

### **Item Checklist**

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

- KinetiZ 7L 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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# Declaration of conformity



**QUANTUM DESIGNS(HK) LTD.**  
**20th Floor, Devon House, TaiKoo Place 979 Kings Road,**  
**Quarry Bay, Hong Kong**

declares that the product

**Mainboard**  
**KinetiZ 7L**

is in conformity with

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

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

European Representative:

QDI COMPUTER (UK) LTD

QDI SYSTEM HANDEL GMBH

QDI COMPUTER (FRANCE) SARL

LEGEND QDI SPAIN S.L.

QDI COMPUTER (SCANDINAVIA) A/S

QDI EUROPE B. V.

QDI COMPUTER HANDELS GMBH

QDI COMPUTER (SWEDEN) AB

Signature : 

Place / Date : HONG KONG/2001

Printed Name : Lv Yan

Position/ Title : Assistant President

## Declaration of conformity



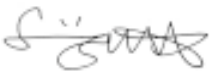
Trade Name: QDI Computer ( U. S . A. ) Inc.  
Model Name: KinetiZ 7L  
Responsible Party: QDI Computer ( U. S. A.) Inc.  
Address: 41456 Christy Street  
Fremont, CA 94538  
Telephone: (510) 668-4933  
Facsimile: (510) 668-4966

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.

Tested to comply with FCC standards.

Signature :   
\_\_\_\_\_

Date : 2001  
\_\_\_\_\_



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 **Note:**

**This manual is suitable for mainboards of KinetiZ 7L series. Each mainboard is carefully designed for the PC user who wants different features.**

**KinetiZ 7L:       with Audio without LAN**

**KinetiZ 7L-L:   with Audio and LAN**

 **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.**



# Chapter 1

## Introduction

### Overview

The KinetiZ 7L green mainboard utilizes the VIA Apollo KLE-133 chipset, Integrated 2D/3D Graphics accelerator with support for the Socket A AMD®Duron™/Athlon™ processors. The VIA®VT686B chipset integrates software configurable AC'97 audio, MC'97 modem and supports Ultra ATA33/66/100 technology. The VIA®KLE-133 chipset provides some new features such as Ultra-Fast 200MHz FSB. Equipped with two memory module sockets, 1.0GB 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.

### Key Features

#### Form factor

- Micro ATX form factor of 244mm x220mm

#### Microprocessor

- Supports AMD Socket A Athlon™ “B” type (FSB is 200MHz)processors at 700MHz/750MHz/800MHz/850MHz/900MHz/950MHz/1GHz
- Supports AMD Socket A Duron™ processors at 600MHz/650MHz/700MHz/750MHz/800MHz/850MHz/900MHz and further processors
- Supports 200MHz FSB

#### Chipset

- Apollo KLE-133 chipset: VT8361, VT82C686B

#### System memory

- Provides two 3.3V 168 pin DIMM sockets, supports PC100/133 SDRAM
- Minimum memory size is 16MB, maximum memory size is 1.0GB

#### On-chip AGP

- Integrated 2D/3D Graphics engines



### **On-board IDE**

- Two fast IDE interfaces supporting four IDE devices including IDE hard disks and CD-ROM drives
- Supports "Ultra ATA/33/66/100"

### **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
- infrared interface
- All I/O ports can be enabled/disabled in the BIOS setup

### **On-chip Audio**

- Build in VT82C686B
- Direct Sound AC97 Audio
- AC97 2.1 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
- 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 2Mb 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: S1,S4(STD),S5(Soft-off)

**Expansion slots**

- 1 ISA slot
- 3 PCI slots
- 1 AMR slot



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## 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.

#### External Connectors

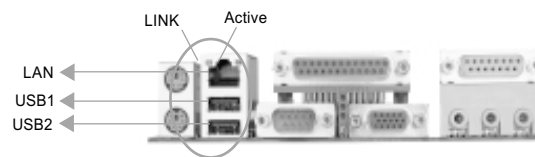
##### PS/2 Keyboard Connector, PS/2 Mouse Connector

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



##### USB1, USB2 and LAN Connector

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

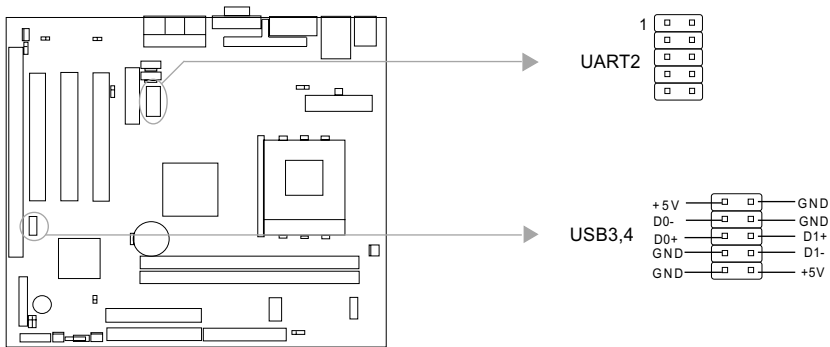


**Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, otherwise your mainboard and expansion cards might be seriously damaged.**



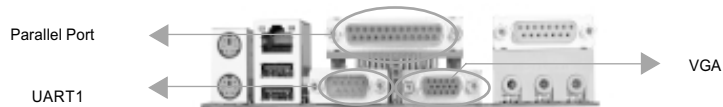
### UART2, USB3,4

The serial port UART2 is not available on the back panel. Therefore, we provide a 9-pin header and a ribbon cable with bracket for UART2 port (manufacturing option). Provides four USB ports, USB3,4 are provided by a 10-pin ribbon cable on board. The optional ribbon cable connects USB3,4 on the panel or the back panel.



### Parallel Port , Serial Port and Monitor Output Connector

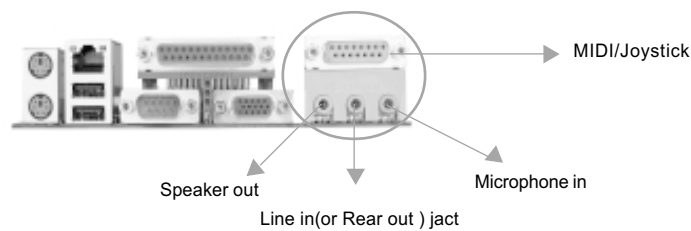
The parallel port connector can be connected to a parallel device such as a printer. The serial port UART1 connector can be connected to a serial port device such as a serial port mouse. You can enable/disable them and choose the IRQ or I/O address in "Integrated Peripherals" from AWARD BIOS SETUP. The monitor output connector is for output to a VGA-compatible device.





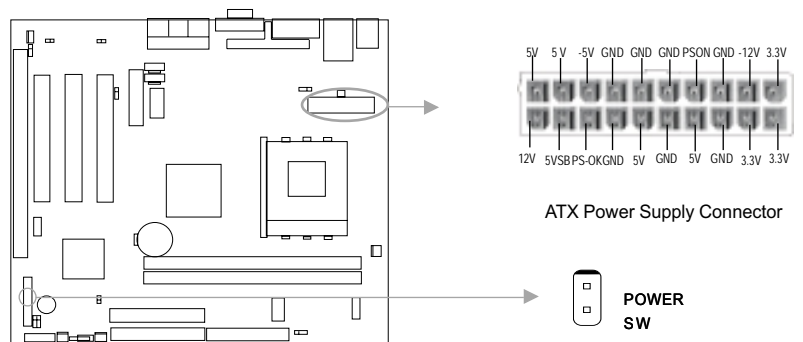
### Line-in jack, Microphone-in jack, Speaker-out jack and MIDI/Joystick connector

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



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

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



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



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

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

### **Reset Switch (RESET)**

The connector connects to the case's reset switch. Press the switch once, the system resets.

### **Speaker Connector (SPEAKER)**

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

### **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 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 APM(advanced power management) suspend, the LED is on.

### **Hardware Green Connector (SLEEP SW)**

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

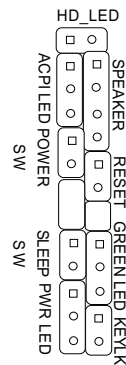
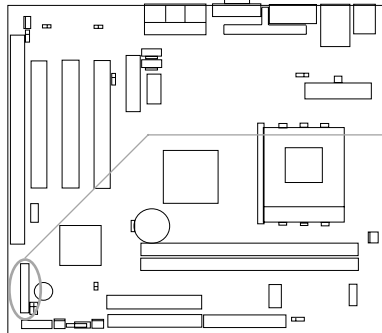
### **Power LED Connector (PWRLED)**

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 Soft-Off status, the LED is off. The connector has an orientation.



### Key-Lock Connector(KEY\_L)

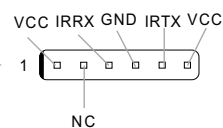
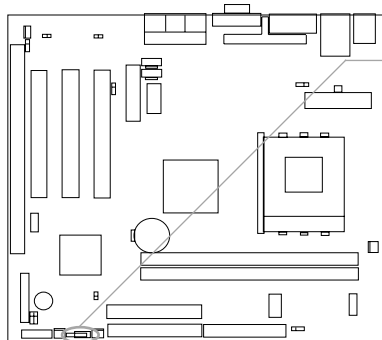
The connector can be connected to the keyboard lock switch on the case for locking the keyboard(only for DOS).



|          | HDD LED(+) | HDD LED(-) |                 |
|----------|------------|------------|-----------------|
| ACPI LED | Orange(-)  | VCC        | SPEAKER         |
|          | Green(-)   | GND        |                 |
|          | LED+       | NC         |                 |
| POWER SW | POWER      | SPKDATA    | RESET           |
|          | GND        | RESET      |                 |
|          | EMPTY      | GND        |                 |
| SLEEP SW | EMPTY      | EMPTY      | GREEN LED/KEYLK |
|          | SLEEP      | LED+       |                 |
|          | GND        | LED-       |                 |
| PWR LED  | LED+       | LED-       | KEYLOCK         |
|          | LED-       | GND        |                 |
|          | LED-       | KEYLOCK    |                 |

### Infrared Header (IrDA)

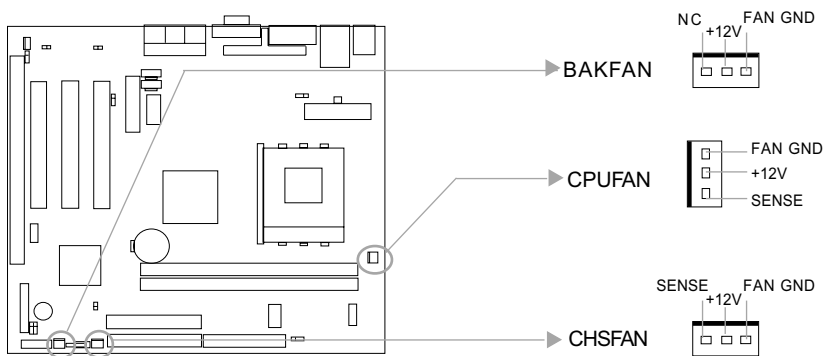
This connector supports wireless transmitting and receiving. If using this function, set "UART 2 Mode" to HPSIR or ASKIR and configure the settings from the "INTEGRATED PERIPHERALS" section of the BIOS.





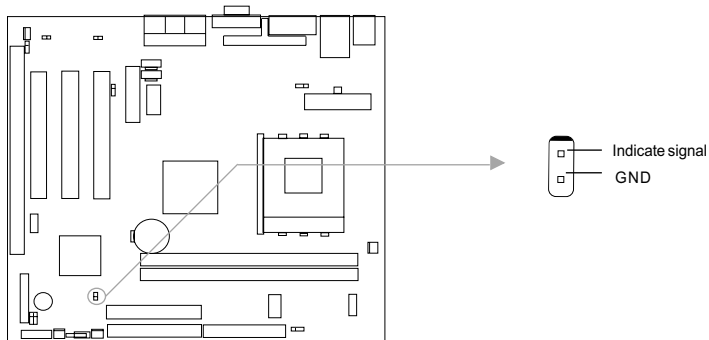
### Fan Connector (CPUFAN, CHSFAN, BAKFAN)

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



### Chassis Security Switch (CHSSEC)

The connector connects to the chassis security switch on the case. The system can detect the chassis intrusion through the status of this connector. If the case has been opened, the system will record the status and indicate the chassis has been opened. You can receive this information from QDI ManageEasy software.

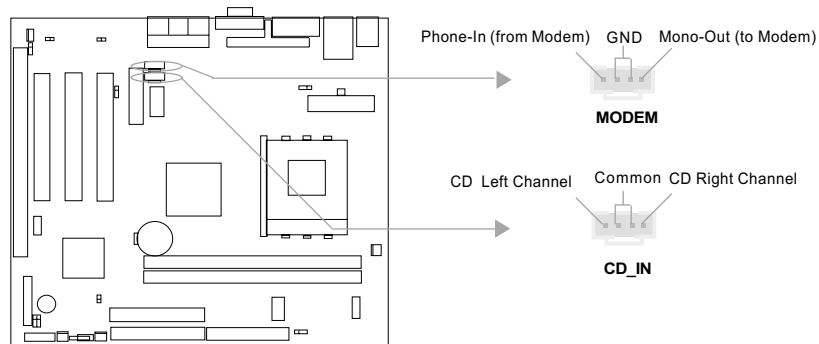






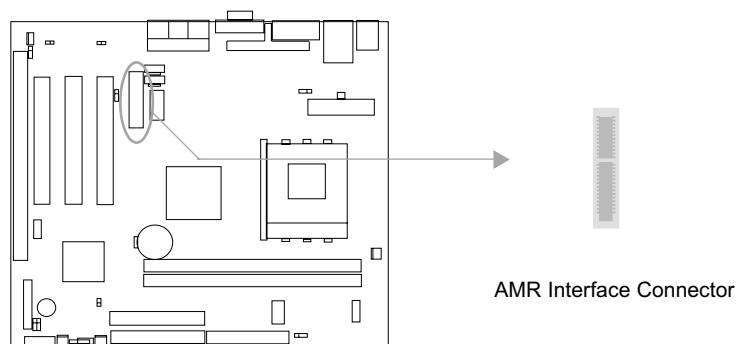
### Audio Connector (CD\_IN, MODEM)

CD\_IN is a Sony standard CD audio connector, it can be connected to a CD-ROM drive through a CD audio cable. The MODEM connector allows the onboard audio to interface with a voice modem card with a similar connector. It allows connecting the mono\_in (such as a phone) or mono\_out (such as a speaker) between the onboard audio and the voice modem card.



### Audio/Modem Riser Interface Connector (AMR)

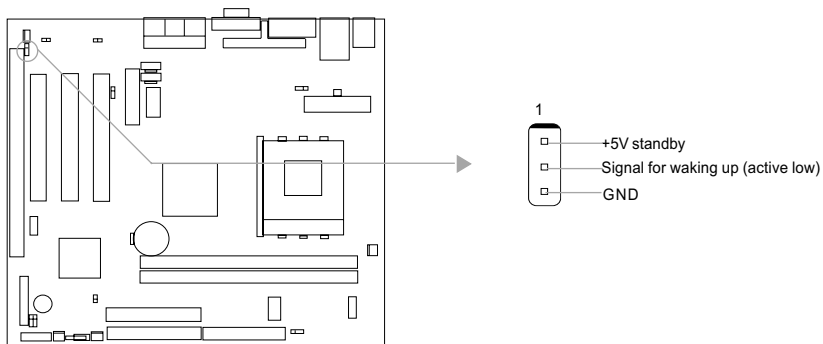
The AMR Interface Connector is the interface between the mainboard and the Audio/Modem Riser card. The connector provides all necessary signals which supports several different configurations of audio and modem in the system, such as audio and modem on the Riser, audio on the mainboard and modem on the 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.





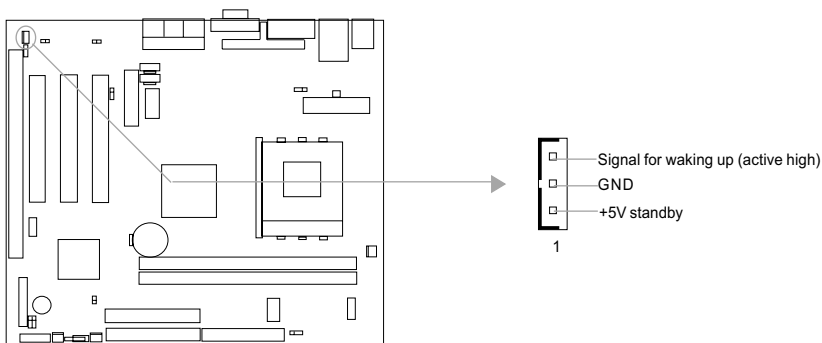
### Wake-Up On Internal Modem (WOM)

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.



### Wake-Up On LAN (WOL)

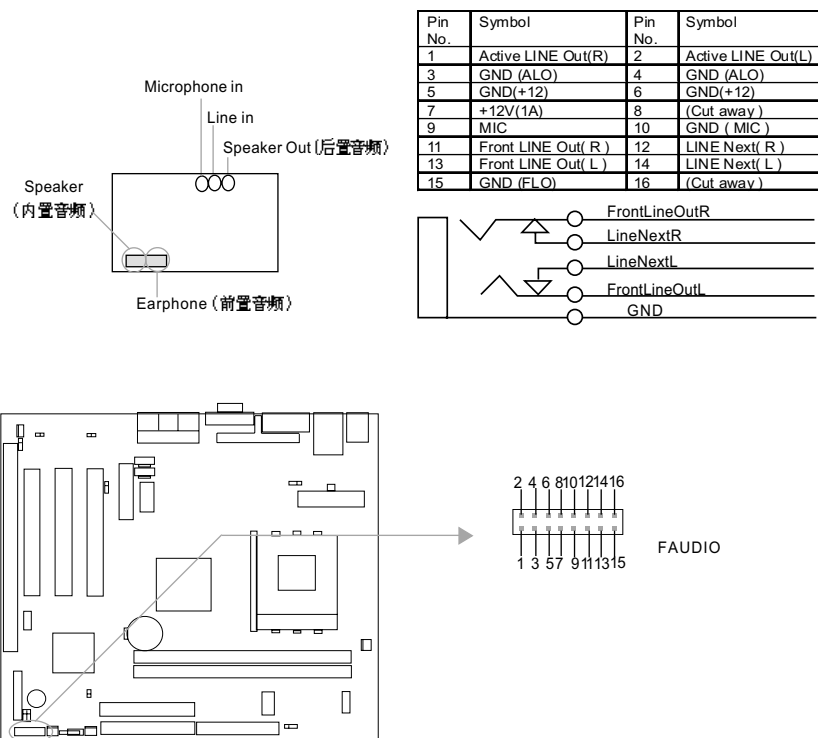
Through the Wake-Up On LAN function, a wake event occurring from the network can wake up the system. If this function is to be used, please be sure an ATX 2.01 power supply of which 5VSB line is capable of delivering 720mA, and a LAN adapter which supports this function are used. Then connect this header to the relevant connector on the LAN adapter, set "Modem Ring Resume" as Enabled in the "POWER MANAGEMENT SETUP" section of the BIOS. (On-board RTL8100 LAN need not use this header) Save & exit, then boot the operating system once to make sure this function takes effect.





## Audio Interface

The audio interface includes three parts, one is the FrontAudio, another is the RearAudio, the last is the ActiveAudio. Their priority level is as sequence. when the FrontAudio is available, the RearAudio and the ActiveAudio will be cut off. when the RearAudio is available, the ActiveAudio will be cut off. An onboard amplifier is needed for the case of earphone plugged into. when the FrontAudio is inexistence, Pin11 and Pin12, Pin13 and Pin14 must be short connected.








### Expansion Slots & I/O Ports description

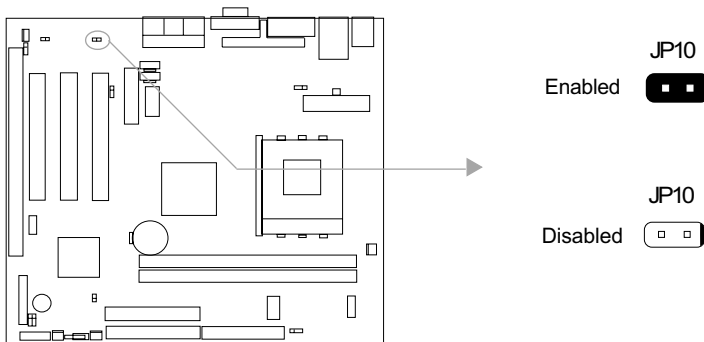
| Slot / Port | Description         |
|-------------|---------------------|
| PCI1        | First PCI slot      |
| PCI2        | Second PCI slot     |
| PCI3        | Third PCI slot      |
| ISA         | First ISA slot      |
| AMR.        | AMR slot            |
| IDE1        | Primary IDE port    |
| IDE 2       | Secondary IDE port  |
| DIMM1       | First DIMM slot     |
| DMM2        | Secondary DIMM 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.

### Wake-Up On LAN (JP10)

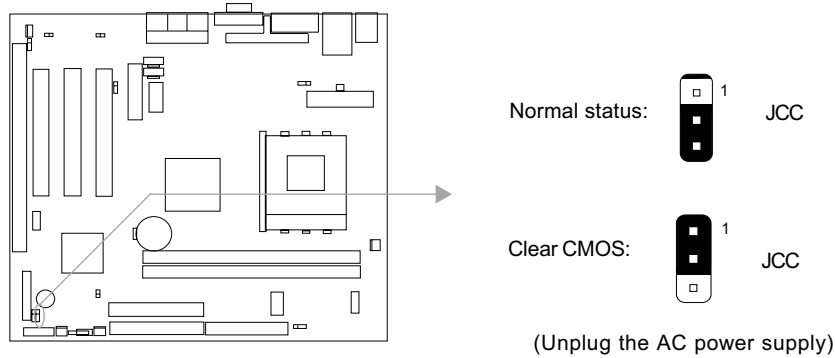
This Jumper allows you to enable or disable the onboard LAN wake up function.If you wish to use wake on LAN function,set the jumper JP10 as closed.Otherwise ,set JP10 as opened for disabling this function.





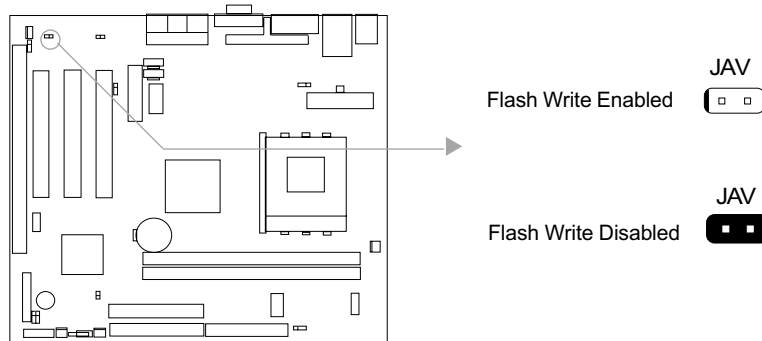
### Clear CMOS (JCC)

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.



### 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.



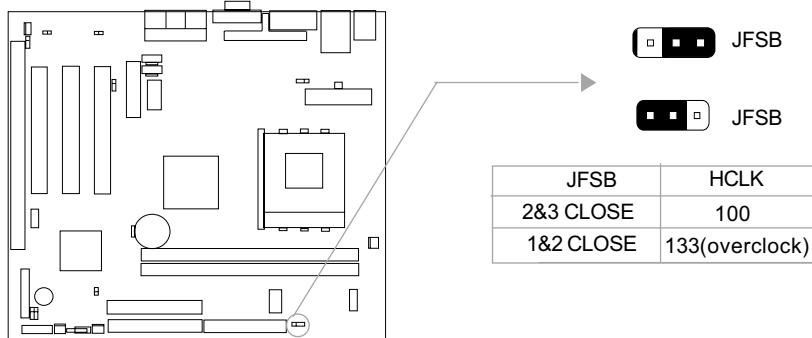
Setting the jumper JAV as open (default), meanwhile disabling the "BIOS\_ProtectEasy" item from "Advanced BIOS Features" in AWARD BIOS CMOS Setup, allows you to flash the BIOS to the Flash ROM.

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 100MHz. Refer to the chart below for the location of these jumpers, and the table for information on how to set them.



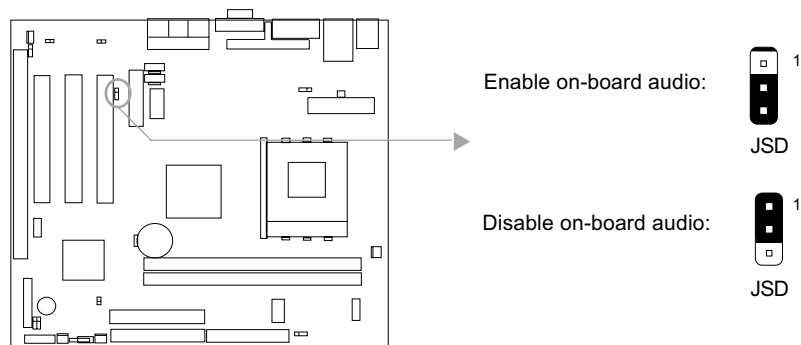
The system support CPU FSB is 100MHz( Ultra -Fast 200MHz ). but overclock to 133MHz FSB is also allowed. We do not guarantee the overclocking system to be stable. whether or not your system can be overclocked depends on your processor's capability. Whether the processor is bus ratio locked or unlocked should also be taken into account.

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



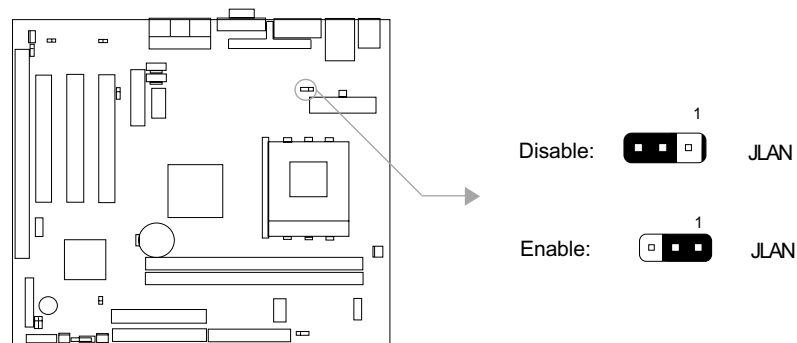
### Enable/Disable on-board audio(JSD)

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. The AMR slot only accept slave AMR card when set JSD jumper as enable, The AMR slot only accept primary AMR card when set JSD jumper as disable.



### Enable/Disable onboard LAN (JLAN)

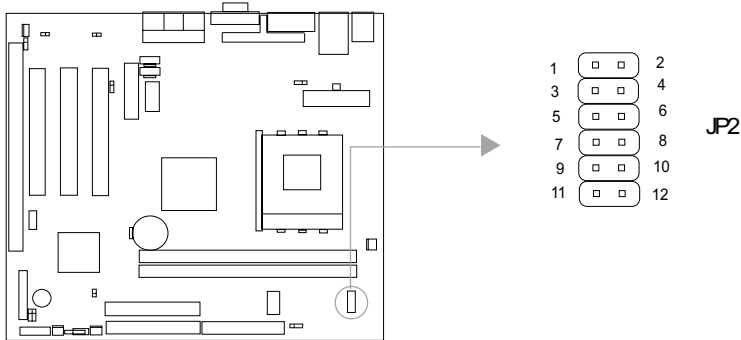
This Jumper allows you to use the onboard LAN function. before using this function, set JLAN with pin1 and pin2 closed. Otherwise set JLAN with pin2 and pin3 closed for disabling.





### 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.



| Voltage | JP2      |          |          |          |           |            |
|---------|----------|----------|----------|----------|-----------|------------|
|         | 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:** The CPU core voltage value maybe exist deviation between the actual measure and standard is allowed. 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.





## 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 >= 7.95) 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 /?

**Note: BIOS version will update constantly. We will not be responsible for any BIOS description differ from your mainboard BIOS shown.**



## 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 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 Features Setup Menu

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



Figure-2-1 IDE Primary Master Setup Menu

## Hard Disk

### Primary Master/Primary Slave/Secondary Master/Secondary Slave

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

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



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

### **CHS mode**

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 dividing the number of cylinders is less than 1024 by dividing it by 2. At the same time, the number of heads is multiplied by 2. A reverse transformation process will be made inside INT13h in order to access the right HDD address.

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

### **Remark**

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



## Video

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

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

## Halt On

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

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

## Memory

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

|                 |  |
|-----------------|--|
| Base Memory     | The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system. |
| Extended Memory | The BIOS determines how much extended memory is presented during the POST.                               |
| Total Memory    | Total memory of the system equals the sum of the above memory.   |



## CPU SpeedEasy Setup



Figure-1 CPU SpeedEasy Setup Menu

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

| Item                         | Option                    | Description  |
|------------------------------|---------------------------|--|
| • Auto Detect DIMM/PCI Clk   | <i>Enabled</i>            | Closes empty PCI or DIMM CLK signal to reduce EMI  |
|                              | <i>Disabled</i>           | Does not close empty PCI or DIMM CLK signal  |
| • CPU Host/PCI/ spread spec. | <i>Default</i>            | These items are of selected CPU FSB and PCI clock.Default setting is recommended.  |
|                              | <i>100/33Mhz/-0.5%</i>    | ±0.5%, ±0.25%,-0.5% means enable clock Spread Spectrum 0.5%, ± 0.25%, -0.5% to reduce EMI.<br>Off means disable clock spread spectrum. |
|                              | <i>100/33Mhz/ ± 0.25%</i> |  |
|                              | <i>100/33Mhz/±0.5%</i>    |  |
|                              | <i>102/34Mhz/off</i>      |  |
| <i>.....</i>                 |                           |  |



## Advanced BIOS Features Setup



Figure-2 Advanced BIOS Features Setup Menu

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

| <u>Item</u>                 | <u>Option</u>   | <u>Description</u>  |
|-----------------------------|-----------------|---|
| • QDI BootEasy feature      | 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   | <i>Enabled</i>  | Allows you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep. |
|                             | <i>Disabled</i> | Invalidates this function.  |
| • CPU Internal Cache        | <i>Enabled</i>  | Enables CPU internal Level1/Level2 cache.   |
|                             | <i>Disabled</i> | Disables CPU internal Level1/Level2 cache.  |
| • External Cache            | <i>Enabled</i>  | Enables external L2 cache. this allows better performance.  |
|                             | <i>Disabled</i> | Disable external cache.   |
| • CPU L2 Cache ECC Checking | <i>Enabled</i>  | Enables CPU L2 Cache ECC function.  |
|                             | <i>Disabled</i> | Disables CPU L2 Cache ECC function.   |



| <b>Item</b>   | <b>Option</b>          | <b>Description</b>  |
|---|------------------------|---|
| • Quick Power On Self Test                            | <i>Enabled</i>         | Enables quick POST. BIOS will shorten or skip some check items during POST to speed up POST after you power on the computer.              |
|   | <i>Disabled</i>        | Normal POST.  |
| • First (Second, Third) Boot Device Boot Other Device | <i>Disabled Floppy</i> | Select Your Boot Device Priority. It could be Disabled, Floppy, LS/ZIP, HDD-0, HDD-1, HDD-2, HDD-3, SCSI, CDROM, LAN.                     |
| • Swap Floppy Drive                                   | <i>Enabled</i>         | Exchanges the assignment of A&B floppy drives.  |
|   | <i>Disabled</i>        | The assignment of A&B floppy drives are normal.   |
| • Boot Up Floppy Seek                                 | <i>Enabled</i>         | Tests floppy drives.  |
|   | <i>Disabled</i>        | Disabled this function.   |
| • Boot Up Numlock Status                              | <i>On</i>              | Keypad is used as number keys.  |
|   | <i>Off</i>             | Keypad is used as arrow keys.   |
| • Gate A20 Option                                     | <i>Normal</i>          | The A20 signal is controlled by the keyboard controller or chipset hardware.  |
|   | <i>Fast</i>            | Default setting. The A20 signal is controlled by Port 92 or the chipset specific method.  |
| • Typematic Rate Setting                              | <i>Enabled</i>         | Keystrokes repeat at a rate determined by the keyboard controller - when enabled, the typematic rate and typematic delay can be selected. |
|   | <i>Disabled</i>        |   |
| • Typematic Rate (Chars/Sec)                          | <i>6-30</i>            | The rate at which character repeats when you hold down a key.   |
| • Typematic Delay (Msec)                              | <i>250-1000</i>        | The delay before keystrokes begin to repeat.  |
| • Security Option                                     | <i>System Setup</i>    | Selects whether the password is required every time the system boots or only when you enter setup.  |





| <u>Item</u>  | <u>Option</u>   | <u>Description</u>  |
|--|-----------------|---|
| <ul style="list-style-type: none"> <li>OS Select For DRAM&gt;64MB</li> </ul>                             | <i>Non-OS2</i>  | If your operating system is not OS/2, please select this item.                              |
|  | <i>OS2</i>      | If system DRAM is more than 64MB and the operating system is OS/2, please select this item. |
| <ul style="list-style-type: none"> <li>Report NO FDD for WIN 95</li> </ul>                               | <i>Yes</i>      | Report NO Floppy Disk Drive for WIN 95 to release IRQ6.                                     |
|  | <i>No</i>       | Do not report No Floppy Disk Drive for WIN 95.  |
| <ul style="list-style-type: none"> <li>Video BIOS Shadow</li> </ul>                                      | <i>Enabled</i>  | Video BIOS will be copied to RAM. Video Shadow will increase the video speed.               |
|  | <i>Disabled</i> | Video shadow is disabled.   |
| <ul style="list-style-type: none"> <li>C8000~CBFFF Shadow:<br/>... ..<br/>DC000-DFFFF Shadow:</li> </ul> | <i>Enabled</i>  | Optional ROM will be copied to RAM by 16K bytes per unit.                                   |
|  | <i>Disabled</i> | The shadow function is disabled.  |
| <ul style="list-style-type: none"> <li>Delay for HDD (Secs)</li> </ul>                                   | <i>0-15</i>     | Sets the delay time for Initialize the IDE device.  |
| <ul style="list-style-type: none"> <li>Show Bootup Logo</li> </ul>                                       | <i>Enabled</i>  | Enables the logo when system boots up.  |
|  | <i>Disabled</i> | Logo will not be shown when system boots up.  |
| <ul style="list-style-type: none"> <li>Flash Write Protect</li> </ul>                                    | <i>Enabled</i>  | Does not allow you to upgrade the BIOS.   |
|  | <i>Disabled</i> | 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      | <i>Enabled</i><br><i>Disabled</i>                 | Select Enabled for setting SDRAM timing by SPD parameter.  |
| • DRAM Clock              | <i>100M</i><br><i>133M</i>                        | Define DRAM frequency  |
| • SDRAM Cycle Length      | <i>2/3</i>  | Defines the CLT timing parameter of SDRAM<br>Latency Time = 2 clocks.<br>Latency Time = 3 clocks.            |
| • Bank Interleave         | <i>2 Bank</i><br><i>4 Bank</i><br><i>Disabled</i> | Allows you to set how many banks of SDRAM for interleaving supported in your mainboard.                      |
| • Memory Hole             | <i>15-16M</i><br><i>Disabled</i>                  | Memory Hole at 15-16M is reserved for expanded ISA card.<br>Not Set this memory hole.                        |
| • PCI master Pipeline Req | <i>Enabled</i><br><i>Disabled</i>                 | Enables PCI master pipeline request.<br>Disables PCI master pipeline request.                                |
| • P2C/C2P Concurrency     | <i>Enabled</i><br><i>Disabled</i>                 | Enables P2C/C2P concurrency.<br>Disables P2C/C2P concurrency.<br>P2C means PCI to CPU, C2P means CPU to PCI. |



| <b>Item</b>                       | <b>Option</b>                     | <b>Description</b>   |
|-----------------------------------|-----------------------------------|--|
| • Fast R-W Turn Around            | <i>Enabled</i><br><i>Disabled</i> | Enables Fast R-W Turn Around.<br>Disables Fast R-W Turn Around.<br>R-W means Read to Write.            |
| • System BIOS Cacheable           | <i>Enabled</i><br><i>Disabled</i> | Besides conventional memory, system BIOS area is also cacheable.<br>System BIOS area is not cacheable. |
| • Video RAM Cacheable             | <i>Enabled</i><br><i>Disabled</i> | Besides conventional memory, video RAM is also cacheable.<br>Video RAM area is not cacheable.          |
| • Frame Buffer size               | <i>2M,4M,8M</i>                   | Sets on-chip AGP share memory.   |
| • AGP Aperture Size Aperture (MB) | <i>4~128</i>                      | Sets the effective size of the Graphics  |
| • AGP Mode                        | <i>1X,2X,4X</i>                   | Sets the mode of AGP.  |
| • AGP Driving Control             | <i>Auto</i><br><i>manual</i>      | The default setting is suggested.  |
| • AGP Driving Value               | <i>00~FF</i>                      | Sets the AGP Driving Value when the AGPcard runs incorrectly.  |
| • AGP Fast write                  | <i>Enabled</i><br><i>Disabled</i> | Enables AGP Fast Write.<br>Disables AGP Fast Write.  |
| • Onchip USB                      | <i>Enabled</i><br><i>Disabled</i> | Enables the onchip USB controller.<br>Disables the onchip USB controller.                              |
| • USB Keyboard Support            | <i>Enabled</i><br><i>Disabled</i> | Legacy USB keyboard support is enabled.<br>Legacy USB keyboard support is disabled.                    |
| • Onchip Sound                    | <i>Auto</i><br><i>Disabled</i>    | Enables AC97 function.<br>Disables AC97 function.  |
| • Onchip Modem                    | <i>Auto</i><br><i>Disabled</i>    | Enables MC97 function.<br>Disables MC97 function.  |



| <b>Item</b>               | <b>Option</b>                     | <b>Description</b>  |
|---------------------------|-----------------------------------|---|
| • CPU to PCI Write Buffer | <i>Enabled</i><br><i>Disabled</i> | Enables CPU to PCI Write Buffer.<br>Disables CPU to PCI Write Buffer.         |
| • PCI Dynamic Bursting    | <i>Enabled</i><br><i>Disabled</i> | Enables PCI Dynamic Bursting.<br>Disables PCI Dynamic Bursting.               |
| • PCI Master 0 WS Write   | <i>Enabled</i><br><i>Disabled</i> | Enables PCI Master 0 WS Write.<br>Disables PCI Master0 WS Write.              |
| • PCI Delay Transaction   | <i>Enabled</i><br><i>Disabled</i> | Enables PCI Delay Transaction.<br>Disables PCI Delay Transaction.             |
| • Delay Transaction       | <i>Enabled</i><br><i>Disabled</i> | Enabled for slow speed ISA device in system.<br>Disabled is normal operation. |
| • PCI Master Read Caching | <i>Enabled</i><br><i>Disabled</i> | Enabled PCI Master Read Caching .<br>Disabled PCI Master Read Caching .       |
| • PCI#2 Access #1 Retry   | <i>Enabled</i><br><i>Disabled</i> | Enables PCI#2 Access #1 Retry.<br>Disables PCI#2 Access #1 Retry.             |
| • AGP Master 1 WS Write   | <i>Enabled</i><br><i>Disabled</i> | Enables AGP Master 1 WS Write.<br>Disables AGP Master 1 WS Write.             |
| • AGP Master 1 WS Read    | <i>Enabled</i><br><i>Disabled</i> | Enables AGP Master 1 WS Read.<br>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.

| <u>Item</u>        | <u>Option</u>                        | <u>Description</u>   |
|--------------------|--------------------------------------|--|
| • ACPI function    | <i>Enabled</i><br><i>Disabled</i>    | Validates ACPI function.<br>Invalidates ACPI function.   |
| • Power Management | <i>press Enter</i>                   | Enters to set the following items.   |
| • Power Management | <i>User Define</i>                   | Users can configure their own Power Management Timer.  |
|                    | <i>Min Saving</i>                    | Pre - defined timer values are used. All timers are in their MAX values.   |
|                    | <i>Max Saving</i>                    | Pre - defined timer values are used. All timers are in their MIN values.   |
| • HDD Power Down   | <i>Disabled</i><br><i>1 - 15 Min</i> | HDD's motor will not be off by timer.<br>Define the continuous HDD idle time before the HDD enters power saving mode (motor off).  |
| • Doze Mode        | <i>Disabled</i><br><i>1Min~ 1Hr</i>  | The system never enters Doze mode.<br>Defines the continuous idle time before the system enters Doze mode. If any items defined in "Reload Global Timer Events" are on and activated, the system will be woken up. |
| • Suspend Mode     | <i>Disabled</i><br><i>1Min ~ 1Hr</i> | The system never enters Suspend mode by timer.<br>Defines the continuous idle time before the system enters Suspend mode. If any items defined in "PM Events" are on and activated, the system will be woken up.   |



| <b>Item</b>          | <b>Option</b>                | <b>Description</b>   |
|----------------------|------------------------------|--|
| • PM Control by APM  | <i>NO</i>                    | System BIOS will ignore APM when Power Management is enabled.  |
|                      | <i>Yes</i>                   | System BIOS will wait for APM's prompt before entering any PM mode e.g. Standby or Suspend.                  |
| • Video Off Option   | <i>Suspend -&gt; Off</i>     | Screen blanks after the system enters either standby mode or suspend mode.                                   |
|                      | <i>All Modes -&gt; Off</i>   | Screen blanks after the system enters all modes.   |
|                      | <i>Always On</i>             | Screen is always on.   |
| • Video Off Method   | <i>Blank Screen</i>          | The system BIOS will only blank off the screen when disabling video.   |
|                      | <i>V / H SYNC + Blank</i>    | In addition to Blank Screen, BIOS will also turn off the V-SYNC & H - SYNC signals from VGA card to monitor. |
|                      | <i>DPMS support</i>          | This function is enabled only for VGA cards supporting DPMS.   |
| • MODEM Use IRQ      | <i>3, 4, 5, 7, 9, 10, 11</i> | Special wake-up event for Modem.   |
|                      | <i>NA</i>                    | This function is not applied.  |
|                      |                              |  |
| • Soft-off by PWRBTN | <i>Instant-off</i>           | The system will power off immediately once the power button is pressed.                                      |
|                      | <i>Delay 4 Sec</i>           | The system will not power off until the power button has been pressed continuously for more than 4 seconds.  |
| • CPU fan in suspend | <i>On</i>                    | When system enters S1, CPU fan will be still on to keep cpu more cool.                                       |
|                      | <i>Off</i>                   | When system enters S1, CPU fan will be off automatically.  |
| • Wake Up Events     | <i>Press Enter</i>           | sets the following items.  |



| Item                       | Option             | Description  |
|----------------------------|--------------------|--|
| • VGA                      | <i>On</i>          | VGA active reloads global timer.   |
|                            | <i>Off</i>         | VGA active has no influence to global timer.   |
| • LPT&COM                  | <i>NONE</i>        | Disables this function.  |
|                            | <i>LPT</i>         | When select COM/LPT, any activity from one of the listed system peripheral devices or IRQs wakes up the system.  |
|                            | <i>COM</i>         |  |
|                            | <i>LPT/COM</i>     |  |
| • HDD&FDD                  | <i>ON</i>          | When on of HDD&FDD, any activity from one of the listed system peripheral devices wakes up the system.   |
|                            | <i>OFF</i>         | Disables this function.  |
| • PCI Master               | <i>ON</i>          | When on of PCI master, any activity from one of the listed system peripheral devices wakes up the system.  |
|                            | <i>OFF</i>         | Disables this function.  |
| • PowerOn by PCI Card      | <i>Enable</i>      | Allows any event occurring to the PCI card will awaken a system which has been powered down.   |
|                            | <i>Disable</i>     | Disables power-on by PCI card.   |
| • Modem Ring Resume        | <i>Enabled</i>     | Allows the system to be powered on when a ring indicator signal comes up to UART1 or UART2 from an external modem or comes up to WOM header from an internal modem card, |
|                            | <i>Disabled</i>    | Does not allow wake up from internal/external modem.   |
|                            |                    |  |
| • RTC Alarm Resume         | <i>Enabled</i>     | RTC alarm can be used to generate a wake event to power up the system which is in power-off status. You can set any date or any time to power up the system.             |
|                            | <i>Disabled</i>    | RTC has no alarm function.   |
| • Primary INTR             | <i>On</i>          | Allows wake up from IRQ.   |
|                            | <i>Off</i>         | Does not Allows wake up from IRQ.  |
| • IRQs Activity Monitoring | <i>Press Enter</i> | Reloads global timer.  |
| • IRQ3~IRQ15               | <i>Enabled</i>     | enables IRQ3~IRQ15 to wake up.   |
|                            | <i>Disabled</i>    | Disables IRQ3~IRQ15 to wake up.  |



## PnP/PCI Configurations Setup



Figure-6 PnP/PCI Configurations Setup Menu

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

| <b>Item</b>                | <b>Option</b> | <b>Description</b>   |
|----------------------------|---------------|--|
| ● 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.                                    |
| ● 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.  |
| ● PCI Latency Timer(CLK)   | 0~255         | Defines PCI Latency Timer  |





## Integrated Peripherals



Figure-4 Integrated Peripherals Menu

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

| <u>Item</u>                            | <u>Option</u>                     | <u>Description</u>  |
|--|-----------------------------------|---|
| • OnChip IDE channel 0/1               | <i>Enabled</i><br><i>Disabled</i> | Enables OnChip IDE First/Second Channel.<br>Disables OnChip IDE First/Second Channel.   |
| • IDE Prefetch Mode                    | <i>Enabled</i><br><i>Disabled</i> | Enables IDE Prefetch Mode.<br>Disables IDE Prefetch Mode.   |
| • Primary/ Secondary Master/Slave PIO  | <i>Mode 0 - 4</i><br><i>Auto</i>  | Defines the IDE primary/secondary master/ slave PIO mode.<br>The IDE PIO mode is defined by auto -detection.  |
| • Primary/ Secondary Master/Slave UDMA | <i>Auto</i><br><i>Disabled</i>    | Ultra DMA mode will be enabled if an ultra DMA device is detected.<br>Disables this function.   |
| • Init Display First                   | <i>PCI SLOT</i><br><i>AGP</i>     | Initializes the PCI VGA first. If a PCI VGA card and an AGP card are installed together in the system, the one initialized first functions.<br>Initializes the AGP first. |
| • IDE HDD Block Mode                   | <i>Enabled</i><br><i>Disabled</i> | Allows IDE HDD to read/write several sectors at once.<br>IDE HDD only reads/writes a sector once.   |



| <b>Item</b>               | <b>Option</b>  | <b>Description</b>   |
|---------------------------|--|--|
| • Onboard FDD Controller  | <i>Enabled</i><br><i>Disabled</i>  | Onboard floppy disk controller is enabled.<br>Onboard floppy disk controller is disabled.  |
| • Onboard Serial Port 1/2 | <i>3F8/IRQ4,</i><br><i>2F8/IRQ3,</i><br><i>3E8/IRQ4,</i><br><i>2E8/IRQ3,</i><br><i>Auto</i><br><br><i>Disabled</i> | Defines the onboard serial port address and required interrupt number.<br><br>Onboard serial port address and IRQ are automatically assigned<br>Onboard serial port is disabled. |
| • UART 2 Mode             | <i>Standard</i><br><i>HPSIR</i><br><i>ASKIR</i>  | Defines Serial Port 2 as standard serial port.<br>Supports IRD mode.<br>Supports SHARP ASK-IR protocol with maximum baud rate up to 57600bps.                                    |
| • Onboard Parallel Port   | <i>378/IRQ7,</i><br><i>278/IRQ5,</i><br><i>3BC/IRQ7</i><br><i>Disabled</i>   | Defines onboard parallel port address and IRQ channel.<br><br>Onboard parallel port is disabled.   |
| • Onboard Parallel Mode   | <i>Normal</i><br><i>EPP</i><br><i>ECP,</i><br><i>ECP/EPP</i>   | Defines the parallel port mode as Normal, Enhanced Parallel Port (EPP), or Extended Capabilities Port (ECP).   |
| • ECP mode use DMA        | <i>1</i><br><i>3</i>   | Sets DMA for ECP mode use.   |
| • Parallel Port EPP Type  | <i>EPP1.9</i><br><i>EPP1.7</i>   | Selects parallel port EPP type.  |
| • Onboard Legacy Audio    | <i>Enabled</i><br><i>Disabled</i>  | Enables onboard legacy audio.<br>Disables onboard legacy audio.  |
| • Sound Blaster           | <i>Enabled</i><br><i>Disabled</i>  | Enables Sound Blaster.<br>Disables Sound Blaster.  |
| • SB I/O Base Address     | <i>220H/240H</i><br><i>260H/280H</i>   | Defines SB I/O Base Address.   |



| <b>Item</b>            | <b>Option</b>                                | <b>Description</b>                        |
|------------------------|--|---|
| • SB IRQ Select        | <i>IRQ5-10</i>                               | Selects SB IRQ.                           |
| • SB DMA Select        | <i>DMA0</i><br>.....<br><i>DMA3</i>          | Selects SB DMA .                          |
| • MPU-401              | <i>Enabled</i><br><i>Disabled</i>            | Enables MPU-401.<br>Disables MPU-401.     |
| • MPU-401 I/O Address  | <i>300-303H</i><br>... ..<br><i>330-333H</i> | Defines MPU-401 I/O address.              |
| • Game port (200-207H) | <i>Enabled</i><br><i>Disabled</i>            | Enables game port.<br>Disables game port. |



## PC Health Status

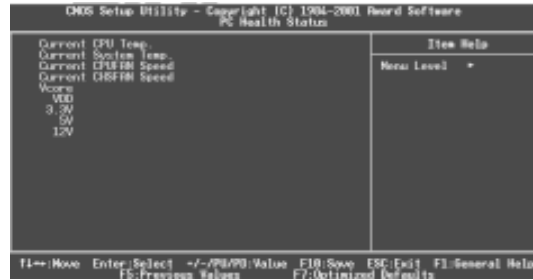


Figure-7 PC Health Status Menu

The following describes the meaning of each item.

| <u>Item</u>            | <u>Current Data Shown</u> | <u>Description</u>  |
|------------------------|---------------------------|---|
| • Current CPU Temp     | 39°C/102°C                | Temperature of the CPU core.  |
| • Current System Temp. | 30°C/ 86°F                | Temperature inside the chassis.   |
| • Current CPUFAN Speed | 4999RPM                   | RPM( Revolution Per Minute) speed of fan connected to the fan header CPUFAN/  |
| • Current CHSFAN Speed | 3998RPM                   | 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 significant voltages of the mainboard. Vcore Voltage is the CPU core voltage from the on board switching power supply. VDD is the Northbridge voltage from the onboard switching power supply. 3.3V, 5V and 12V are voltages from the ATX power supply. |
| VDD                    | 3.36V                     |   |
| 3.3V                   | 3.32V                     |   |
| 5V                     | 4.83V                     |   |
| 12V                    | 11.79V                    |   |



## 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.



## 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. Install Driver

It's recommended for most users that program will be installed with the most common options.

- |                     |                 |
|---------------------|-----------------|
| A. Chipset Software | B. VGA Driver   |
| C. Network Driver   | C. Audio Driver |
| D. DirectX          |                 |

#### 2. Accessory

The softwares contained in this directory are:

- A. QDI ManageEasy
- B. Norton AntiVirus

#### 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 - K7L FR.doc, etc.



## Appendix B

### Facilité de vitesse Initialisation(Francais)

#### **Installation de la carte mère KinetiZ 7L**

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)  
Lorsque tous les éléments du système sont installés physiquement, rebranchez l'unité centrale.
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 VGA*
- C. *Pilote Audio codec AC97*
- D. *DirectX 8.0*

### **2. Accessory**

Les logiciels contenus dans ce répertoire sont :

- A. QDI ManageEasy
- B. Norton Anti-Virus

### **3. Browse CD**

Vous pouvez voir le contenu du CD-ROM

Dans le répertoire Utility :

- A. AWDFLASH.EXE
- B. LF.EXE
- C. CBLOGO.EXE

Dans le répertoire Documents :

- A. Adobe Acrobat Reader V3.0 – Ar32e301.exe
- B. Manuels français \*.doc





## **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.

### **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.

## LogoEasy

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

### Operation Process:

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

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

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

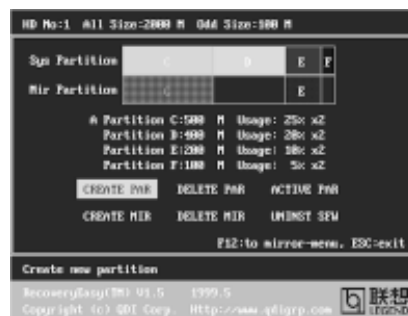


figure-1 Partition Interface

#### 1.0 Install RecoveryEasy for the first time

- a. The utility checks the previous disk partition at first, and displays the status of the first four partitions. If there are more than four disk partitions, users will be asked to delete the redundant disk partitions, since only four partitions that can be activated are



allowed to exist. However, if there're only four or fewer partitions, users can follow the system prompt and choose to install RecoveryEasy based on the previous disk partitions. In this way, the original extension partitions will be changed to normal ones, and probably the sequence of the partitions will be changed also, but the contents contained in each partition will remain the same.

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

### 1.1 CREATE PAR

**Function** : Creates a new partition.

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

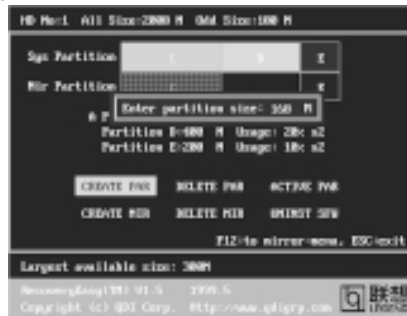


figure-2 Create Partition

**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.

**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.

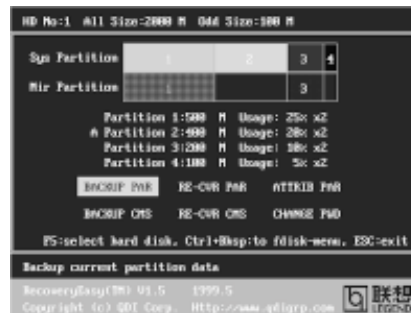


figure-3 Recovery User Interface

### 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 backed up before, a warning message will be shown, and the time when last backup was done will be displayed in the status line. After confirming the warning message, the system performs the backup. By pressing “N” or “ESC” key, the system quits.



## 2.2 RE-CVR PAR

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

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

**Steps:**

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

**Note:**

- 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.

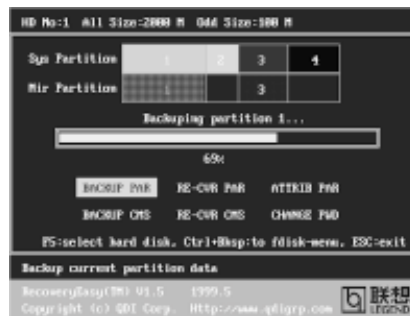


figure-4 Backup Partition

- 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:**

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



## 2.4 BACKUP CMS

**Function** : Backups all CMOS settings.

**Limitation** : None.

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

## 2.5 RE-CVR CMS

**Function** : Recovers all CMOS settings.

**Limitation** : None.

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

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

## 2.6 CHANGE PWD

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

**Limitation** : None.

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

**Note:**

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

## 2.7 Others

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

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

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



**FAQ:****1. What does RecoveryEasy do?**

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

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

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

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

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

**4. Are there any hard disk limitations of RecoveryEasy?**

RecoveryEasy supports all kinds of current IDE hard disks and has no limitation on the hard disk capacity. RecoveryEasy can not provide its function for some special hard disk types such as SCSI, but it will not affect their usage.

**5. Are there any OS limitations of RecoveryEasy?**

RecoveryEasy supports current operating systems such as DOS, Windows 95/98. However in Windows NT, Windows 2000, Unix and OS2 systems, users should notice that the disk tools bundled in the OS could change the mirror partition. On the other hand, since users can create partition with RecoveryEasy, it is unnecessary to use other disk tools.

**6. Why does the system halt when HDD access mode is changed (eg. LBA->LARGE)?**

This is a way to protect the system from the errors of data accessing caused by changing HDD access mode. When RecoveryEasy detects such things, the system will be locked, users could reboot the system and set the HDD access mode as the original one in BIOS SETUP.



**7. Why does the remainder size plus partitions size not match the total size shown in RecoveryEasy sometimes?**

When the location of partitions is not continuous, the above problem exists.

**8. Are there any other disk partition tools that can modify the partition table made by RecoveryEasy?**

RecoveryEasy provides a write-protect function, so the disk tools such as Fdisk, Partition Magic, BootMenu, SmartDisk and BootStar can not modify the partition table created by RecoveryEasy. Some of the applications even terminate during operation. However the disk tools bundled in the OS such as Windows NT, Windows 2000, Unix and OS2 could change the mirror partition.

**9. Why does it happen that a prompt “*installation can not continue*” pops up when installing Windows98 or a yellow exclamation mark shown beside IDE device in system properties?**

During Windows 98 installation, the installation program will write to MBR (Master Boot Record) which is protected by RecoveryEasy, therefore the installation will be terminated. To avoid this problem, a “ATTRIB PAR” button is provided in Recovery User Interface. Enable this switch before installing Windows 98, then the installation will be successfully completed. In order to remove the yellow question mark before IDE devices in Device Manager, enable this switch once more after system reboot.

**10. Why does the converting of FAT16->FAT32 in PQ Magic go wrong?**

MBR will be accessed when converting FAT16 to FAT32 with PQ Magic, which is protected by RecoveryEasy, therefore the conversion will be invalidate. Enabling the “ATTRIB PAR” switch from Recovery User Interface before converting can avoid this problem. It's the same situation as “FAT32 Converter” provided in

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

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

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

RecoveryEasy can implement the multi-boot function by activating different partition. For example on the hard disk, partition C contains DOS, partition D contains Windows 95 version, partition E contains Windows 98 version, when activating partition C in RecoveryEasy, the system enters DOS, when activating partition E, the system enters Windows 98 version.



At the same time, the sequence of the partitions is adjusted accordingly, partition E becomes C:, partition C becomes D: and partition D becomes E:. This function is the same as that of fdisk.exe, but the system needs reboot in order to make the change validate for fdisk.exe.

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

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

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

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

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

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



## 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 implements this function.

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

## Norton AntiVirus

When you install Norton AntiVirus and accept options, your computer is safe. Norton AntiVirus automatically checks boot records for viruses at system startup, Checks programs for viruses at the time you use them, scans all local hard drives for viruses once per week, and monitors your computer for any activity that might indicate the work of a virus in action. It also scans files you download from the internet and checks floppy disks for boot viruses when you use them.

The list below shows the most important tasks Norton AntiVirus helps you perform: Scan for viruses on your computer; Remove viruses from your computer; Update your virus protection with LiveUpdate; Quarantine an infected file. you can go to the Symantec Web site to view an online tutorial:

<http://www.symantec.com/techsupp/tutorial/nav2001>



## ManageEasy

It is well known that guaranteeing the computer's security and reliability is essential. Especially today, effectively managing and monitoring the computer's hardware is even more important; because processing and exchanging critical data through computer and network are happening everyday. Moving with the computer's development, the system of the computer will become more and more complex; at the same time, the control of computer's hardware will be strengthened. Today, it is possible to monitor and manage your complex hardware from Windows 9X and Windows NT.

QDI ManageEasy is a system tool, like a bridge between the complex hardware and OS, used to access hardware status and to execute some control functions. It supports stronger functions for Windows 9X and Windows NT. These functions enables you to view more than one hundred of the basic information about your computer and monitor some key reference data about computer health in real time. QDI ManageEasy also helps you to use remote access and control computers in your local area network. With QDI ManageEasy, you can improve your management level.



BootEasy

## QDI BootEasy

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



BootEasy Setup Menu

BootEasy technology enormously improves the long BOOT process time of computers. Reducing the wait time every user has to suffer when starting their computer. BIOS without BootEasy has to perform many routines every 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.

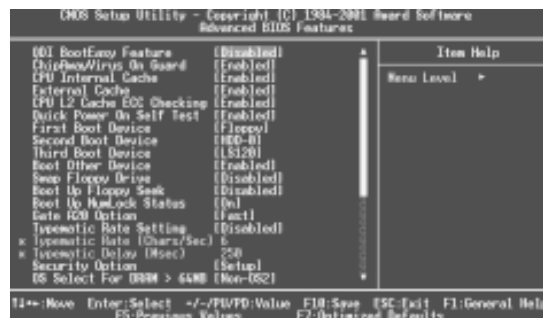
### Note:

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 Wartezeit 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 inizializzare le varie periferiche esterne.

Ora con Boot Easy, il BIOS non eseguirà questi processi ripetitivi così 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 partirà 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 DANNEGATE
- (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.

# **Mainboard Layout**

K7L

P/N:147000205