiZ 7E-C mainboard only)

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 mainboard has two solution for on-board audio

Soft-sound(AC'97codec)

Hardware-sound(CT5880)
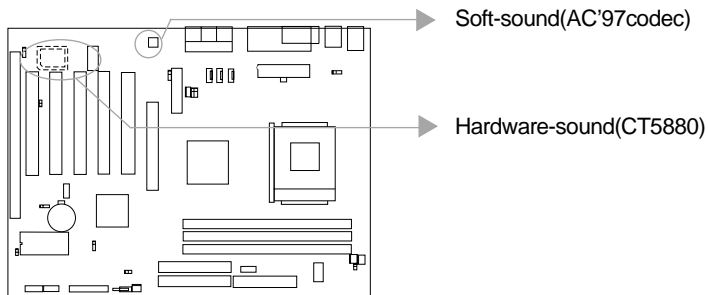
Installation of CT5880 driver

Before you install CT5880 chipset driver, please make sure that CT5880 chipset is onboard.

1. If CT5880 chipset is onboard, the CD2000 will detected it and the option " PCI Sound Driver" will appear on screen, you click this option to install CT5880 chipset driver .

2. If CT5880 is not onboard, the CD 2000 will detected AC97codec and the option " Audio Codec Driver" will appear on screen, you click this option to complete the installation

Note : After installation of CT5880dirver, you can select four speaker output function

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.
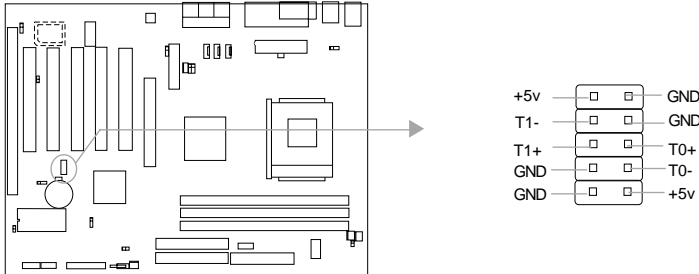
PS/2 Mouse Connector

PS/2 Keyboard Connector

Invalid for KinetiZ 7E mainboard

USB1, USB2

Two USB ports are available for connecting USB devices.

USB1

USB2

Invalid for KinetiZ 7E mainboard

USB3, USB4

Two USB ports are not available on the back panel. Therefore, we provide a 10-pin ribbon cable with bracket to connect Built-in on-board USB header. (optional)

+5v	□ □	GND
T1-	□ □	GND
T1+	□ □	T0+
GND	□ □	T0-
GND	□ □	+5v

Parallel Port Connector and Serial Port Connector (UART1)

The parallel port connector can be connected to a parallel device such as a printer, while the serial port connector can be connected to a serial port device 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.

Parallel Port →

UART1 →

Invalid for KinetiZ 7E mainboard
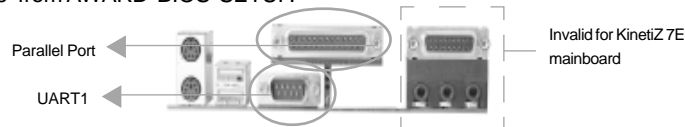
UART2

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)

1

UART2
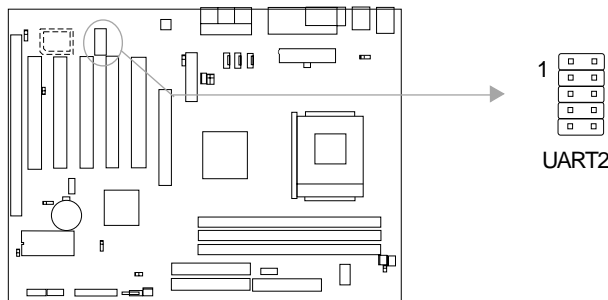
Line-in jack(or Rear out jack), Microphone-in jack, Speaker-out jack and MIDI/Joystick connector

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.

Note: For the KinetiZ 7E-C mainboard, the Rear out jack replaces Line-in jack to connect powered speakers for audio output.

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

MIDI/Joystick

Speaker out

Microphone in

Line in(or Rear out) jact
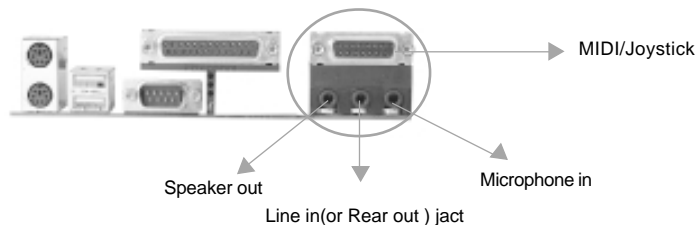
Note: The jacks and the MIDI/Joystic connector shown above are invalid for KinetiZ 7E mainboard without audio

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.

ATX Power Supply Connector

3.3V 3.3V GND 5V GND 5V GND PS-OK 5VSB 12V

3.3V -12V GND PSON GND GND GND -5V 5V 5V
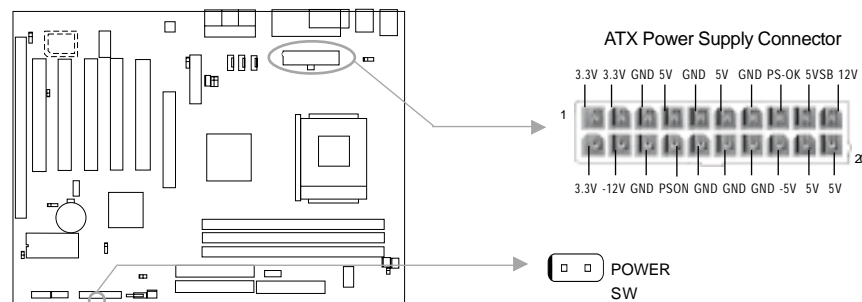
POWER SW

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 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.

ACPI LED Connector (ACPI_LED)

The ACPI LED is double-color lights with three pins. Pin1&Pin2 drive different color lights. If Pin1 drives the yellow light , Pin2 drives the green light, the following status will come out. When the system is in power up status, the LED is green on. When the system is in suspend status, the LED is green blink. When the system is in suspend to RAM status, the LED is orange on. When the system is in soft-off status, the LED is off.

GREEN LED Connector (GREEN_LED)

When the system is in power up, ACPI suspend, soft-off, the LED is off. When the system is in suspend to RAM status and APM(advanced power management) suspend, the LED is on.
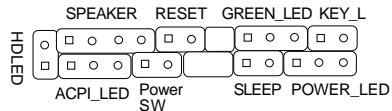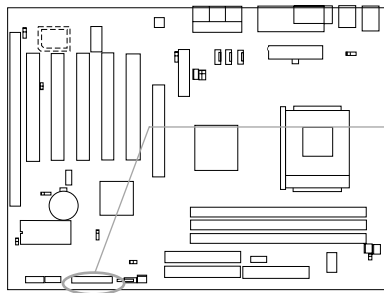
Hardware Green Connector (SLEEP)

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

Power LED Connector (PWRLED)

The power LED has four status. When the system is in power up status, the LED is on. When the system is in suspend status, the LED is blink. When the system is in Suspend to RAM, the LED is off. When the system is in Soft-Off status, the LED is off. 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.

		SPEAKER				RESET			Green_LED				KEY_L
HDDLED	HDDLED	VCC	GND	NC	SPKDATA	RE-	GND	EMPTY	LED	LED	LED	GND	KEYLOCK
	HDDLED +	LED1 -	LED2 -	LED+(VCC)	POWER	GND	EMPTY	EMPTY	SLEEP	GND	LED	LED -	LED -
	ACPI LED				Power				SLEEP		POWER LED		

Fan Connector (CPUFAN, CHSFAN, FAN3)

Besides speed of the FAN3, The speeds of the CPU fan and chassis fan can be detected and viewed in "PC Health Status" section of the BIOS.
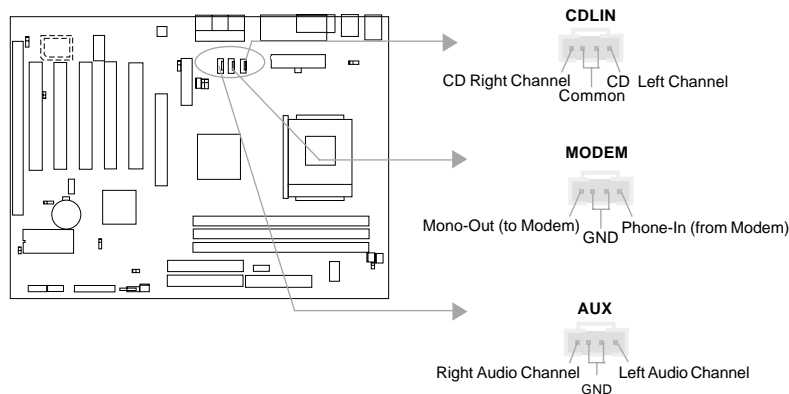

FAN3
FAN GND
+12V
NC

CPUFAN
FAN GND
+12V
SENSE

SENSE   FAN GND
+12V
CHSFAN
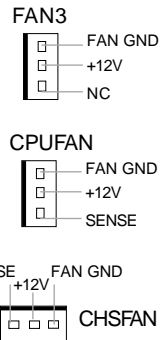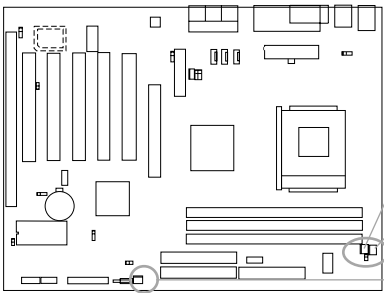
Internal Audio Connectors (AUX, CDLIN, MODEM)

AUX and CDLIN connectors allow you to receive stereo audio input from such sound sources as a CD-ROM, TV tuner, or MPEG card. The MODEM connector allows the onboard audio to interface with a voice modem card with a similar connector. It also allows the sharing of mono_in (such as a phone) and mono_out (such as a speaker) between the onboard audio and the voice modem card.

CDLIN

CD Right Channel — CD Left Channel
Common

MODEM

Mono-Out (to Modem) — Phone-In (from Modem)
GND

AUX

Right Audio Channel — Left Audio Channel
GND

Note: The internal audio connectors shown above are invalid for KinetiZ 7E mainboard without audio.

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 Either AMR (Audio/Modem Riser) card or MR (Modem Riser) card can be used on this system. This software configurable AC'97 audio and modem system gives customers an advanced, multimedia solution at an extremely low price. The AC'97 audio and modem system can be enabled/disabled in "Advance Chipset Feature Setup" in AWARD BIOS CMOS Setup.

AMR Interface Connector
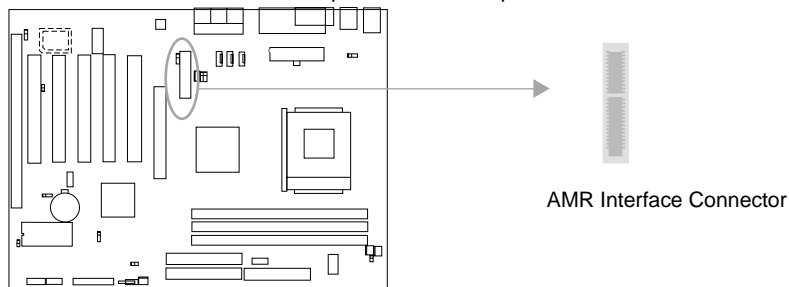
Note: For KinetiZ 7E-C mainboard, the first PCI only accept the slave card and the AMR slot only accept Primary AMR card. For KinetiZ 7E mainboard, the AMR slot only accept Primary AMR card.

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 the function is used. Then connect this header to the relevant connector on the modem card, set "Modem Ring Resume" 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.

+5V standby 1
Signal for waking up (active low)
GND
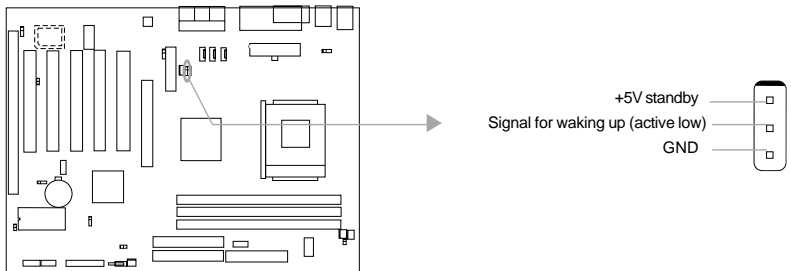
Wake-Up On LAN (WOL)

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 are used. Then connect this header to the relevant connector on the LAN adapter, set "Modem Ring Resume" 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.
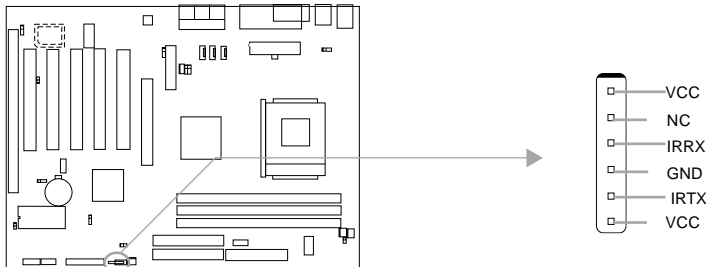
Signal for waking up (active high)
GND
+5V standby 1
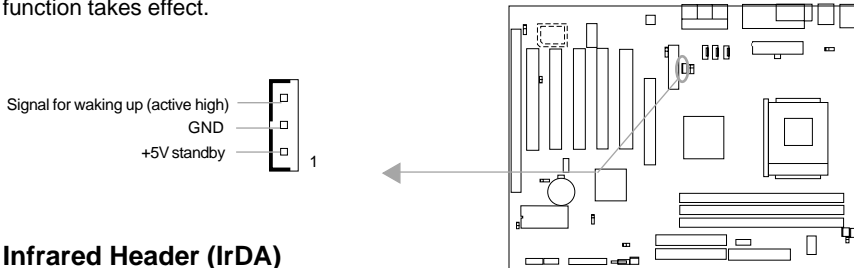
Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. If using this function, set "UART 2 Mode" to HPSIR or ASKIR and configure the settings from the "INTEGRATED PERIPHERALS" section of the BIOS.


VCC
NC
IRRX
GND
IRTX
VCC

Expansion Slots & I/O Ports description

Slot / Port	Description
PCI 1	First PCI slot.
PCI 2	Second PCI slot.
PCI 3	Third PCI slot.
PCI 4	Fourth PCI slot.
PCI 5	Fifth PCI slot.
DIMM1	First DIMM slot.
DIMM2	Second DIMM slot.
DIMM3	Third DIMM slot.
IDE 1	Primary IDE port.
IDE 2	Secondary IDE port.
ISA	First ISA slot.
AMR	AMR slot.
AGP	AGP slot.
FLOPPY	Floppy Drive Port.

Jumper Settings

Jumpers are located on the mainboard. Pin 1 for all jumpers are located on the side with a thick white line (Pin1→ ▢ ▫ ▫), refer to the mainboard's silkscreen . Jumpers with three pins will be shown as ▆▆▫ to represent pin1 & pin2 connected and ▫▆▆ to represent pin2 & pin3 connected.

Suspend to RAM Switch (J12)

If you want to Disable Suspend to RAM function, set J12 with pin2&pin3 closed, meanwhile, set "ACPI Suspend Type" to S1 in "Power Management Setup" section of the BIOS. Otherwise, set J12 with pin1&pin2 closed for implementing this function.

Warning: If you set J12 with pin2&pin3 closed and set "ACPI Suspend Type" to S3 in "Power Management Setup" section of the BIOS, the blank screen will come out, in this case when system enter S3 status., just clear CMOS and boot up the system once again.

Disable STR   J12

Enable STR   J12
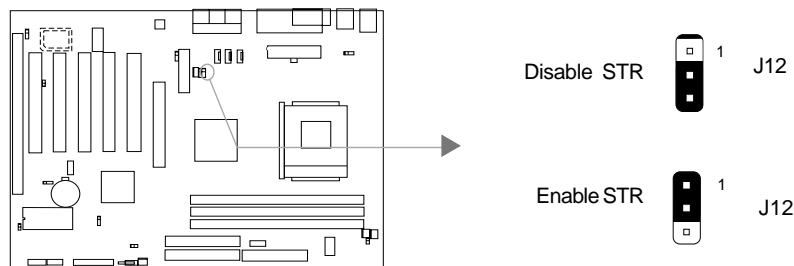
Enable/Disable on-board audio(JSD)

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. The onboard audio should be disabled when using a PCI/ISA sound card.
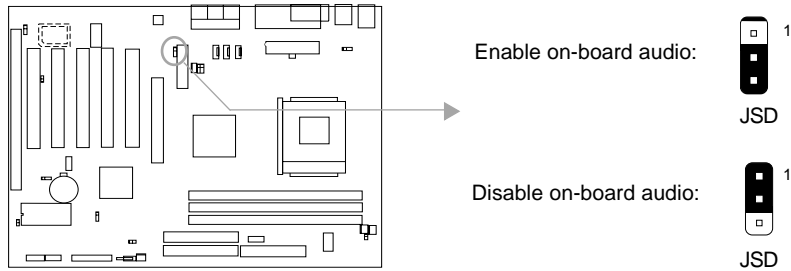
Enable on-board audio: 1

JSD

Disable on-board audio: 1

JSD

BIOS-ProtectEasy Jumper (JAV)

The BIOS of the mainboard is contained inside the Flash ROM. 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.

Flash Write Enabled   JAV

Flash Write Disabled   JAV
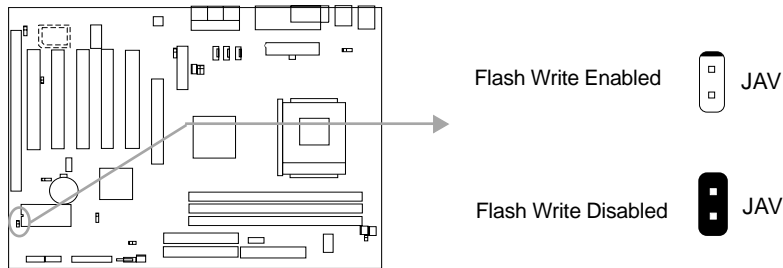
Setting the jumper JAV as open(default), meanwhile disabling the "BIOS_ProtectEasy" item from "Advanced BIOS Features" in AWARD BIOS CMOS Setup, allows you to flash the BIOS to the Flash ROM.

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 "Unkown Flash Type" will be displayed on the screen, and DMI information update will be fail.

Overclocking Jumper Setting (JFSB)

Jumpers labeled JFSB is located on the mainboard providing users with CPU overclocking feature. The host bus speed can be set as 100/133MHz. 133MHz is "C" type. Refer to the chart below for the location of these jumpers, and the table for information on how to set them.

JFSB	HCLK
CLOSE	100
OPEN	133
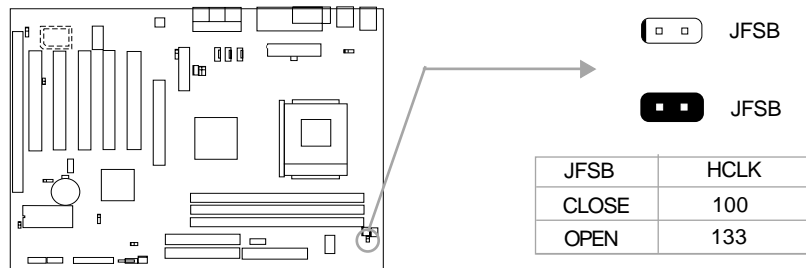
AMD Athlon™ CPU FSB is 100MHz/133MHz, but delivering twice the throughput of 100MHz/133MHz Pentium III-based systems(Ultra -Fast 200MHz/266MHz). However, whether or not your system can be overclocked depends on your processor's capability. Whether the processor is bus ratio locked or unlocked should also be taken into account. We do not guarantee the overclocking system to be stable.

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

Enable USB KeyDevice Wake-up Function (JUSB1, JUSB2)

The mainboard provides the advanced USB keyDevice wake-up function. The system can be waken up from its power saving status including ACPI S3 by activating USB keyDevice. When using this function, set JUSB1&JUSB2 with pin1 & pin2 closed. Otherwise, set JUSB1&JUSB2 with pin2 & pin3 closed for disabling.
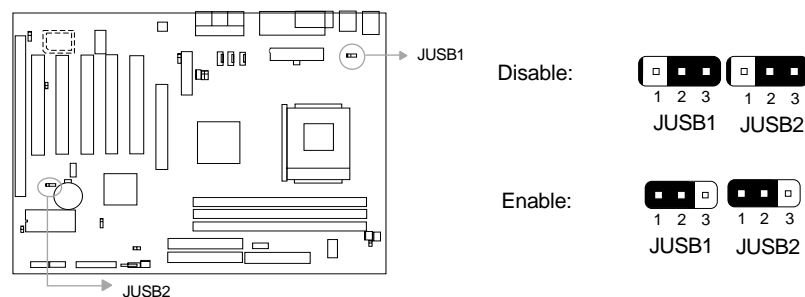
CPU bus ratio selection (J19&JP9)

The Host Bus speed by the CPU bus ratio equals the CPU's internal frequency (CPU speed)

If Host Bus speed = 100MHz, CPU bus ratio =4

then CPU speed= 100MHz x 4= 400MHz

please setup CPU bus ratio according to the following table.

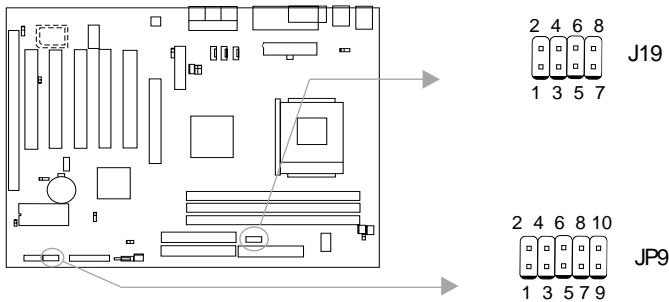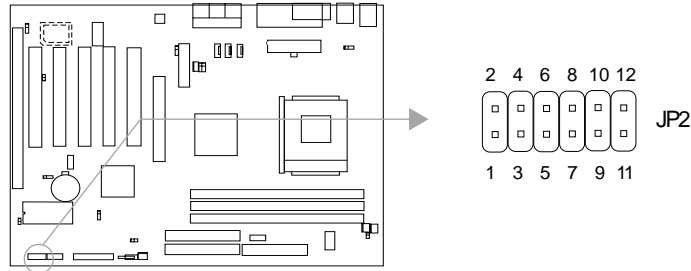| Jumper	JP9					J19			
RATIO	Pin(1-2)	Pin(3-4)	Pin(5-6)	Pin(7-8)	Pin(9-10)	Pin(1-2)	Pin(3-4)	Pin(5-6)	Pin(7-8)
5	close	close	open	close	open	close	close	open	close
5.5	open	close	open	close	open	open	close	open	close
6	close	open	open	close	open	close	open	open	close
6.5	open	open	open	close	open	open	open	open	close
7	close	close	close	open	open	close	close	close	open
7.5	open	close	close	open	open	open	close	close	open
8	close	open	close	open	open	close	open	close	open
8.5	open	open	close	open	open	open	open	close	open
9	close	close	open	open	open	close	close	open	open
9.5	open	close	open	open	open	open	close	open	open
10	close	open	open	open	open	close	open	open	open
10.5	open	open	open	open	open	open	open	open	open
11	close	close	close	close	open	close	close	close	close
11.5	open	close	close	close	open	open	close	close	close
12	close	open	close	close	open	close	open	close	close
12.5	open	open	close	close	open	open	open	close	close
Auto	open	open	open	open	close	open	open	open	open

Note: The Most of Socket A processors have locked bus ratio. In this case, it's not necessary to setup the bus ratio by Jumper setting. So only unlocked Socket A processspors can adjust specified bus ratio through hardware jumper setting .

CPU Core Voltage Setting (JP2)

The Jumper JP2 allows you to adjust the CPU core voltage manually. it's suggested to set JP2 as Auto (CPU default core voltage) unless you know AMD Athlon/Duron processor well.

```
2  4  6  8  10 12

JP2

1  3  5  7  9  11
```

| Jumper | JP2 | | | | | |
Voltage	Pin(1-2)	Pin(3-4)	Pin(5-6)	Pin(7-8)	Pin(9-10)	Pin(11-12)
Auto	open	open	open	open	open	open
1.65V	close	close	close	open	close	close
1.675V	open	open	open	close	close	close
1.7V	close	open	open	close	close	close
1.725V	open	close	open	close	close	close
1.75V	close	close	open	close	close	close
1.775V	open	open	close	close	close	close
1.8V	close	open	close	close	close	close
1.825V	open	close	close	close	close	close
1.85V	close	close	close	close	close	close

Warning: To set CPU core voltage higher than its default core voltage is not suggested. If you do, we will not be responsible for any damages caused.

Onboard Sound(CT5880) Setting (JP8)

The onboard hardware sound(CT5880) can be enabled or disabled by using jumper JP8. Disabled the onoard hardware sound (CT5880) if you are using a PCI or ISA sound card. Set JP8 with pin1&pin2 closed for enabling onboard sound, otherwise, set JP8 with pin2&pin3 closed for disabling onboard sound.

Enable on-board Sound:

JP8

Disable on-board Sound:

JP8
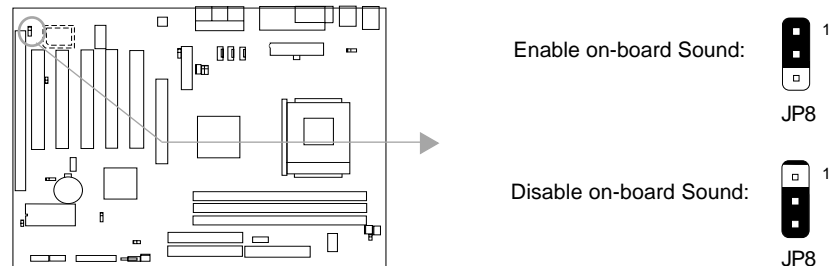
Clear CMOS (JCC)

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)

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.**

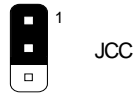When you encounter problems, for example, you find your system does not support the latest CPU released on our current mainboard, you may therefore upgrade the BIOS, please don't forget to set JAV as open and disable the "Flash Write Protect" item in AWARD BIOS CMOS Setup first .

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. Click "Browse CD" option under QDI Driver CD 2000, copy Awdflash.exe (version 7.73) from the directory \Utility onto 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 mainboard.
4. Decompress the file downloaded, 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 or simultaneously press the <Ctrl> + <Alt> + <Esc> keys, 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 that 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 that 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.
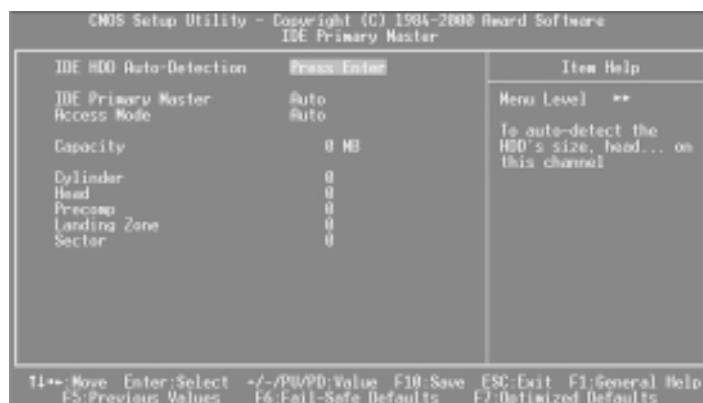
Figure-2-1　IDE Primary Master Setup Menu

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

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

CHS

Generic access mode in which neither the BIOS nor the IDE controller will make any transformation during accessing.

If the user sets his HDD to CHS 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 divising 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.

Frequency/Voltage Control
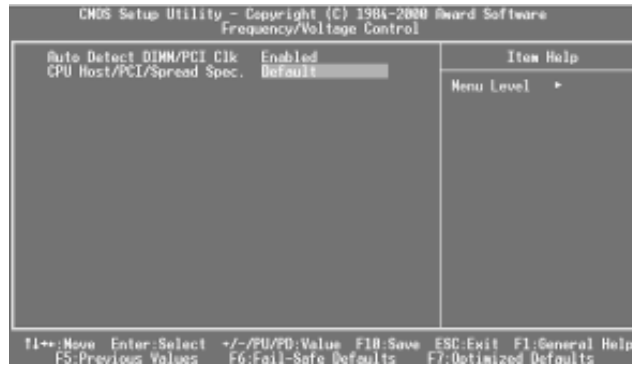
Figure-1 Frequency/Voltage Control Menu

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

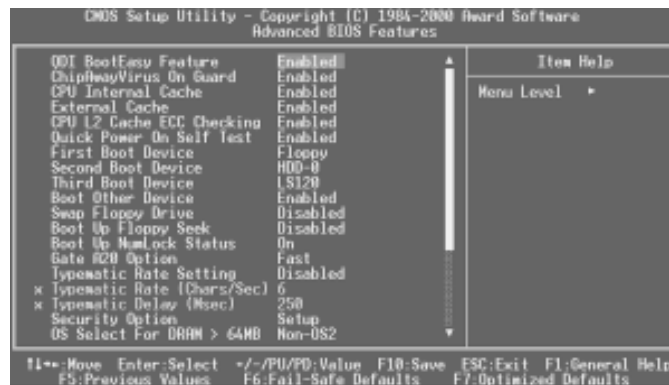| Item	Option	Description
● Auto Detect DIMM/ PCI Clk	*Enabled* *Disabled*	Closes the CLK signal if no PCI or DIMM plug in.
● CPU Host/PCI/ spread spec.	*Default* *100/33Mhz/-0.5%* *100/33Mhz/± 0.25%* *100/33Mhz/± 0.5%* *102/34Mhz/off* ...... *133/33Mhz/-0.5%* *133/33Mhz/± 0.25%* *133/33Mhz/± 0.5%* *136/34MHz/off*	These items are of selected CPU FSB and PCI clock.Default setting is recommended. ± 0.5%,± 0.25%,-0.5% means enable clock Spread Spectrum 0.5%, ± 0.25%, -0.5% to reduce EMI. Off means disable clock spread specturm to reduce EMI.

Advanced BIOS Features Setup

Figure-2   Advanced BIOS Features Setup Menu

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

Item	Option	Description
● QDI BootEasy	Enabled	PC boot in rapid speed, without any redundant waiting for the displaying of starting OS.
	Disabled	PC boot in the legacy BIOS way.
● ChipAway Virus on Guard	Enabled	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.
	Disabled	Invalidates this function.
● CPU	Enabled	Enables CPU internal Level1/Level2 cache.
Internal Cache	Disabled	Disables CPU internal Level1/Level2 cache.
● External Cache	Enabled	Enables external L2 cache. this allows better performance.
	Disabled	Disable external cache.
● CPU L2 Cache	Enabled	Enables CPU L2 Cache ECC function.
ECC Checking	Disabled	Disables CPU L2 Cache ECC function.
● Quick Power On Self Test	Enabled	Enables quick POST. BIOS will shorten or skip some check items during POST to speed up POST after you power on the computer.
	Disabled	Normal POST.
● First (Second, Third) Boot Device Boot other Device	Disabled Floppy	Selects your Boot Device Priority. It could be Disabled, Floppy, LS/ZIP, HDD-0, HDD-1, HDD-2, HDD-3, SCSI, CDROM, LAN.

|		
● Swap Floppy	*Enabled*	Exchanges the assignment of A&B floppy drives.
Drive	*Disabled*	The assignment of A&B floppy drives are normal.
● Boot Up	*Enabled*	Tests floppy drives to determine whether they
Floppy Seek	*Disabled*	have 40 or 80 tracks.
● Boot Up	*On*	Keypad is used as number keys.
Numlock Status	*Off*	Keypad is used as arrow keys.
● Gate A20	*Normal*	The A20 signal is controlled by the keyboard controller
Option		or chipset hardware.
	Fast	Default setting. The A20 signal is controlled by Port 92
		or the chipset specific method.
● Typematic Rate	*Enabled*	Keystrokes repeat at a rate determined by the
Setting	*Disabled*	keyboard controller - when enabled, the
		typematic rate and typematic delay can be
		selected.
● Typematic Rate	*6-30*	The rate at which character repeats when you
(Chars/Sec)		hold down a key.
● Typermatic Delay	*250-1000*	The delay before keystrokes begin to repeat.
(Msec)		
● Security Option	*System*	Selects whether the password is required every
	Setup	time the system boots or only when you enter
		setup.
● OS Select For	*Non-OS2*	If your operating system is not OS/2, please select
DRAM>64MB		this item.
	OS2	If system DRAM is more than 64MB and the operating
		system is OS/2, please select this item.
● Video BIOS	*Enabled*	Video BIOS will be copied to RAM. Video Shadow
Shadow		will increase the video speed.
	Disabled	Video shadow is disabled.
● C8000~CBFFF	*Enabled*	Optional ROM will be copied to RAM by 16K bytes
Shadow:		per unit.
... ...		
DC000-DFFFF		
Shadow:	*Disabled*	The shadow function is disabled.
● Show Bootup	*Enabled*	Enables the logo when system boots up.
Logo	*Disabled*	Logo will not be shown when system boots up.
● Flash Write	*Enabled*	Does not allow you to upgrade the BIOS.
Protect		**Note: Enabling this item can protect the**
		system BIOS from being attacked by severe
		virus such as CIH. Therefore disable this
		item item only when wanting to flash BIOS,
		afterwards set this item as Enabled (default).
	Disabled	Disabling this item allows you to upgrade the BIOS.

Advanced Chipset Features Setup
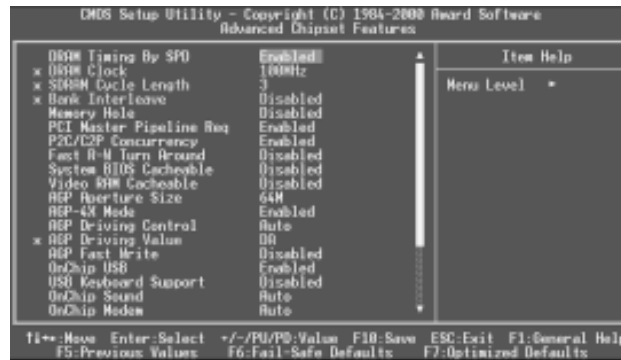
Figure-3 Advanced Chipset Features Setup Menu

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

Item	Option	Description
● DRAM Timing By SPD	*Enabled*	Select Enabled for setting SDRAM timing by SPD.
	Disabled	
● DRAM Clock	*100MHz*	Sets DRAM operation clock.
	133MHz	
● SDRAM Cycle Length	*2/3*	Defines the CLT timing parameter of SDRAM Latency Time = 2 clocks.
		Latency Time = 3 clocks.
● Bank Interleave	*2 Bank*	Allows you to set how many banks of SDRAM
	4 Bank	support in your mainboard.
	Disabled	
● Memory Hole	*15-16M*	Memory Hole at 15-16M is reserved for expanded ISA card.
● PCI master Pipeline Req	*Enabled*	Enables PCI master pipeline request.
	Disabled	Disables PCI master pipeline request.
● P2C/C2P Concurrency	*Enabled*	Enables P2C/C2P concurrency.
	Disabled	Disables P2C/C2P concurrency.
		P2C means PCI to CPU, C2P means CPU to PCI.
● Fast R-W Turn Around	*Enabled*	Enables Fast R-W Turn Around.
	Disabled	Disables Fast R-W Turn Around.
		R-W means Read to Write.
● System BIOS Cacheable	*Enabled*	Besides conventioal memory, system BIOS area is also cacheable.
	Disabled	System BIOS area is not cacheable.
● Video RAM Cacheable	*Enabled*	Besides conventional memory, video RAM is also also cacheable.
	Disabled	Video RAM area is not cacheable.

● AGP Aperture Size (MB)	*4~128*	Sets the effective size of the Graphics Aperture to be used in the particular GART Configuration.
● AGP-4X Mode	*Enabled*	Supports 4X mode.
	Disabled	Does not support 4X mode.
● AGP Driving Control	*Auto*	The default setting is suggested.
	manual	
● AGP Driving Value	*00 - FF*	Sets the AGP Driving Value when AGP Driving Control is set as manual.
● Onchip USB	*Enabled*	Enables the onchip USB controller.
	Disabled	Disables the onchip USB controller.
● USB Keyboard Support	*Enabled*	Legacy USB keyboard support is enabled.
	Disabled	Legacy USB keyboard support is disabled.
● Onchip Sound	*Auto*	Enables AC97 function.
	Disabled	Disables AC97 function.
		Note: This item is available for KinetiZ 7E-A mainboard only.
● Onchip Modem	*Auto*	Enables MC97 function.
	Disabled	Disables MC97 function.
● CPU to PCI Write Buffer	*Enabled*	Enables CPU to PCI Write Buffer.
	Disabled	Disables CPU to PCI Write Buffer.
● PCI Dynamic Bursting	*Enabled*	Enables PCI Dynamci Bursting.
	Disabled	Disables PCI Dynamci Bursting.
● PCI Master 0 WS Write	*Enabled*	Enables PCI Master 0 WS Write.
	Disabled	Disables PCI Master0 WS Write.
● PCI Delay Transaction	*Enabled*	Enables PCI Delay Transaction.
	Disabled	Disables PCI Delay Transaction.
● PCI#2 Access #1 Retry	*Enabled*	Enables PCI#2 Access #1 Retry.
	Disabled	Disables PCI#2 Access #1 Retry.
● AGP Master 1 WS Write	*Enabled*	Enables AGP Master 1 WS Write.
	Disabled	Disables AGP Master 1 WS Write.
● AGP Master 1 WS Read	*Enabled*	Enables AGP Master 1 WS Read.
	Disabled	Disables AGP Master 1 WS Read.

Power Management Setup

Figure-5 Power Management Setup Menu

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

Item	Option	Description
● ACPI function	Enabled	Validates ACPI function.
	Disabled	Invalidates ACPI function.
● Power Management	User Define	Users can configure their own Power Management Timer.
	Min Saving	Pre - defined timer values are used. All timers are in their MAX values.
	Max Saving	Pre - defined timer values are used. All timers are in their MIN values.
● ACPI Suspend Type	S1(POS)	Selects the suspend type.
	S3(STR)	S1 is power on suspend, S3 is Suspend to RAM.
● PM Control by APM	NO	System BIOS will ignore APM when Power Management is enabled.
	Yes	System BIOS will wait for APM's prompt before entering any PM mode e.g. Standby or Suspend.
● Video Off Option	Suspend -> Off	Screen blanks after the system enters either standby mode or suspend mode.
	All Modes -> Off	Screen blanks after the system enters all modes.
	Always On	Screen is always on.
● Video Off Method	Blank Screen	The system BIOS will only blank off the screen when disabling video.
	V / H SYNC + Blank	In addition to Blank Screen, BIOS will also turn off the V-SYNC & H - SYNC signals from VGA cards to monitor.
	DPMS	This function is enabled only for the VGA card supporting DPMS.
● Modem Use IRQ	3,5,7,9,10,11 NA	Special Wake-up event for Modem.

|		
● Soft-off by PWRBTN	*Instant-off*	The system will power off immediately once the power button is pressed.
	Delay 4 Sec	The system will not power off until the power button has been pressed continuously for more than 4 seconds.
● CPU fan in suspend	*On*	When system enters S1, CPU fan will be on always.
	Off	When system enters S1, CPU fan will be off automatically.
● Wake Up Events	*Press Enter*	sets the following items.
● USB Resume from S3	*Enabled*	When system enters S3 state, USB can be waken up.
	Disabled	Disables this function.
● VGA	*On*	VGA active reloads global timer.
	Off	VGA active has no influence to global timer.
● LPT&COM	*NONE*	Disables this function.
	LPT	When select COM/LPT, any activity from one of the
	COM	listed system perpheral devices or IRQs wakes up
	LPT/COM	the system.
● HDD&FDD	*ON*	When on of HDD&FDD, any activity from one of the listed system peripheral devices wakes up the system.
	OFF	Disables this function.
● PCI Master	*ON*	When on of PCI master, any activity from one of the listed system peripheral devices wakes up the system.
	OFF	Disables this function.
● PowerOn by PCI Card	*Enable*	Allows any event occurring to the DMA controller will awaken a system which has been powered down.
	Disable	Disables power-on by PCI card.
● Modem Ring Resume	*Enabled*	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,
	Disabled	Does not allow wake up from internal/external modem.
● RTC Alarm Resume	*Enabled*	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.
	Disabled	RTC has no alarm function.
● Primary INTR	*On*	Allows wake up from IRQ.
	Off	Does not Allows wake up from IRQ.
● IRQs Activity Monitoring	*Press Enter*	Reloads global timer.

PnP/PCI Configurations Setup
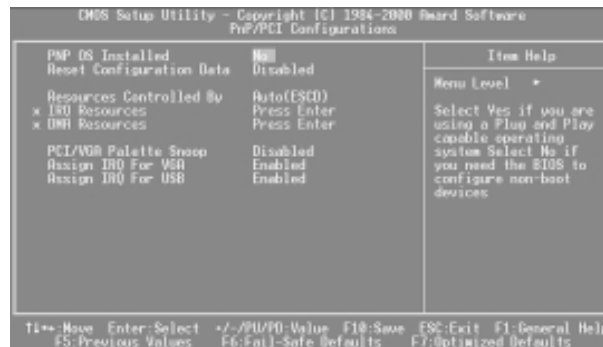
Figure-6 PnP/PCI Configurations Setup Menu

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

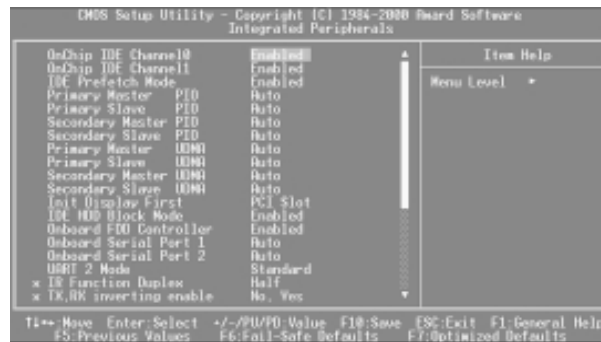| Item	Option	Description
• PNP OS Installed	Yes	Device resources assigned by PnP OS.
	No	Device resources assigned by BIOS.
• Reset Configuration Data	Enabled	The system BIOS will reset configuration data once then automatically set this item as disabled.
	Disabled	Disables the configuration data function.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

Integrated Peripherals

Figure-4 Integrated Peripherals Menu

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

Item	Option	Description
● OnChip IDE channel 0/1	Enabled	Enables OnChip IDE First/Second Channel.
	Disabled	Disables OnChip IDE First/Second Channel.
● IDE Prefetch Mode	Enabled	Enables IDE Prefetch Mode.
	Disabled	Disables IDE Prefetch Mode.
● IDE Primary/ Secondary Master/Slave PIO	Mode 0 - 4	Defines the IDE primary/secondary master/ slave PIO mode.
	Auto	The IDE PIO mode is defined by auto -detection.
● IDE Primary/ Secondary Master/Slave UDMA	Auto	Ultra DMA mode will be enabled if an ultra DMA device is detected.
	Disabled	Disables this function.
● Init Display First	PCI SLOT	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.
	AGP	Initializes the AGP first.
● IDE HDD Block Mode	Enabled	Allows IDE HDD to read/write several sectors at once.
● Onboard FDD Controller	Enabled	Onboard floppy disk controller is enabled.
	Disabled	Onboard floppy disk controller is disabled.
● Onboard Serial Port 1/2	3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3,	Defines the onboard serial port address and required interrupt number.
	Auto	Onboard serial port address and IRQ are auto-matically assigned
	Disabled	Onboard serial port is disabled.

● UART 2 Mode	*Standard*	Defines Serial Port 2 as standard serial port.
	HPSIR	Supports IRD mode.
	ASKIR	Supports SHARP ASK-IR protocol with maximum baud rate up to 57600bps.
● Onboard Parallel Port	*378/IRQ7, 278/IRQ5, 3BC/IRQ7*	Defines onboard parallel port address and IRQ channel.
	Disabled	Onboard parallel port is disabled.
● Parallel Port Mode	*SPP*	Defines the parallel port mode as
	EPP	Standard Parallel Port (SPP), Enhanced
	ECP,	Parallel Port (EPP), or Extended
	ECP+EPP	Capabilities Port (ECP).
● ECP mode use DMA	*1. 3*	
● Parallel Port EPP Type	*EPP1.9*	Selects parallel port EPP type.
	EPP1.7	

Note: For KinetiZ 7E-C or KinetiZ 7E mainboard, the following item will not appear.

● Onboard Legacy Audio	*Enabled*	Enables onboard legacy audio.
	Disabled	Disables onboard legacy audio.
● Sound Blaster	*Enabled*	Enables Sound Blaster.
	Disabled	Disables Sound Blaster.
● SB I/O Base Address	*220H/240H 260H/280H*	Defines SB I/O Base Address.
● SB IRQ Select	*IRQ5~10*	Selects SB IRQ.
● SB DMA Select	*DMA0~DMA3*	Selects SB DMA .
● MPU-401	*Enabled*	Enables MPU-401
	Disabled	Disables MPU-401
● MPU-401 I/O Address	*300/303H~ 330-333H*	Defines MPU-401 I/O address.
● Game port (200-207H)	*Enabled*	Enables game port.
	Disabled	Disables game port.

PC Health Status

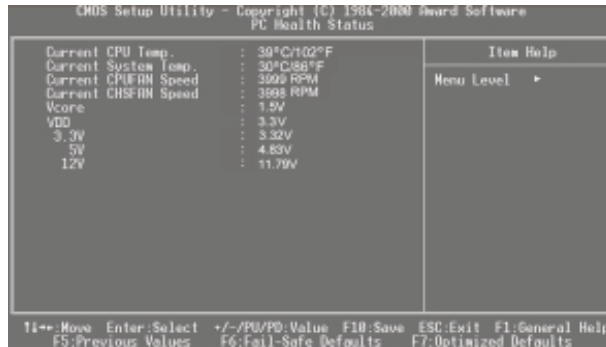

Figure-7 PC Health Status Menu

The following describes the meaning of each item.

Item	Current Data Shown	Description
● Current CPU Temp	$39^0C/102^0C$	Temperature of the CPU core.
● Current System Temp.	$30^0C/ 86^0F$	Temperature inside the chassis.
Current CPUFAN Speed	3999RPM	RPM(Revolution Per Minute) speed of fan
Current CHSFAN Speed	3998RPM	connected to the fan header CPUFAN/ 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.
● Vcore	1.65V	Displays current Voltage values including all
VDD	3.36V	significant voltages of the mainboard. Vcore
3.3V	3.32V	Voltage is the CPU core voltage from the
5V	4.83V	on board switching power supply. Vsram
12V	11.79V	is the Northbridge voltage from the onboard switching power supply. 3.3V, 5V and 12V are voltages from the ATX power supply.

Set 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 "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 "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.

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.

Appendix A

QDI Driver CD 2000

A QDI Driver CD 2000 is supplied with this mainboard. Insert CD 2000 that came with your mainboard into your CD-ROM drive to bring up the screen, click the options to install. The contents contained in it are showed as below:

1. **Express Install**
   It's recommended for most users that program will be installed with the most common options.
   A. Chipset Driver
   C. Audio Driver   D. DirectX 8.0

2. **Accessory**
    The softwares contained in this directory are:
    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. cblogo.exe
   The files included in **Documents** are:
   A. Adobe Acrobat Reader V3.0 - Ar32e301.exe
   B. French Manual - K7E FR.doc, ect.

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 on the QDI Mainboard Utility CD) to replace it by any other logo which you prefer.

Please you follow these steps to use CBLOGO.EXE Utility:

1. Copy "CBLOGO.EXE"and "AWDFLASH.EXE" from the directory \Utility located on QDI Mainboard Utility CD onto 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) onto 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 into mainboard 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 "CDLOGO.EXE". Please you refer to it's on_line help. If you don't prefer the logo displayed on the screen during boot up, set the "Show Bootup Logo" option as Disabled in the "BIOS FEATURES SETUP" 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 backuping 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.
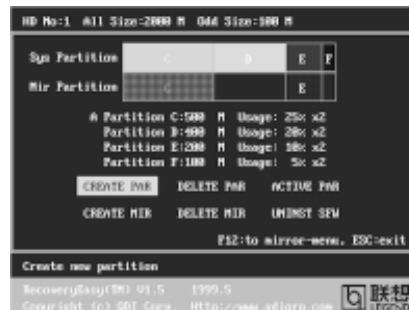

figure-1 Partition Interface

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.
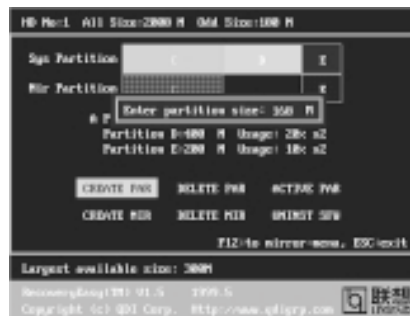

figure-2 Create Partition

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:

a. 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.

b. 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
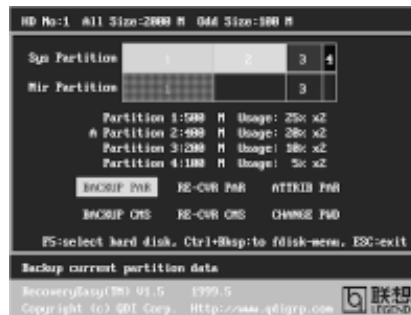settings backup or recovery, and changing password functions.

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:

a. Use F5 key to choose the partition with mirror area existed.

b. If the partition chosen has been backuped 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:

a. Use F5 key to choose the backuped partition.

b. 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 guage will be shown as below, the backup or recovery speed is about 4-5Mbyte/s. See figure-4.
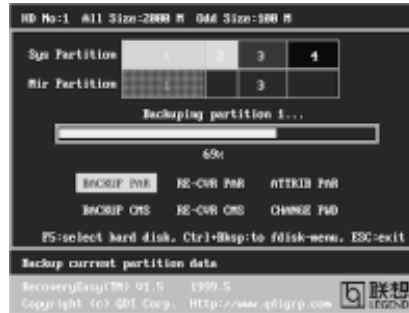

figure-4 Backup Partition

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 backuped 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 down
    load 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 26th 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.

Mainboard Layout

K7E/K7E-A/K7E-C