



Integrated Peripherals



Figure-8 Integrated Peripherals Menu

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

| <u>Item</u> | <u>Option</u> | <u>Description</u> |
|--|--------------------|--|
| • IDE HDD Block Mode | <i>Enabled</i> | Allows IDE HDD to read/write several sectors at once. |
| | <i>Disabled</i> | IDE HDD only reads/writes a sector once. |
| • IDE Primary/ Secondary Master/Slave PIO | <i>Mode 0 - 4</i> | Defines the IDE primary/secondary master/ slave PIO mode. |
| | <i>Auto</i> | The IDE PIO mode is defined by auto -detection. |
| • IDE Primary/ Secondary Master/Slave UDMA | <i>Auto</i> | Ultra DMA mode will be enabled if ultra DMA device is detected. |
| | <i>Disabled</i> | Disables this function. |
| • On-chip Primary/Secondary PCI IDE | <i>Enabled</i> | On-chip primary/secondary PCI IDE port is enabled. |
| | <i>Disabled</i> | On-chip primary/secondary PCI IDE port is disabled. |
| • USB Keyboard Support | <i>Enabled</i> | USB Keyboard Support is enabled. |
| | <i>Disabled</i> | USB Keyboard Support is disabled. |
| • Init Display First | <i>PCI SLOT</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. |
| | <i>AGP</i> | Initializes the AGP first. |
| • POWER ON Function | <i>BUTTON ONLY</i> | Use the power button to power up the system. |
| | <i>Password</i> | Enables the Keyboard Password Power-on function and disables the power button's power-on function. Other than choosing this option, the password should be entered to implement this function. |



| | | |
|--------------------------|---|---|
| | <i>Password/ Button</i> | Both the keyboard and the power button can be used to power up the system. Note: If this option(Password) is chosen, the jumperJKB must be set as PIN1 & PIN2 closed, or this will prevent you from powering up your system. |
| • Onboard FDC Controller | <i>Enabled Disabled</i> | Onboard floppy disk controller is enabled. Onboard floppy disk controller is disabled. |
| • Onboard Serial 1/2 | <i>3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Auto</i> | Defines the onboard serial port address and required interrupt number. Onboard serial port address and IRQ are automatically assigned. |
| • Serial Port 2 Mode | <i>Disabled Normal ASKIR IrDA</i> | Onboard serial port is disabled. Defines Serial Port 2 as standard serial port. Supports SHARP ASK-IR protocol with maximum baud rate up to 57600bps. Supports IrDA version1.0 SIR protocol with maximum baud rate up to 115.2Kbps. |
| • Onboard Parallel Port | <i>378/IRQ7, 278/IRQ5, 3BC/IRQ7</i> | Defines onboard parallel port address and IRQ channel. |
| • Parallel Port Mode | <i>Disabled SPP EPP ECP, ECP+EPP</i> | Onboard parallel port is disabled. Defines the parallel port mode as Standard Parallel Port (SPP), Enhanced Parallel Port (EPP), or Extended Capabilities Port (ECP). |
| • PWRON After PWR-Fail | <i>Off On Former-Sts</i> | The system remains OFF when the AC power supply resumes. The system will be powered up when the AC power supply resumes. Whatever the system status is, before the AC power supply cuts off, the system remains in the previous status (ON/OFF) when the AC power supply resumes. |

System Monitor

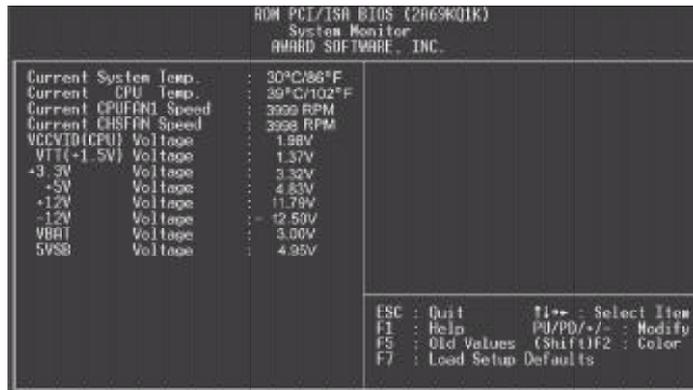


Figure-9 System Monitor Menu

The following describes the meaning of each item.

| <u>Item</u> | <u>Current Data Shown</u> | <u>Description</u> |
|------------------------|---------------------------|--|
| • Current System Temp. | 30°C/ 86°F | Temperature inside the chassis. |
| • Current CPU Temp | 39°C/102°C | Temperature of the CPU core. |
| • Current CPUFAN Speed | 3999RPM | RPM(Revolution Per Minute) speed of fan 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. |
| • Current CHSFAN Speed | 3998RPM | |
| • VCCVID(CPU) Voltage | 1.98V | Displays current Voltage values including all significant voltages of the mainboard. +3.3V, +5V, +12V, -12V and 5VSB are voltages from the ATX power supply, VTT (+1.5) Voltage is GTL Termination Voltage from the on-board regulator, and VCCVID (CPU) Voltage is the CPU core voltage from the on board switching power supply. VBAT is the voltage of the onboard battery. |
| VTT(+1.5V) Voltage | 1.37V | |
| + 3.3V Voltage | 3.32V | |
| +5V Voltage | 4.83V | |
| +12V Voltage | 11.79V | |
| -12V Voltage | -12.50V | |
| VBAT Voltage | 3.00V | |
| 5VSB Voltage | 4.95V | |



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.



IDE HDD Auto Detection

The Enhanced IDE features are included in all Award BIOS. Below is a brief description of these features.

| ROM PCI/ISA BIOS (2A69KQ10) CMOS SETUP UTILITY AWARD SOFTWARE, INC. | | | | | | | |
|---|------|------|------|---------|---------|--------|-------------|
| HARD DISKS | TYPE | SIZE | CYLS | HEAD | PRECOMP | LANDZ | SECTOR MODE |
| Primary Master: | | | | | | | |
| Select Primary Master Option (N=Skip): N | | | | | | | |
| OPTION | SIZE | CYLS | HEAD | PRECOMP | LANDZ | SECTOR | MODE |
| 2(Y) | 541 | 525 | 32 | 0 | 1049 | 67 | LBA |
| 1 | 541 | 1050 | 16 | 65535 | 1049 | 63 | NORMAL |
| 3 | 541 | 525 | 32 | 65535 | 1049 | 63 | LARG |
| Note: Some OSes (like SCO-UNIX) must use "NORMAL" for installation | | | | | | | |
| ESC: Skip | | | | | | | |

Figure-11 IDE HDD Auto Detection Menu

1. Setup Changes

With auto-detection

- BIOS setup will display all possible modes supported by the HDD including NORMAL, LBA and LARGE.
- If HDD does not support LBA modes, no "LBA" option will be shown.
- If number of physical cylinder is less than or equal to 1024, "LARGE" option may not be shown.
- Users can select their appropriate mode .

With Standard CMOS Setup

| | CYLS | HEADS | PRECOMP | LAND | SECTOR | MODE |
|----------------------|------|-------|---------|------|--------|--------|
| | | | | | | ZONE |
| Drive C: User(516MB) | 1120 | 16 | 65535 | 1119 | 59 | Normal |
| Drive D: None(203MB) | 684 | 16 | 65535 | 685 | 38 | ----- |

When HDD type is set as "user", the "MODE" option will be available for users to select their own HDD mode.



2. HDD Modes

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

NORMAL

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

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

LBA (Logical Block Addressing) mode

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

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

LARGE mode

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

BIOS tricks DOS (or other OS) into recognizing 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.

3. Remark

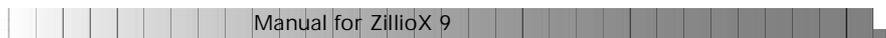
To support LBA or LARGE mode of HDDs, there must be some softwares involved which are located in Award HDD Service Routine(INT13h).It may fail to access a HDD with LBA (LARGE) mode selected if you are running under an Operating System which replaces the whole INT 13h.

Boot with BIOS defaults

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



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Appendix A

QDI Mainboard Utility CD-ROM

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

1. Chipset Dispatches:
 - Intel Chipset Drivers included in the directory \ChipDrv\Intel can be used for this motherboard.
 - a. Intel PIIX4 Driver, included in directory \ChipDrv\Intel\PIIX4
This driver is for Windows 95/OSR2 which supports the latest Intel PCI devices such as the PCI IDE hard disk controller, PCI USB device etc. It can also remove the yellow question mark in the Device Manage of Windows 95 after installation.
Run \ChipDrv\Intel\PIIX4\Setup.exe for installation.
 - b. Intel Bus Master Driver, included in directory \ChipDrv\Intel\BMIDE
It's Intel Bus Master Driver for Windows 95, which can enhance the capability of IDE data transaction up to Ultra DMA/33MB supported by 440ZX chipset or other ultimate chipset.
Run \ChipDrv\Intel\BMIDE\Setup.exe for installation.
2. PC-cillin Anti-Virus software:
 - Windows 95/98 English version is located in the directory \Pccillin\Win9x. Run Setup.exe for installation.
 - Windows 95/98 Chinese version is located in the directory \Pccillin\PWin9x. Run Setup.exe for installation.
 - Windows NT English version is located in the directory \Pccillin\WinNT4.0. Run Setup.exe for installation. S/N is PNEF-9991-6558-5857-5535.
3. QDI Mainboard Utility:
 - The utilities located in the directory \Utility are:
FLASH.EXE
CBLOGO.EXE
LFEXE
Refer to the online help for information on how to use these utilities.
4. Documents for QDI Mainboard:
 - The files included in the directory \Doc are:
Adobe Acrobat Reader V3.0 —ar32e301.exe
ManageEasy Manuals —QMEV12.PDF.



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.**

P/N : 430-01016-601-00
Manual ZillioX 9 Ver 1.0

Item Checklist

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

- ZillioX 9 mainboard
- QDI Mainboard Utility CD-ROM
- I/O shield
- 1 IDE ribbon cable
- 1 floppy ribbon cable
- User' s manual

Notice

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

**Board Layout of
ZillioX 9 V1.0**