Advanced BIOS Features Setup
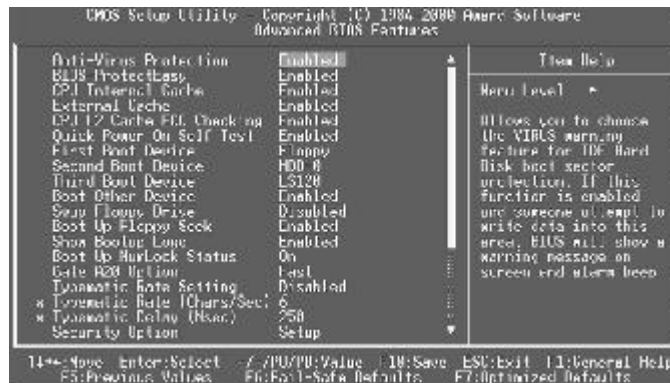

Figure-3 Advanced BIOS Features Setup Menu

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

Item	Option	Description
● Anti-Virus Protection	*Enabled*	Allows you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.
	Disabled	Invalidates this function.
● BIOS-ProtectEasy	*Enabled*	Enabling this item can protect your BIOS from being attacked by severe virus (such as CIH) or accidentally writting. Therefore disable this item only when you want to flash BIOS, afterwards set this item as Enabled (default).
	Disabled	Disabling this item allows you to upgrade the BIOS.
● CPU Internal Cache	*Enabled*	Enables CPU internal Level1/Level2 cache.
	Disabled	Disables CPU internal Level1/Level2 cache.
● CPU L2 Cache ECC Checking	*Enabled*	Enables CPU L2 Cache ECC function.
	Disabled	Disables CPU L2 Cache ECC function.
● Quick Power On Self Test	*Enabled*	Enables quick POST. BIOS will shorten or skip some check items during POST to speed up POST after you power on the computer.
	Disabled	Normal POST.

|		
● First (Second, Third) Boot Device Boot other Device	*Disabled* *Floppy*	Selects your Boot Device Priority. It could be Disabled, Floppy, LS/ZIP, HDD-0, HDD-1, HDD-2, HDD-3, SCSI, CDROM, LAN.
● Swap Floppy Drive	*Enabled* *Disabled*	Exchanges the assignment of A&B floppy drives. The assignment of A&B floppy drives are normal.
● Boot Up Floppy Seek	*Enabled* *Disabled*	Tests floppy drives to determine whether they have 40 or 80 tracks.
● Show Bootup Logo	*Enabled* *Disabled*	Enables the logo when system boots up. Logo will not be shown when system boots up.
● Boot Up Numlock Status	*On* *Off*	Keypad is used as number keys. Keypad is used as arrow keys.
● Gate A20 Option	*Normal*	The A20 signal is controlled by the keyboard controller or chipset hardware.
	Fast	Default setting. The A20 signal is controlled by Port 92 or the chipset specific method.
● Typematic Rate Setting	*Enabled* *Disabled*	Keystrokes repeat at a rate determined by the keyboard controller - when enabled, the typematic rate and typematic delay can be selected.
● Typematic Rate (Chars/Sec)	*6-30*	The rate at which character repeats when you hold down a key.
● Typermatic Delay (Msec)	*250-1000*	The delay before keystrokes begin to repeat.
● Security Option	*System* *Setup*	Selects whether the password is required every time the system boots or only when you enter setup.
● OS Select For DRAM>64MB	*Non-OS2*	If your operating system is not OS/2, please select this item.
	OS2	If system DRAM is more than 64MB and the operating system is OS/2, please select this item.
● Video BIOS Shadow	*Enabled*	Video BIOS will be copied to RAM. Video Shadow will increase the video speed.
	Disabled	Video shadow is disabled.
● C8000~CBFFF Shadow: DC000-DFFFF	*Enabled*	Optional ROM will be copied to RAM by 16K bytes per unit.
Shadow:	*Disabled*	The shadow function is disabled.

Advanced Chipset Features Setup
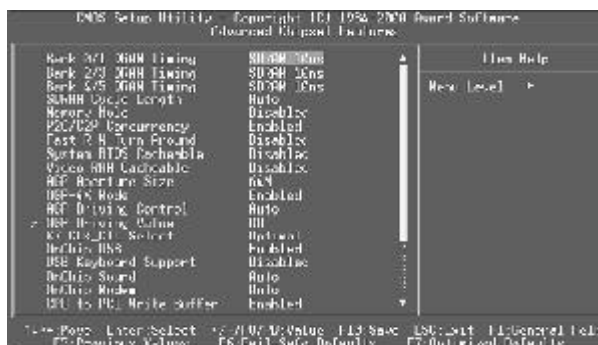
Figure-4   Advanced Chipset Features Setup Menu

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

Item	Option	Description
● Bank 0/1, 2/3, 4/5 DRAM Timing	*SDRAM 8ns* *SDRAM 10ns* *Normal* *Medium* *Fast* *Turbo*	These items are of selected SDRAM read/write timing. Ensure your DIMMs are as fast as 8ns, otherwise select 10ns. The faster you choose, the higher performance you can receive.
● SDRAM Cycle Length	*Auto/2/3*	Defines the CLT timing parameter of SDRAM expressed in 66MHz clocks. Latency Time = Auto, according to SDRAM SPD. Latency Time = 2 clocks. Latency Time = 3 clocks.
● Memory Hole	*Enabled*	Memory Hole at 15-16M is reserved for expanded ISA card.
	Disabled	Does not set this memory hole.
● P2C/C2P Concurrency	*Enabled*	Enables P2C/C2P concurrency.
	Disabled	Disables P2C/C2P concurrency. P2C means PCI to CPU, C2P means CPU to PCI.
● Fast R-W Turn Around	*Enabled*	Enables Fast R-W Turn Around.
	Disabled	Disables Fast R-W Turn Around. R-W means Read to Write.
● System BIOS Cacheable	*Enabled*	Besides convential memory, system BIOS area is also cacheable.
	Disabled	System BIOS area is not cacheable.
● Video RAM Cacheable	*Enabled*	Besides conventional memory, video RAM is also also cacheable.
	Disabled	Video RAM area is not cacheable.

● AGP Aperture Size (MB)	*4~256*	Sets the effective size of the Graphics Aperture to be used in the particular GART Configuration.
● AGP-4X Mode	*Enabled*	Supports 4X mode.
	Disabled	Does not support 4X mode.
● AGP Driving Control	*Auto*	The default setting is suggested.
	manual	
● AGP Driving Value	*00 - FF*	Sets the AGP Driving Value when AGP Driving Control is set as manual.
● K7 CLK_CTL Select	*Optimal*	Default setting is recommended.
	Default	
● Onchip USB	*Enabled*	Enables the onchip USB controller.
	Disabled	Disables the onchip USB controller.
● USB Keyboard Support	*Enabled*	Legacy USB keyboard support is enabled.
	Disabled	Legacy USB keyboard support is disabled.
● Onchip Sound	*Auto*	Enables AC97 function.
	Disabled	Disables AC97 function.
● Onchip Modem	*Auto*	Enables MC97 function.
	Disabled	Disables MC97 function.
● CPU to PCI Write Buffer	*Enabled*	Enables CPU to PCI Write Buffer.
	Disabled	Disables CPU to PCI Write Buffer.
● PCI Dynamic Bursting	*Enabled*	Enables PCI Dynamci Bursting.
	Disabled	Disables PCI Dynamci Bursting.
● PCI Master 0 WS Write	*Enabled*	Enables PCI Master 0 WS Write.
	Disabled	Disables PCI Master 0 WS Write.
● PCI Delay Transaction	*Enabled*	Enables PCI Delay Transaction.
	Disabled	Disables PCI Delay Transaction.
● PCI#2 Access #1 Retry	*Enabled*	Enables PCI#2 Access #1 Retry.
	Disabled	Disables PCI#2 Access #1 Retry.
● AGP Master 1 WS Write	*Enabled*	Enables AGP Master 1 WS Write.
	Disabled	Disables AGP Master 1 WS Write.
● AGP Master 1 WS Read	*Enabled*	Enables AGP Master 1 WS Read.
	Disabled	Disables AGP Master 1 WS Read.
● Memory Parity/ECC Check	*Enabled*	Enables the Error Checking&Correction if ECC memory is used.
	Disabled	Disables the ECC function.

Integrated Peripherals

Figure-5 Integrated Peripherals Menu

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

• UART 2 Mode	*Standard*	Defines Serial Port 2 as standard serial port.
	HPSIR	Supports IRD mode.
	ASKIR	Supports SHARP ASK-IR protocol with maximum baud rate up to 57600bps.
• Onboard Parallel Port	*378/IRQ7, 278/IRQ5, 3BC/IRQ7*	Defines onboard parallel port address and IRQ channel.
	Disabled	Onboard parallel port is disabled.
• Parallel Port Mode	*SPP*	Defines the parallel port mode as
	EPP	Standard Parallel Port (SPP), Enhanced
	ECP,	Parallel Port (EPP), or Extended
	ECP+EPP	Capabilities Port (ECP).
• Onboard Legacy Audio	*Enabled*	Enables onboard legacy audio.
	Disabled	Disables onboard legacy audio.
• Sound Blaster	*Enabled*	Enables Sound Blaster.
	Disabled	Disables Sound Blaster.
• SB I/O Base Address	*220H/240H 260H/280H*	Defines SB I/O Base Address.
• SB IRQ Select	*IRQ5~10*	Selects SB IRQ.
• SB DMA Select	*DMA0~DMA3*	Selects SB DMA .
• MPU-401	*Enabled*	Enables MPU-401
	Disabled	Disables MPU-401
• MPU-401 I/O Address	*300/303H~ 330-333H*	Defines MPU-401 I/O address.
• Game port (200-207H)	*Enabled*	Enables game port.
	Disabled	Disables game port.

Power Management Setup

Figure-6   Power Management Setup Menu

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

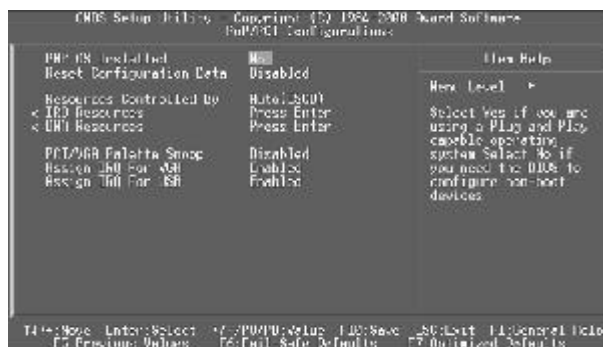|		
• Modem Use IRQ	*3,5,7,9,10,11 NA*	Special Wake-up event for Modem.
• Soft-off by PWRBTN	*Instant-off*	The system will power off immediately once the power button is pressed.
	Delay 4 Sec	The system will not power off until the power button has been pressed continuously for more than 4 seconds.
• Wake Up Events	*Press Enter*	sets the following items.
• VGA	*On*	VGA active reloads global timer.
	Off	VGA active has no influence to global timer.
• LPT&COM	*NONE LPT COM LPT/COM*	Default setting is recommended.
• HDD&FDD	*ON OFF*	Default setting is recommended.
• PCI Master	*ON OFF*	Default setting is recommended.
• Power On by PCI Card	*Disable*	Disables power-on by PCI card.
	Enable	Enables power-on by PCI card.
• Wake Up On LAN/Ring	*Enabled*	Allows the system to be powered on when a ring indicator signal comes up to UART1 or UART2 from an external modem or comes up to WOM header from an internal modem card, or when a remote wake up signal comes up to the WOL header from LAN adapter.
	Disabled	Does not allow wake up on LAN or wake up from internal/external modem.
• RTC Alarm Resume	*Enabled*	RTC alarm can be used to generate a wake event to power up the system which is in power-off status. You can set any date or any time to power up the system.
	Disabled	RTC has no alarm function.
• IRQs Activity Monitoring	*Press Enter*	Reloads global timer.

PnP/PCI Configurations Setup

Figure-7 PnP/PCI Configurations Setup Menu

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

Item	Option	Description
● PNPOS 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	Assigns system resources (IRQ and DMA) automatically by BIOS.
● PCI/VGA Palette Snoop	Enabled	Enables PCI/VGA Palette Snoop.
	Disabled	Disables PCI/VGA Palette Snoop.
● Assign IRQ For VGA	Enabled	Assigns the needed IRQ for the VGA card.
	Disabled	Does not assign an IRQ for the VGA card, in order to release the IRQ.
● Assign IRQ For USB	Enabled	Assigns an IRQ for USB. If an USB device is used enables this item.
	Disabled	Does not assign an IRQ for USB.

PC Health Status

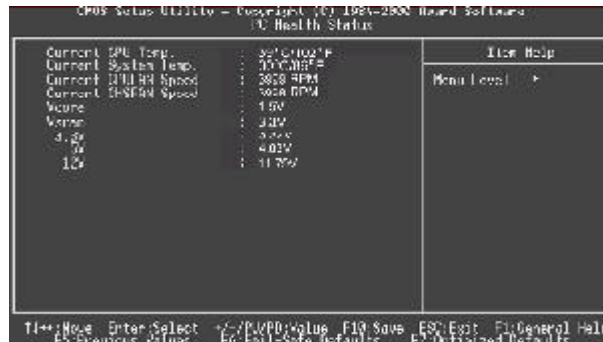

Figure-8 PC Health Status Menu

The following describes the meaning of each item.

Item	Current Data Shown	Description
• 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	3999RPM	RPM(Revolution Per Minute) speed of fan
Current CHSFAN Speed	3998RPM	connected to the fan header CPUFAN/ CHSFAN. Fan speed value is based on an assumption that tachometer signal is two pulses per revolution; In other cases, you should regard it relatively.
• Vcore	1.5V	Displays current Voltage values including all
Vsram	3.3V	significant voltages of the mainboard. Vcore
3.3V	3.32V	Voltage is the CPU core voltage from the
5V	4.83V	on board switching power supply. Vsram
12V	11.79V	is the Northbridge voltage from the onboard switching power supply. 3.3V, 5V and 12V are voltages from the ATX power supply.

Frequency/Voltage Control

Figure-9 Frequency/Voltage Control Menu

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

Item	Option	Description
● DRAM Clock	*Host CLK*	DRAM frequency is the same as CPU FSB.
	HCLK+33M	DRAM frequency is faster than CPU FSB by 33MHz.
● Auto Detect DIMM/ PCI Clk	*Enabled* *Disabled*	Closes the CLK signal if no PCI or DIMM plug in.
● CPU Host Clock (CPU/PCI)	*Default*	Default setting is recommended.
	100/33Mhz (Spd on)	Spd on means Spread Spectrum.
	100/33Mhz(Spd off)	
	110/33Mhz(Spd off)	
	115/38Mhz(Spd off)	
	133/33Mhz(Spd on)	
	133/33Mhz(Spd off)	

Set Supervisor/ User Password

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

ENTER PASSWORD

Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection.

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

PASSWORD DISABLED

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

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

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

Boot with BIOS defaults

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

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Appendix A
QDI Driver CD 2000

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

1. Express Install

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

A. Chipset Driver   B. MR AC 97 Audio Driver

2   Chipset Driver

It's recommended for advanced users that you may choose the options you want to install chipset driver

ViA Chipset Drivers included in the directory \ChipDrv\Via .

3   OnBoard Device Driver

It's recommended for advanced users that you may choose the options you want to install Audio driver

For Windows 98, click this option you can install the drivers for your Onboard sound. For Windows 2000, system will detect the sound device and install the drvers automatically.

2.   Accessory

The softwares contained in this directory are:

A. DirectX 7.0   B. QDI ManageEasy

C. PC-cillin

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

The files included in **Docum ents** are:

A. Adobe Acrobat Reader V3.0 - Ar32e301.exe

B. French Manual - AD5 FR.doc, ect.

PC-cillin 98

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

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

QDI ManageEasy V2.0

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

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

Appendix B.
Boot Logo

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


If you press <**Esc**>, it switches to the booting message screen. Otherwise, it enters operating system directly. You can use "**cblogo.exe**" (included on the QDI Mainboard Utility CD) to replace it by any other logo which you prefer. Regarding the method of using **cblogo.exe** utility, please refer to it's online help. If you don't prefer the logo displayed on the screen during boot up, set the "Show Bootup Logo" option as Disabled in the "BIOS FEATURES SETUP" section of the BIOS.

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

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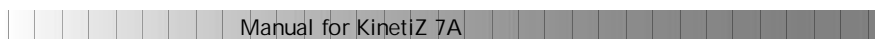
RecoveryEasy

Introduction:

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

Operation Process:

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

1.   Partition Interface (see figure-1)

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

figure-1 Partition Interface

1.0   Install RecoveryEasy for the first time

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

b. If choosing to install RecoveryEasy on an absolutely clear disk, the utility will delete all the previous partitions.

c. The password is set as default setting " qdiqdi" after installing RecoveryEasy.

1.1   CREATE PAR

Function   **:** Creates a new partition.

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

Steps   **:** After pressing the " CREATE PAR" button.

a. The system will prompt whether users want to create a mirror partition for it or not.

b. If answering " Y" , input the new partition size in Megabyte. Notice that the maximum partition size that can be assigned is half of the left disk space, which is also displayed in the status line. Another half is for the mirror partition. If answering " N" , the whole disk space left can be assigned. See figure-2.

figure- 2 Create Partition

Note:

a. The system will prompt " Insert system floppy, then reset" when the first partition on the first hard disk is created.

b. After using DOS6.xx boot disk to format C partition, the system should be reset in order to access the partition.

c. In Windows system 1,048,576 bytes equal 1 Megabyte, while in RecoveryEasy 1,000,000 bytes equal 1 Megabyte, therefore a smaller size will be displayed in Windows system compared with the size displayed in RecoveryEasy.

1.2   DELETE PAR

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

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

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

1.3 ACTIVE PAR

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

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

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

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

1.4 CREATE MIR

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

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

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

1.5 DELETE MIR

Function : Deletes the mirror partition.

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

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

1.6 UNINST SFW

Function : Uninstall RecoveryEasy.

Limitation : None.

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

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

1.7 OTHERS

F12 : Switches to Recovery User Interface.

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

F5:

a. When two or more than two hard disks are installed on the system, use F5 key to choose the hard disk. Every time users use F5 key to switch the hard disk, the operation result for the previous hard disk is saved. When processing a certain hard disk, F5 key can be used to choose the partition.

b. In addition, when two or more than two hard disks are installed, the sign of partitions will be changed from C, D, E, F to 1, 2, 3, 4 accordingly.

2. Recovery Interface (see figure-3)

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

figure-3 Recovery User Interface

2.1 BACKUP PAR

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

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

Steps:

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

b. If the partition chosen has been backuped before, a warning message will be shown, and the time when last backup was done will be displayed in the status line. After confirming the warning message, the system performs the backup. By pressing "N" or "ESC" key, the system quits.

2.2 RE-CVR PAR

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

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

Steps:

a. Use F5 key to choose the backuped partition.

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

Note:

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

figure-4 Backup Partition

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

2.3 ATTRIB PAR

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

Limitation : None.

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

Note:

a. The switch resets to the default setting "disable" every time the system reboots.

b. In order to implement this function, users need to enable the switch when installing the OS or modifying the partition properties. Please note: Do not create or delete partitions or change the partition size when modifying the partition properties.

2.4 BACKUP CMS

Function : Backups all CMOS settings.

Limitation : None.

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

2.5 RE-CVR CMS

Function : Recovers all CMOS settings.

Limitation : None.

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

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

2.6 CHANGE PWD

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

Limitation : None.

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

Note:

a. The password should be no more than 6 characters, only digital and alphabetic letters are valid.

b. Once the password is enabled, users will be asked to input the password every time they try to enter the RecoveryEasy user interfaces, and up to 3 times try is permitted.

2.7 Others

Ctrl+Bksp : Switches to Partition User Interface.

ESC : Exits from the Partition User Interface.

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

FAQ:

1. **What does RecoveryEasy do?**

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

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

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

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

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

4. Are there any hard disk limitations of RecoveryEasy?

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

5. Are there any OS limitations of RecoveryEasy?

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

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

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

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

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

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

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

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

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

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

MBR will be accessed when converting FAT16 to FAT32 with PQ Magic, which is protected by RecoveryEasy, therefore the conversion will be invalidate. Enabling the "ATTRIB PAR" switch from Recovery User Interface

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

11. What if partitions be wrongly deleted in RecoveryEasy?

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

12. What is multi-boot?

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

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

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

14. What if users lose the password?

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

15. Does RecoveryEasy protect hard disk against CIH?

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

Item Checklist

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

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

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Board Layout of
KinetiZ 7A V1.0

P/N: 430-01020-001-00

Manual for KinetiZ 7A Ver 1.0