



- | | | |
|-------------------------|-----------------|--|
| • Assign IRQ
For USB | <i>Enabled</i> | Assigns an IRQ for USB. If an USB device is used, enable this item. |
| | <i>Disabled</i> | Does not assign an IRQ for USB. If no USB device is used, disabling this item can release the IRQ. |
| • Assign IRQ
For VGA | <i>Enabled</i> | Assigns an IRQ for VGA Card. |
| | <i>Disabled</i> | Does not assign an IRQ for the VGA card. In order to release the IRQ. |



Integrated Peripherals

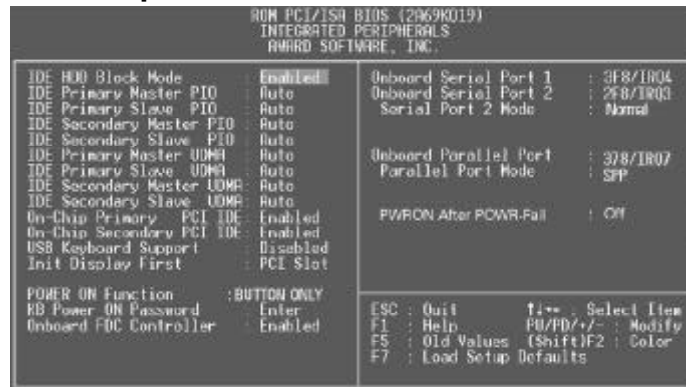


Figure-7 Integrated Peripherals Menu

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.
• On board PCI SCSI Chip	<i>Enabled</i>	
	<i>Disabled</i>	
• 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>Password</i>	Enables the keyboard password power-on function and disables the power switch's power-on function. In order to implement this function, you need to set the "KB Power On Password" . Then you can power on the system only by using the keyboard.



	<i>Button Only</i>	Disables the keyboard password power-on function. The system can be powered on only by the power switch.
• Onboard Serial Port 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 version 1.0 SIR protocol with maximum baud rate up to 115.2Kbps.
• Onboard Parallel Port	<i>378/IRQ7, 278/IRQ5, 3BC/IRQ7 Disabled</i>	Defines onboard parallel port address and IRQ channel.
• Parallel Port Mode	<i>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 resumes in the previous status (ON/OFF) when the AC power supply resumes.



System Monitor

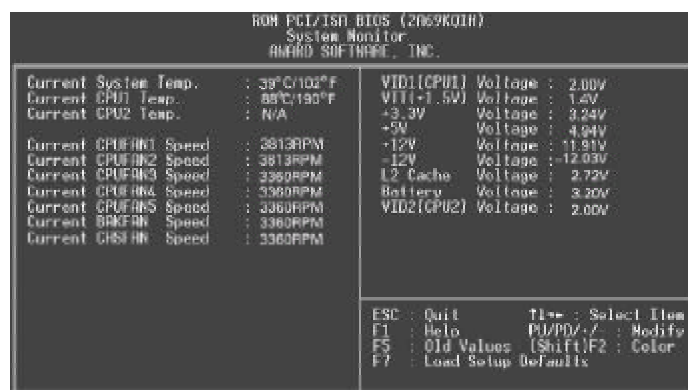


Figure-8 System Monitor Menu

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°C	The temperature inside the chassis.
• Current CPU1 Temp.	88°C/ 190°C	The temperature of the CPU core.
• Current CPU2 Temp.	N/A	
• Current CPUFAN1 speed	3813RPM	PRM(Revolution Per Minute)- speed of fan connected to the fan header CPUFAN or 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 CPUFAN2 speed	3813RPM	
• Current CPUFAN3 speed	3360RPMs	
• Current CPUFAN4 speed	3360RPM	
• Current CPUFAN5 speed	3360RPM	
• Current BAKFAN speed	3360RPM	
• Current CHSFAN speed	3360RPM	
• VID1 (CPU1) Voltage	2.00V	Displays current Voltage values including all significant voltages of the mainboard.
• VTT (+1.5) Voltage,	1.4V	
• +3.3V Voltage,	3.24V	+3.3V, +5V, +12V and -12V are voltages from an ATX power supply, VTT (+1.5)
• +5V	4.94V	
• +12V	11.91V	Voltage is GTL Termination Voltage from the on-board regulator. VID1(CPU1) and VID2
• -12V	-12.03V	(CPU2) Voltages are CPU core voltage from the onboard switching power supply. L2
• L2 Cache Voltage	2.72V	cache voltage is also from onboard switch-
• Battery	3.20V	ing power supply. Battery is the onboard
• VID2 (CPU2) Voltage	2.00V	lithium battery voltage.



SecurityEasy Setup



Figure-9 SecurityEasy Setup Menu

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

<u>Item</u>	<u>Option</u>	<u>Description</u>
• Lock Function Select	<i>Enable</i> <i>Disable</i>	Enables the SecurityEasy function. Disables the SecurityEasy function.
• SecurityEasy Password	<i>Enter</i>	When the SecurityEasy function is enabled, you need to set the SecurityEasy password, since typing the SecurityEasy password is the only way to exit the SecurityEasy lock mode. When selecting this option, the following message "ENTER PASSWORD" will appear at the center of the screen to assist you in creating a password. Set the password no more than six characters, and press<Enter>. The password set now will clear any previously entered password from CMOS memory. Confirm the password when prompted.
• Keyboard Inactive Timer	<i>Disable</i> <i>4 Min~</i> <i>1 Hour</i>	The system will not enter the SecurityEasy lock mode due to the keyboard inactive timer. Sets the continuous idle time of keyboard before the system enters the SecurityEasy lock mode.
• Hotkey Function Select	<i>Disabled</i> <i>Enabled</i>	Disables the hotkey function. Push once the hotkey (Ctrl + F12) after enabling this option, the system will enter the SecurityEasy lock status.



Password Setting

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 CMOS Setup freely.

PASSWORD DISABLED

If you have selected “**System**” in “Password Setting” of “BIOS Features Setup” menu, you will be prompted for the password every time the system reboots or whenever you enter CMOS Setup.

If you have selected “**Setup**” at “Password Setting” from “BIOS Features Setup” menu, you will be prompted for the password only when you enter CMOS Setup.



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-9 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 in "user" type, 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 devising 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. Installation of Intel 440GX Chipset Driver:
This utility program was developed for updating several Windows 95/98 INF files so that the latest Intel chipset components can be recognized or configured properly in the system.
 - a. Windows 95 INF Update
Run \ChipDrv\Intel\G4\Win95\Setup.exe for installation.
 - b. Windows98 INF Update
Run \ChipDrv\Intel\G4\Win98\Setup.exe for installation.
2. Installation of Intel 82558 LAN Driver:
Locate the appropriate driver for your OS in directory \DevDrv\LAN\82558
Note: You must copy all the files to the hard disk while you install the 82558 driver on Windows NT.
For more information about this Intel PCI LAN adapter, please refer to the files contained in the directory \DevDrv\LAN\82558\Info.
3. Installation of Adaptec AIC-7890 SCSI Driver:
Locate the appropriate driver for your OS in directory \DevDrv\SCSI\7890.
Note: 1. \DevDrv\SCSI\7890\UNIX\7890.img is the driver for UNIX, you could decompress it to a floppy disk with HDCOPY.EXE before installation.
2. Windows NT 4.0 should be installed from floppy disk with the SCSI hard disk.
For detailed installation instructions, please refer to the readme file in the related directory.
4. 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 4.0 English version is located in the directory \Pccillin\WinNT4.0. Run Setup.exe for installation. S/N is PNEF-9991-6558-5857-5535.
5. 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.



Appendix B. Boot Logo

When you power on or reset your system, the picture displayed below will appear 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 preferred. Regarding the method of using **cblogo.exe** utility, please refer to its 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 : 430-01016-301-00
Manual GeniuX 4 Ver 1.0

Item Checklist

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

- ☒ GeniuX 4 mainboard
- ☒ QDI Mainboard Utility CD-ROM
- ☒ Retention Module
- ☒ I/O shield
- ☒ 1 IDE ribbon cable
- ☒ 1 floppy ribbon cable
- ☐ Heat Sink (manufacturing option)
- ☒ Internal 50-pin narrow SCSI cable with 8 headers
- ☒ Internal 68-pin wide SCSI cable with 5 headers
- ☒ Internal 68-pin Ultra 2 SCSI cable with 5 headers
- ☐ External 68-pin wide SCSI cable with bracket (manufacturing option)
- ☒ 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 GeniuX 4 V1.0

Supplement for Intel LAN adapter manual

For the onboard LAN adapter on G4 mainboard, refer to the chart below instead of the chart on page1.

