

CHAPTER 1

System Description

Welcome to use 6310V mainboard. It runs with VIA 693/693A chipset to support 66MHz ~ 150MHz Bus Frequency, and Pentium[®] II/III CPUs.

1-1 ATC6310V Mainboard Specifications

CPU Support

- ◆ Slot 1 on board supporting Intel Pentium[®] III CPUs 450MHz to 733MHz, Pentium[®] II CPUs 233MHz to 450MHz and Intel Celeron[™] CPUs 266MHz to 533MHz.
- ◆ Model ATC6310V-00 supports up to 100MHz CPU Clock;
Model ATC6310V-01 supports up to 133MHz CPU Clock.
- ◆ Built-in Switching Voltage Regulator.(VRM 8.4 SPEC.)
- ◆ Auto-detect CPU core voltage range 1.3V to 3.5V.

Memory Support:

- ◆ Three 168-pin DIMM sockets for three banks of 64-bit wide path up to 1280MB unbuffered SDRAM / Virtual Channel Memory.

I/O System:

- ◆ On-board VIA Chipset: VIA693+596A for Mode ATC6310V-00;
VIA693A+596B for ATC6310V-01.
- ◆ Bus Frequency: 66MHz, 100MHz for ATC6310V-00;
66MHz, 100MHz, 133MHz for ATC6310V-01.
- ◆ One AGP slot compliant to AGP 2.0 1x/2x mode, three PCI revision 2.1 interface compliant and two 16-bit ISA slots.
- ◆ Dual Master IDE connectors support Ultra DMA33/66, up to four devices in two channels: UDMA33 for 6310V-00; UDMA66 for 6310V-01.
- ◆ USB (Universal Serial Bus) Header.
- ◆ PS/2 Keyboard Connector and PS/2 Mouse Header.

- ◆ Winbond 83977 high-speed Ultra Multi-I/O chipset.
- ◆ Infrared Transfer (IrDA TX/RX) Connector.
- ◆ One FDD port supporting two devices up to 2.88MB.
- ◆ Two 16550A fast UARTs compatible serial ports.
- ◆ One EPP/ECP mode parallel printer port.
- ◆ Optional Hardware Health Monitoring chip.

BIOS Support:

- ◆ AWARD BIOS, providing **CMOS Setup Utilities**:
 - **Standard CMOS Features Setup** for Date, Drives and VGA ;
 - **Advanced BIOS Features Setup** for CPU Cache, Self Test, Boot Device, Typematic Rate , and Security Options etc.;
 - **Advanced Chipset Features Setup** for SDRAM CAS, RAS, System BIOS Cacheable, and Video BIOS Cacheable etc.;
 - **Integrated Peripherals Setup** for IDE Mode, USB, Audio, and Modem etc.;
 - **Power Management Setup** on Video, HDD, CPU etc.;
 - **PnP/PCI Configurations Setup** for PnP, Reset, Resources etc.;
 - **PC Health Status Control** and Setup;
 - **Frequency / Voltage Control** on CPU, SDRAM, PCI & SSC etc.;
 - **Load Fail-Safe Defaults**;
 - **Load Optimized Defaults**;
 - **Set Supervisor/User Password**;

 **Board Dimension** : 225mm x 230mm .

 **Baby AT form factor** ; ATX & AT power connectors.

1-2 Features Highlight

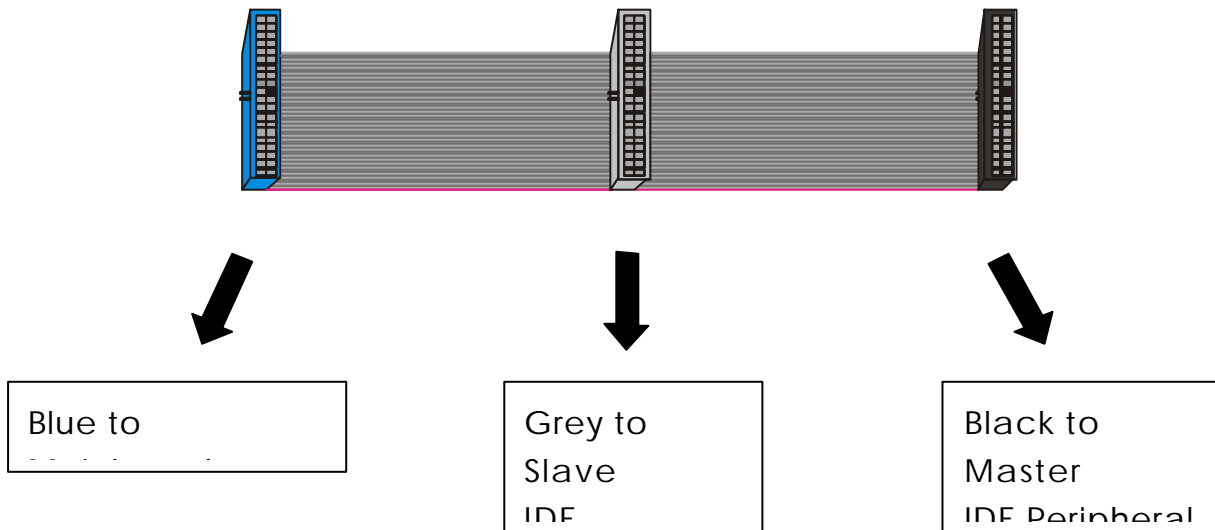
1-2-1 System Differentiation:

Model ATC6310V-00	Model ATC6310V-01
1. Chipset VIA 693 +596A	1. Chipset VIA 693A +596B
2. Support 66/100MHz Bus Frequency	2. Support 133MHz Bus Frequency
3. Support Ultra DMA/33	3. Support both Ultra DMA33/66

##Ultra DMA 66 Cable for Model 6310V-01

Ultra DMA 66 cable (40-pin connector & 80-line cable) is packaged while utilizing VIA596B chip which supports both UDMA 33 & UDMA 66 on the mainboard. (Ultra DMA 33 cable is provided with VIA569A chip supporting only Ultra DMA 33.)

Ultra DMA 66 Cable Diagram



1-2-2 Software Power Off Control

This mainboard supports Software Power Off Control under ATX power supply, through the SMI code in the BIOS under Windows 95/98, and MS-DOS operation system environment.

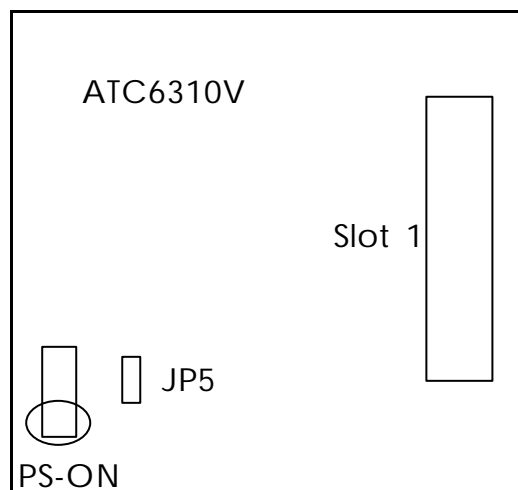
First, you should connect the power switch cable to the connector “PS-ON” on the mainboard. In the BIOS screen of POWER MANAGEMENT SETUP’, choose “User Define” (or “Min. Power Saving” or “Max. Power Saving”) in ‘Power Management’.

In Windows 95/98, if you want to power off the system, you just need to choose “shutdown the computer?” in the “Shut Down Windows” of Windows 95/98. Then the system will be powered off directly and stays at the stand-by status. If you want to restart the system, just press the power switch button..

If you are going to leave your system idle for several days, we suggest you use hardware power off (pull the power cord out)to shut down your system.

When system is software powered off , the ATX power supply will yet provide a low power of 5V to your mainboard. At that time, Power LED will flash with JP5 set to Pin1-2 closed. The performance of Power LED is as below:

JP5	Power LED(at stand-by system)
Pin1-2	Power LED to flash
Pin2-3	Power LED Light Off

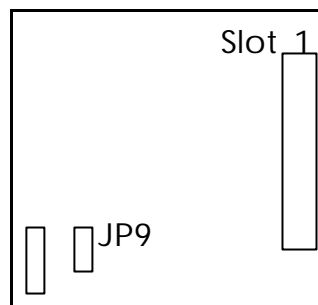


To locate “PS-ON” header and JP5, please see “Page A Quick Jumper & Connector Setting”.

1-2-3 Keyboard & PS/2 Mouse Power On (W/JP9 Setting)

With ATX Power Supply and Jumper 9 set to Pin 2-3 closed, 6310V Mainboard is enabled to Keyboard & PS/2 Mouse Power on functions :

JP 9	KB & PS/2 Mouse Wakeup
1-2	Disabled
2-3	Enabled



The default Power On function is “Button Only”. That means, we can only turn our computer on and off by pressing the “Power Button”. If we want to enable KB & PS/2 Mouse Power On function, we first have to set JP9 Pin 1-2 closed, and then go to “Power On Function” in “Integrated Peripherals” of Award BIOS Setup. At the line “Power On Function”, we can press “Page Up” or Page Down” to make the following selections:

1. Password (via Keyboard):

When you selects “Password”, screen will display “Enter Password:”. After you have typed the password, screen will show “ Confirm Password:” and you have to type the same password to confirm it. Save your selection and shut down system. Now computer will only be powered on by entering correct password.

In case the set password is forgotten, carry out “Clear CMOS” to clear password, or computer can not be powered on.

2. Hot Key (via Keyboard):

When user selects this option, screen will show another line : “Hot Key Power ON : Ctrl-F1”. User can select from “Ctrl-F1” to “Ctrl-F12” as “Hot Key” by pressing PageUp / PageDown. After fixing Hot Key, save selection and shut down system. Now computer will only be powered on by pressing the correct Hot Key.

3. Mouse Left, Mouse Right (via PS/2 Mouse):

This function is available via PS/2 mouse only. You can select either “Mouse Left” or “Mouse Right” from the “Power On Function” line. After picking either option, save selection and shut down system. Now computer will only be powered on by double-clicking the correct PS/2 Mouse button.

Do not slide the mouse when you click; or you can’t power on the system.

4. Button Only (via Power Button):

“Button Only” is default setting, at which computer can only be on/off via Power Button.

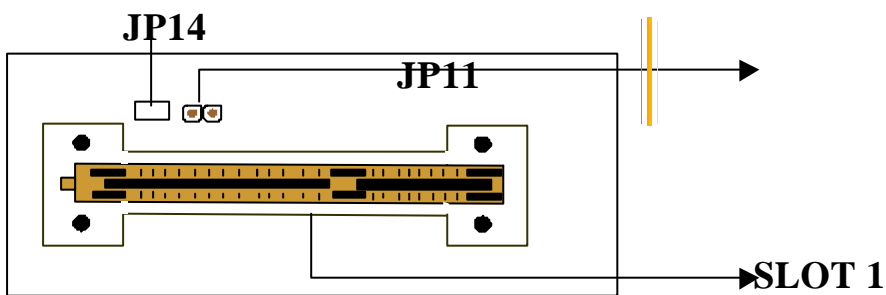
1-2-4 CPU Base Clock Autodetection and Overclock

ATC6310V-01 provides **Jumper 11** and **Jumper 14** to allow you to set your CPU host clock and perform CPU overclock function.

As illustrated in the table below, you can try to overclock a 66MHz CPU to 100MHz by setting JP11 open and JP14 closed. Or you can try to overclock a 66/100MHz CPU to 133MHz by setting both JP11 and JP14 open.

Please note that the default setting of Jumper 11 and 14 are ‘closed’.

JP 11	JP14	CPU BASE CLOCK
Closed	Closed	66/100MHz By Autodetection
Open	Closed	For 100MHz Overclocking
Open	Open	For 133MHz Overclocking



ATC6310V-00 does not provide JP14 nor supports 133MHz overclocking. By setting JP11 open, it supports 100MHz overclocking.

In view of Intel’s specific design, overclocking to 100MHz or higher is not necessarily successful. If you want to overclock your CPU base, please set “CPU Clock Frequency” in “CHIPSET FEATURES SETUP” in the BIOS setup screen.

After set to higher base, if the system cannot boot up, you should shut down your computer, and restart it with the ‘Insert’ key pressed down to clear up the set frequency. It will then operate at the default setting.

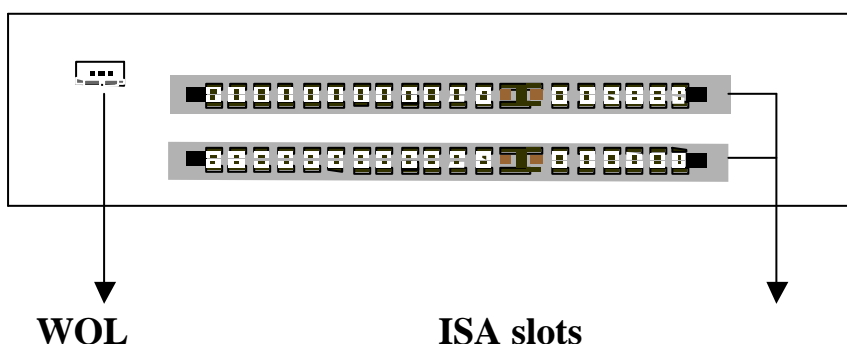
1-2-5 Wake-On-LAN

The remote Wake-On-LAN (WOL) mode of operation is a mechanism that uses Advanced Micro Device Magic Packet technology to power on a sleeping workstation on the network. This mechanism is accomplished when the LAN card receives a specific packet of information, called a Magic Packet addressed to the node on the network. For additional protection, “Secure ON” is an optional security feature that can be added to the Magic Packet that requires a password to power on the sleeping workstation. When LAN card is in remote Wake-On-LAN mode, main system power is to be shut down yet leaving enough power on the mainboard for the LAN card and auxiliary power recondition.

The LAN card performs no network activities while in the remote Wake-On-LAN mode of operation. It only monitors the network for receipt of a Magic Packet. If a Magic Packet is addressed to the LAN card on the network, the LAN card wake up the system. If the Secure ON feature has been enabled, the password added to the Magic Packet is also verified prior to waking up the system.

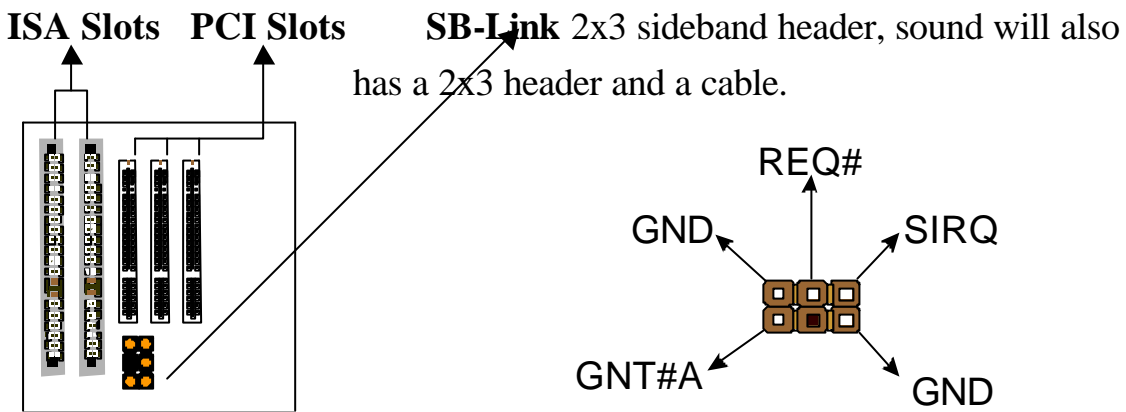
There are two kinds of PCI Ethernet cards with WOL function. One is Intel and the other is with PME signal supporting. And you can set “PCI PME# Function” enabled through “Power Management Setup” from the BIOS setup screen.

Attention: For Wake-On-LAN, the +5V standby power line fixed to the ATX power supply should be capable of delivering +5V \pm 5% at 720mA. Failure to provide adequate standby current when implementing Wake-On-LAN will cause system shut down or even damage the system.



1-2-6 SB-Link Sideband Signals

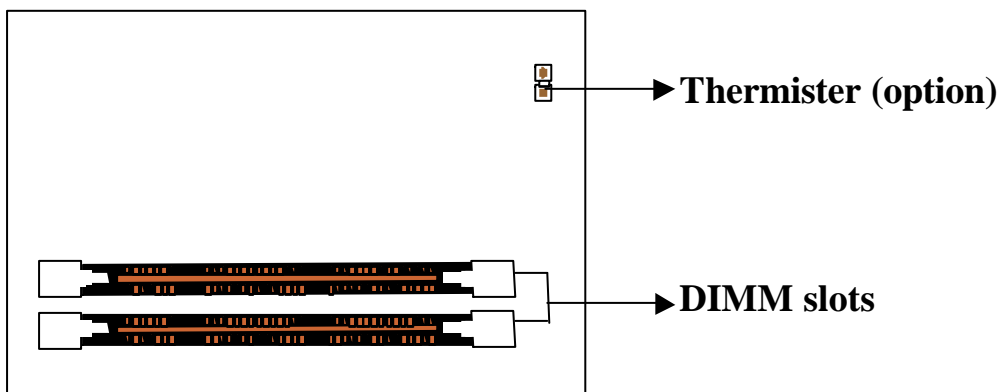
In order to migrate the legacy Sound Blaster compatible audio to the PCI bus, EMU8008 incorporates a pair of SB-Link request/grant sideband signals (PCPCIR EQN and PCPCIGNTN) to interface to the PCI bus. SB-Link is a mechanism that was defined and developed by Creative as a docking solution which allows ISA slots to exist in docking station, so it can be connected to desktop PC PCI bus.



1-2-7 Thermister (option)

When setting up the thermister, the BIOS will load the CPU temperature automatically. There is a choice of the warning beep sound if the user sets the option on. If the CPU is overheated, the user will get the signal from the thermister. And you should shut down computer and check your devices then. If problem persists, you should contact with you dealer.

Protecting and monitoring the CPU temperature is the thermister's job.



1-2-8 LDCM LANDesk Client Manager (option)

The mainboard built-in controller support Intel LDCM. LDCM can satisfy users who want manageable systems that can interact automatically with the user. Client manager is the answer, enabling both administrators and clients to manage systems. The features of LDCM are as following :

View system inventory

Client Manager enables you to view hundreds of inventoried items. Some of these items are software related, while many others are hardware related.

View DMI-compliant component information

Client manager enables you to view component information that is compliant with the Desktop Manager Interface DMI . This means you can manage third-party DMI-compliant components which did not include Client manager.

Back up and restore system configuration files.

Client Manager enables you back up and restore system configuration files. Whenever you plan on changing the system configuration , you can make a backup set. If the system no longer works correctly, after you the change the system configuration , you can simply restore the system configuration with the backup set.

Troubleshoot

Since Client manager enables you to view the system inventory, you can easily troubleshoot system problems.

Receive notifications for system events

Client manager enables you to receive notification of certain system events. For example, if the system is running low on virtual memory, you are notified of the potential problem.

Transfer files to and from client workstations

As an administrator, you have the ability to transfer files to and from client workstation. This is helpful, for example, when you need to update a client workstation driver.

Remotely reboot client workstations

Administrator also have the ability to remotely reboot a workstation. This is helpful when you want your system configuration changes to take effect.

CHAPTER 2

INSTALLATION

2-1 MAINBOARD INSTALLATION

Before installing the computer, please prepare all components such as CPU and DRAM; peripherals such as hard drive, keyboard, CD-ROM; and accessories such as cables. Then, install the system as following:

1. Plug CPU/ heat sink (refer to Pentium[®] II/III installation guide), and DRAM modules on the mainboard.
2. Set DIP switch based on your CPU configuration.
3. Plug add-on cards into PCI/ISA slots, if needed.
4. Connect the power supply.
5. Connect I/O and other cables to the system, especially for Sound connector.
6. Make sure all components and devices are well connected, turn on the power and setup System BIOS based on your configuration.
7. Install peripheral devices, add-on card drivers and test them.

Power on your just installed system. If all parts run well, turn it off and screw the chassis cover to the system, and then connect other necessary external devices.

2-2 CPU Configuration

The mainboard has built-in VID (Voltage Identify) function to auto detect CPU voltages. Hence you do not have to set the CPU voltage setting.

To configure your CPU speed, you only have to set up the DIP Switch SW1 so as to select the corresponding frequency ratio for the CPU. Following sections are illustrations of SW1 settings vs various CPU base clocks. As for the CPU voltage application, VID will automatically do the job for you.

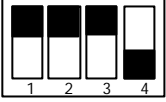
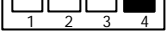
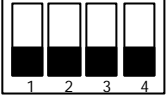
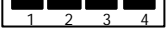
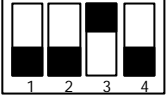
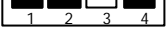
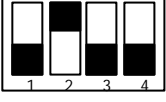
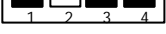
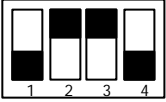
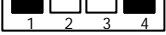
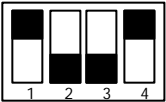
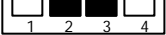
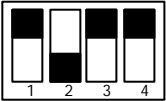
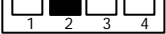
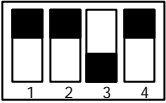
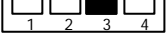

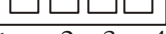


2-2-1 CPU Base Clock Ratio vs SW1 Setting :

Clk. Ratio SW1 Pin Settings

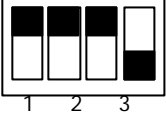
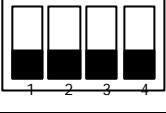
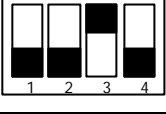
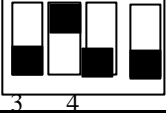
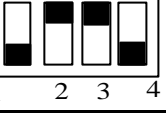




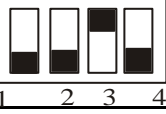
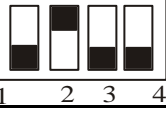

	1-1	1-2	1-3	1-4
3.0x	ON	ON	OFF	OFF
3.5x	ON	ON	ON	OFF
4.0x	OFF	OFF	OFF	OFF
4.5x	OFF	OFF	ON	OFF
5.0x	OFF	ON	OFF	OFF
5.5x	OFF	ON	ON	OFF
6.0x	ON	OFF	OFF	ON
6.5x	ON	OFF	ON	ON
7.0x	ON	ON	OFF	ON
7.5x	ON	ON	ON	ON
8.0x	OFF	OFF	OFF	ON

2-2-2 SW1 Setting vs CPU Base Clock

A. For Intel Pentium II 233~333MHz & Celeron 266~533MHz CPUs.

CPU Base Clk. 66MHz	SW1
233MHz (66x3.5)	ON  OFF 
266MHz (66x4.0)	ON  OFF 
300MHz (66x4.5)	ON  OFF 
333MHz (66x5.0)	ON  OFF 
366MHz (66x5.5)	ON  OFF 
400MHz (66x6.0)	ON  OFF 
433MHz (66x6.5)	ON  OFF 
466MHz (66x7.0)	ON  OFF 
500MHz (66x7.5)	On  Off 
533MHz (66x8.0)	On  Off 

B. For Intel Pentium II 350~450MHz and Pentium III 450~733MHz CPUs.

CPU Base Clk. 100MHz	SW1
<p>350MHz (100x3.5)</p>	<p>ON OFF</p> 
<p>400MHz (100x4.0)</p>	<p>ON OFF</p> 
<p>450MHz (100x4.5)</p>	<p>ON OFF</p> 
<p>500MHz (100x5.0)</p>	<p>ON OFF</p> 
<p>550MHz (100x5.5)</p>	<p>On Off</p> 
<p>600MHz (100x6.0)</p>	<p>On Off</p> 
<p>650MHz (100x6.5)</p>	<p>On Off</p> 
<p>700MHz (100x7.0)</p>	<p>On Off</p> 
<p>533MHz (133x4.0)</p>	<p>On Off</p> 
<p>600MHz (133x4.5)</p>	<p>On Off</p> 
<p>677MHz (133x5.0)</p>	<p>On Off</p> 
<p>733MHz (133x5.5)</p>	<p>On Off</p> 

2-3 SYSTEM MEMORY INSTALLATION

The mainboard provides three 168-pin DIMM sockets for system memory expansion from 8MB to 640MB SDRAM. These three DIMMs are arranged to three banks as below: (please also refer to Component Location Diagram).

Bank/DIMM	Memory Module	Total Memory
Bank0/DIMM1	8/16/32/64/128/256/512MB	8MB~512MB
Bank1/DIMM2	8/16/32/64/128/256/512MB	8MB~512MB
Bank2/DIMM3	8/16/32/64/128MB	8MB~256MB
Total System Memory		8MB~1280MB

DRAM type, Size, parity supported:

⌚ SDRAM/Registered SDRAM: 66MHz~100MHz; Bank 0 and Bank 1 supporting Up to 512MB respectively, Bank 2 supporting 256MB max.

◆ *For 66MHz host bus CPUs use 12ns or faster DIMM module;*

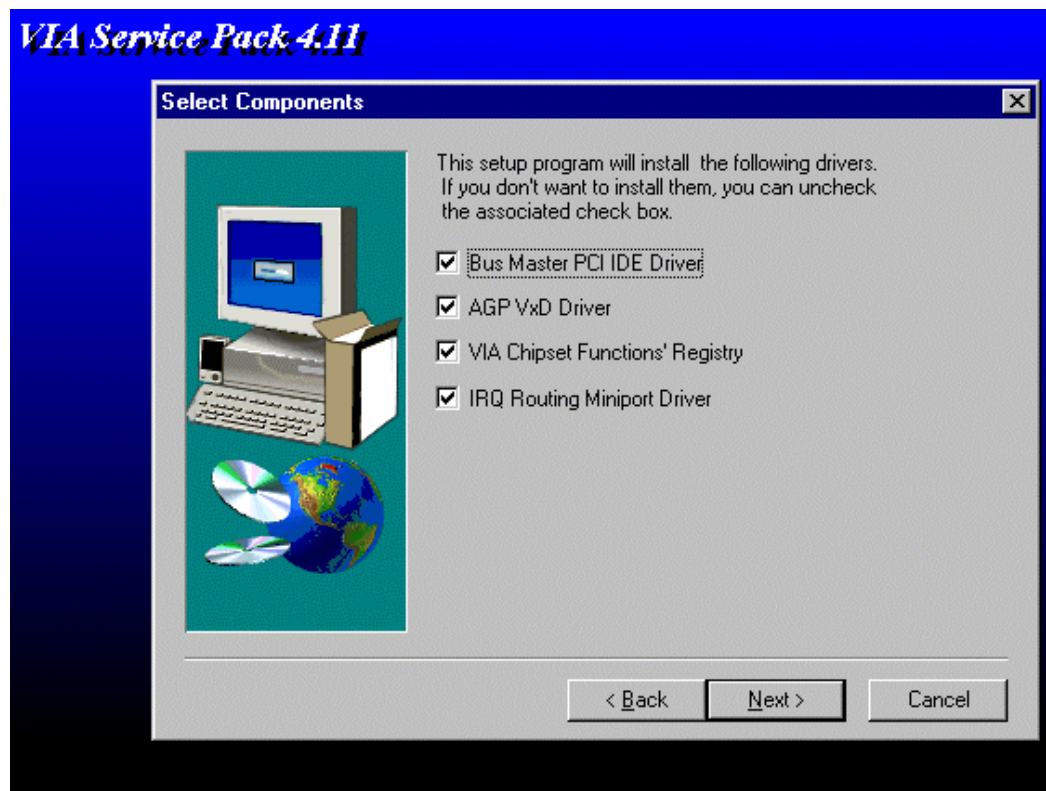
◆ *For 100MHz host bus CPUs use 10ns or faster and PC-100 compliant modules .*

2-4 VIA IDE DRIVER SETUP

The VIA IDE drivers are enclosed into the VIA Utility CD. Use this CD ROM for installation of the VIA drivers.

2-4-1 Setup for Windows 9x :

1. Starting Windows system.
2. Insert the VIA Utility CD ROM into your CD-ROM Drive. If the VIA Driver Setup Main Menu does not appear automatically, just point to “My Computer” and click the CD ROM icon to open the VIA Utility CD ROM directly.
3. In a second, the “VIA Service Pack v.xx main menu shows up.
4. To start VIA drivers setup, point to the “VIA Integrated Setup” and click on it.
5. User-friendly Setup screens will appear one by one, guiding you to finish the complete setup.
6. Among the guiding screens, the “Select Components” screen (as shown below) will show you the programs to be installed into your system. New users are recommended to install all of them

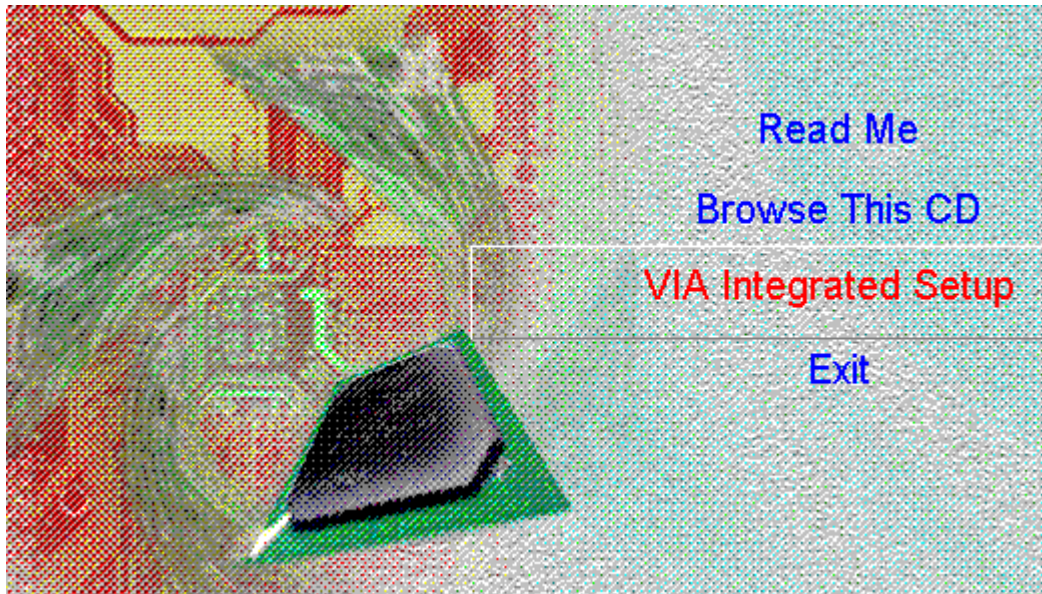


7. When the “Setup complete” screen appears, click “Finish” to restart your computer so as to put the just installed drivers into effect.

2-4-2 Setup for Windows NT 4.0

The VIA IDE drivers for WinNT are also enclosed into the VIA Utility CD. Use this CD ROM for installation of the VIA drivers for WinNT.

1. Starting Windows NT 4.0.
2. Insert the VIA Utility CD ROM into your CD-ROM Drive , point to “My Computer” and click the CD ROM icon to open the VIA Utility CD ROM directly.
3. In a second, the “VIA Service Pack v.xx main menu shows up as below:



4. Point to “VIA Integrated Setup” and click on it to start setup right away.
5. Successive screens with user-friendly instructions will appear to guide you through the whole setup.
6. When the “Setup complete” screen appears, click “Finish” to restart your computer so as to put the just installed drivers into effect.

CHAPTER 3 AWARD BIOS SETUP

Award BIOS manufacturer provides access to the system BIOS through the hardware and software on the mainboard. The hardware consists of a Flash ROM and the software is a group of programs installed in the ROMBIOS along with all the other data the BIOS must contain.

After the BIOS is updated, if you want to clear the old setup data stored in the CMOS, then you can clear CMOS.

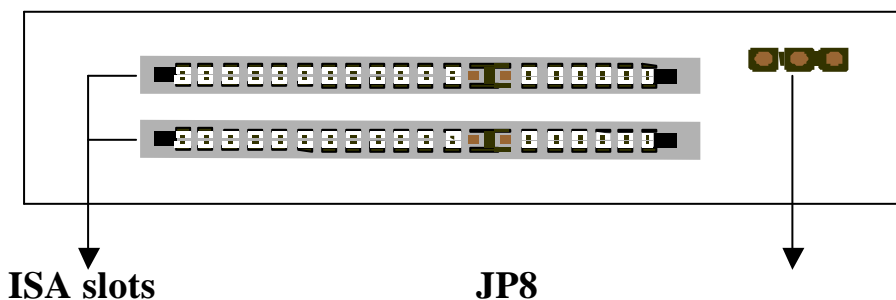
NOTE : In case CMOS should be cleared, unplug the power cord, set Jumper 8 2-3 closed for at least 5 seconds, set it back to 1-2 closed position and plug the power cord again.

	JP8
Normal	1-2
Clear CMOS	2-3



Normal (Pin 1-2 closed)

Clear CMOS (Pin 2-3 closed)



3-1 UPDATE BIOS PROCEDURE

3-1-1 Updating BIOS

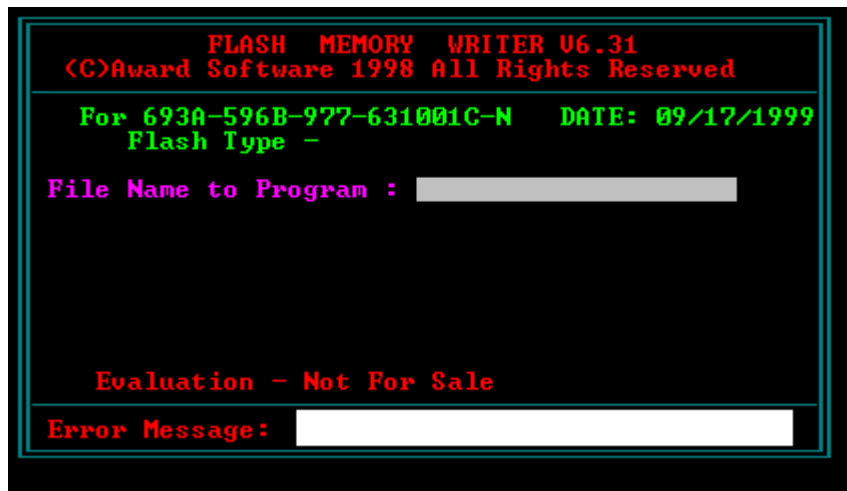
If the BIOS needs to be updated, you can get a CD or diskette with the updated BIOS utility in the package. The BIOS-update diskette or All-In-One CD includes two files:

“awdf flash.exe” -- and “awdf flash.doc”.

And the new or updated Award BIOS file should be obtained from your system manufacturer or dealer.

The updating procedure is as the following:

1. Before updating your BIOS, please load the above-mentioned files to root directory “C” or a floppy drive diskette.
2. Boot the system to DOS mode in a normal manner.
3. Under “C” or Drive “A” (where your BIOS update files should be), type awdf flash.exe and press “Enter”
4. The following screen will inatantly appear, on which you should enter the file name of the new or updated BIOS.



5. After you have entered the file name, press “Enter”. And on the “Error Message” row shows “Do you want to save BIOS (Y/N)”.
6. Type “N” but do not press “Enter”. And the message : " Are you sure to program (Y/N) ?" will appear at once.
7. Type “Y” but do not press “Enter”.
8. BIOS updating process will start at once until you see the message “Reset System or power off to accomplish update process”.
9. Press “F1” button to restart your system, and the updating process is complete.

3-1-2 UPDATE MICROCODE API

Intel also provides MICROCODE API (Applications Programming Interface) for Pentium® II/III processor-based mainboard-users to update data block in BIOS quickly and easily. (You can find this utility in the diskette or All-In-One CD in the package.)

The BIOS code on the Pentium® II/III processor-based mainboard contains data that is specific to each silicon stepping of the processor. Integrators must ensure that this BIOS stepping data matches the processor stepping used. When the BIOS does not contain stepping data that matches the processor stepping, integrators must update the data in the BIOS before shipping the system. Usually, System is updated by replacing the entire BIOS with a new revision of BIOS that contains the correct stepping data.

Intel's BIOS updating API allows just the stepping data within the BIOS to be updated as needed. Mainboards that contain a BIOS with the Intel-defined BIOS updating API can be quickly and easily updated, if required, without obtaining a complete BIOS upgrade. Using this utility, integrators can easily verify that the correct stepping data is present in all mainboards. However, if the stepping data requires updating, the mainboard BIOS must contain the Intel-defined BIOS updating API, otherwise a complete BIOS upgrade is required from the mainboard vendor.

Since API program can only be executed under **DOS Real Mode**, you must **enter Real Mode first** and load the API program to Drive C.

To load the program to C by following steps:

- (1) Type " md c:\ api " and press Enter. Directory "api" is made in Drive C now.
- (2) Insert the Driver/Utility diskette or CD into Drive A or CD ROM Drive E.
- (3) Then type "copy a:\api*. * c:\api" or " copy e:\api*. * c:\api " and press Enter.
(API program is loaded to Drive C now.)
- (4) Type " C:\ api \checkup " to execute this program.

The main menu should now be displayed, showing the following four options :

- 1) Check and load updated
- 2) Specify stepping data file [current : pep.pdb]
- 3) Help
- 4) Quit without loading updated

Select 1 to know the stepping filename, select 2 to load right patch code, then select 1 to update proper patch code. Then cold boot (mechanical power off) system to continue. For more information, please refer to "CHECKUP.HLP" file.

3-2 SYSTEM BIOS CONFIGURATION SETUP

The following sections show how to set up the BIOS configuration under the Award BIOS. The SETUP program is stored in the Read-Only-Memory (ROM) on the mainboard. To do the BIOS SETUP, press the key when the system is booting up. The following main menu will appear. Please first select "STANDARD CMOS SETUP".

ROM PCI/ISA BIOS
CMOS SETUP UTILITY
 AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP
LOAD BIOS DEFAULTS	EXIT WITHOUT SAVING
LOAD SETUP DEFAULTS	
ESC: Quit	↑↓→←:Select Item
F10: Save & Exit Setup	(Shift) F2 : Change Color
Time, Date, Hard Disk Type	

3-2-1 STANDARD CMOS SETUP This screen records some basic hardware information, and sets the system clock and error handling. These records can be lost or corrupted if the on-board battery has failed or is weak.

ROM PCI/ISA BIOS
STANDARD CMOS SETUP
 AWARD SOFTWARE, INC.

Date (mm:dd:yy) : Wed, May 5 1999	
Time(hh:mm:ss) : 13 : 37 : 14	
HARD DISKS	TYPE SIZE CYLS HEAD PRECOMP LANDZ SECTOR MODE
Primary Master	: Auto 0 0 0 0 0 0 Auto
Primary Slave	: Auto 0 0 0 0 0 0 Auto
Secondary Master	: Auto 0 0 0 0 0 0 Auto
Secondary Slave	: Auto 0 0 0 0 0 0 Auto
Drive A : 1.44M, 3.5 in.	
Drive B : None	Base Memory : 640K
Floppy 3 Mode Support : Disabled	Extended memory : 7168K
Video : EGA/VGA	Other Memory : 384K
Halt On: All Errors	-----
	Total Memory : 8192K
ESC : Quit	↑↓→←:Select Item PU/PD/+/- : Modify
F1 : Help	(Shift) F2 : Change Color

Date The date format is <day>,<date>,<month>,<year>. Press<F3> to show the calendar.

day	The day, from Sun to Sat, determined by the BIOS and is displayed-only
date	The date, from 1 to 31
month	The month, Jan. through Dec.
year	The year, from 1900 to 2099

Time The time format is <hour><minute><second>. The time is calculated based on the 24-hour military-time clock. For example, 1p.m. is 13:00:00.

Primary Master Primary; Slave Secondary Master Secondary Slave

These categories identify the types of the 2 channels that have been installed in the computer. There are 45 predefined types and 4 user definable types for Enhanced IDE BIOS. Type 1 to 45 which are predefined. Type ‘user’ which is user-definable. Press PgUp/PgDn to select a numbered hard disk type or type the number and press <Enter>.

If you select '**Auto**', the BIOS will detect the HDD & CD-ROM Drive automatically at the POST stage and show the IDE for HDD & CD-ROM Drive. If you select '**user**', you will need to know the information listed below. This information should be from your hard disk vender or dealer. Then enter the figure directly and press <Enter>. If the controller of the HDD interface is ESDI, the selection shall be '**Type 1**'; if SCSI, the selection shall be '**None**'. If no device is installed select '**NONE**' and press <Enter>.

Type	drive type
SIZE	automatically adjusts
CYLS	number of cylinders
HEAD	number of heads
PRECOMP	write precom
LANDZ	landing zone
SECTOR	number of sectors
MODE	mode type

Drive A, Drive B This category identifies the types of floppy disk drive A or drive B that has been installed in the computer.

None	No floppy drive installed
360K, 5.25 in	5.25" PC-type 360KB capacity
1.2M, 5.25 in	5.25" AT-type 1.2MB capacity
720K, 3.5 in	3.5" double-side 720KB capacity
1.44M, 3.5 in	3.5" double-side 1.44MB capacity
2.88M, 3.5 in	3.5" double-side 2.88MB capacity

Floppy 3 Mode Support This is the Japanese standard floppy drive. This standard stores 1.2MB in a 3.5" diskette.

Video This category selects the type of video adapter used for the primary system monitor. Although secondary monitors are supported, you do not have to select the type in Setup.

EGA/VGA	Enhanced Graphics Adapter/Video Graphics Array. For EGA, VGA, SEGA, SVGA or PGA monitor adapters
CGA 40	Color Graphics Adapters, power up in 40 column mode
CGA 80	Color Graphics Adapters, power up in 80 column mode
MONO	Monochrome adapter, includes high resolution monochrome adapters

Halt On This category determines whether the computer will stop if an error is detected during power up.

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

Memory This category is displayed only which is determined by POST (Power On Self Test) of the BIOS.

Base Memory The POST will determine the amount of base (or conventional) memory installed in the system. The value of the base memory is typically 512K or 640K based on the memory installed on the motherboard.

Extended Memory How much extended memory is present during the POST. This is the amount of memory located above 1MB in the CPU's memory address map.

Other Memory This refers to the memory located in the 640K to 1024K address space. This is memory that can be used for different applications. DOS uses this area to load device drivers in an effort to keep as much base memory free for application programs. The BIOS is the most frequent user of this RAM area since this is where it shadows RAM.

3-2-2 BIOS FEATURES SETUP This screen is a list of system configuration options. Some of them are defaults required by the mainboard's design, others depend on the features of your system.

ROM PCI/ISA BIOS
BIOS FEATURES SETUP
 AWARD SOFTWARE, INC.

Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU L1 Cache	: Enabled	C8000-CBFFF Shadow	: Disabled
CPU L2 Cache	: Enabled	CC000-CFFFF Shadow	: Disabled
CPU L2 Cache ECC Checking	: Enabled	D0000-D3FFF Shadow	: Disabled
Processor Number Feature	: Enabled	D4000-D7FFF Shadow	: Disabled
Quick Power On Self Test	: Enabled	D8000-DBFFF Shadow	: Disabled
Boot Sequence	: A,C,SCSI	DC000-DFFFF Shadow	: Disabled
Swap Floppy Drive	: Disabled		
Boot Up Floppy Seek	: Enabled		
Boot Up NumLock Status	: On		
IDE HDD Block Mode	: Disabled		
Gate A20 Option	: Fast		
Memory Parity /ECC Check	: Disabled		
Security Option	: Setup		
PCI/VGA Palette Snoop	: Disabled		
Assign IRQ For VGA	: Enabled		
OS Select for DRAM>64MB	: Non-OS2	Esc : Quit	↑↓→←:Select Item
HDD S.M.A.R.T. capability	: Disabled	F1 : Help	PU/PD/+/- : Modify
Report No FDD For WIN 95	: No	F5 : Old Values (SHIFT)	F2 : Color
RTC Y2K Compliance	: Enabled	F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Virus Warning When this item is enabled, the Award BIOS will monitor the boot sector and partition table of the hard disk drive for any attempt of modification. If an attempt is made, the BIOS will halt the system and the following error message will appear.

Afterwards, if necessary, you will be able to run an anti-virus program to locate and remove the problem before any damage is done.

<p>! WARNING !</p> <p>Disk boot sector is to be modified Type 'Y' to accept write or 'N' to abort write Award Software, Inc.</p>	
Enabled	Activates automatically when the system boots up. If anything attempts to access the boot sector or hard disk, partition table will cause a warning message to appear.
Disabled	No warning message will appear when anything attempts to access the boot sector or hard disk partition table.

Many disk diagnostic programs which attempt to access the boot sector table can cause the above warning message. If you will be running such a program, we recommend that you first disable Virus Protection beforehand.

CPU L1 Cache, L2 Cache These two categories speed up memory access. However, it depends on CPU/chipset design. The default value is 'enabled'.

CPU L2 Cache ECC Checking When this item is enabled, it means the system supports Error Checking and Correcting (ECC) memory which can guard against data corruption.

Processor Number Feature The Processor Serial Number serves as an identifier for the Processor and its system and thus adds to the system security features. When this feature is "Enabled", the Processor Serial Number is detectable and can be utilized in information Management etc. When "Disabled", the Processor Serial Number is not detectable. This feature is built in Pentium®III Processor only.

Quick Power On Self Test This category speeds up Power On Self Test after you power up the computer. If you set "Enabled", BIOS will shorten or skip some items under check during POST.

Boot Sequence This category determines which drive to search first for the Disk Operating System (i.e., DOS). The system will search those drives in order, Ex.: C, CDROM, A: System will first search for hard disk drive then CDROM drive, and the last is floppy disk drive.

Note: C is primary master; D is primary slave; E is secondary master, F is secondary slave.

Swap Floppy Drive This item allows you to determine whether to enable the swap floppy drive or not. The choice : Enabled/ Disabled.

Boot Up Floppy Seek During POST, the BIOS will determine if the floppy disk drive installed is 40 tracks (360K) or 80 tracks (720K, 1.2M, 1.44M)

Enabled	BIOS searches for floppy disk drive to determine if it is 40 or 80 tracks.
Disabled	BIOS will not search for the type of floppy disk drive by track number.

Boot Up NumLock Status This allows you to determine the default state of the numeric keypad. By default, the system boots up with NumLock on.

On	Keypad is for numeric keys.
Off	Keypad is for arrow keys.

IDE HDD Block Mode This allows your HD controller to use the fast block mode to transfer data to and from your HD drive.

IDE controller uses block mode .
IDE controller uses standard mode.

Gate A20 Option This entry allows you to select how the gate A20 is handled. The gate A20 is a device used to address memory above 1 MB. Initially, the gate A20 was handled via a pin on the keyboard. Today, while keyboards still provide this support, it is more common and much faster for the system chipset to provide support for gate A20. Normal is keyboard; Fast is chipset.

Memory Parity/ECC Check This event is to support SDRAM which has the Memory Parity/ECC Check function. Choices: Enabled/Disabled.

Security Option This category allows you to limit access to the system and Setup, or just to Setup.

System	The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt
Setup	The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt

To disable the security, select PASSWORD SETTING at Main Menu, and then you will be asked to enter password. Do not type anything and just press <Enter>, it will disable the security. Once the security is disabled, the system will boot and you can enter Setup freely.

PCI/VGA Palette Snoop It determines whether the MPEG ISA/VGA cards can work with PCI/VGA or not.

Enabled	When PCI/VGA working with MPEG ISA/VGA Card
Disabled	When PCI/VGA not working with MPEG ISA/VGA Card

Assign IRQ for VGA When this items is enabled, the system will assign an IRQ for VGA. If disabled, VGA occupies no IRQ.

OS Select for DRAM > 64MB This item allows you to access the memory that is over 64MB in OS/2. The choice : Non-OS2, OS2

HDD S.M.A.R.T. Capability Choose “Enabled” if your system support “SMART” (Safe Monitoring Analysis and Reporting Technology).

Report No FDD For WIN95 Set this item to Yes, BIOS will report FDD to Win95. If in standard CMOS setup, set Drive A to none and set this item to yes. Inside Win95, My Computer and File manager Disk(A:) will show Removable Disk (A:).

RTC Y2K Compliance Full Y2K system compliance supported.

Hit <TAB> Message Display This item is enabled when the setting of *Initial Display Mode* is Silent. If you set Yes, you can see the message: “<TAB> - Switch back to POST screen, - to run SETUP” show on the screen.

Video BIOS Shadow Determines whether video BIOS will be copied to RAM. However it is optional depending on chipset design. Video Shadow will increase the video speed. The choice : Enabled/Disabled

C8000 – CBFFF Shadow; DC000 – DFFFF Shadow These categories determine whether option ROMs will be copied to RAM. An example of such option ROM would be the support of onboard SCSI. The choice : Enabled/Disabled

3-2-3 CHIPSET FEATURES SETUP This screen controls the setting for the chipset on the mainboard.

ROM PCI/ISA BIOS
CHIPSET FEATURES SETUP
 AWARD SOFTWARE, INC.

Bank 0/1 DRAM Timing	: SDRAM 10ns	Auto Detect DIMM/PCI Clk	: Disabled
Bank 2/3 DRAM Timing	: SDRAM 10ns	Spread Spectrum Modulated	: Disabled
Bank 4/5 DRAM Timing	: SDRAM 10ns	CPU Host/PCI Clock	: 66/33MHz
SDRAM Cycle Length	: 3		
DRAM Clock	: Host Clock		
Memory Hole	: Disabled		
Read Around Write	: Disabled		
Concurrent PCI/Host	: Disabled		
System BIOS Cacheable	: Enabled		
Video RAM Cacheable	: Disabled		
AGP Aperture Size (MB)	: 128		
AGP-2X Mode	: Enabled		
OnChip USB	: Enabled		
USB Keyboard Support	: Disabled		
		Esc: Quit	↑↓→← : Select Item
		F1 : Help	PU/PD/+/-: Modify
		F5 : Old Values	(Shift)F2 : Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Bank 0/1 , 2/3, 4/5 DRAM Timing Each item is for selection of SDRAM speed. Choices are: 10ns, 8ns, Normal, medium, fast and Turbo. In case a faster choice cannot bring about a smooth system run, a slower choice should be taken. Default is the slowest 10ns.

SDRAM Cycle Length There are 3 cycle lengths for choice: 1,2,3.

DRAM Clock This item is for selecting the desired DRAM Clock:
“Host Clock” means CPU Host Clock is chosen as the DRAM Clock.
“HClock – MHz” means CPU Host Clock is lowered down.
“Hclock + MHz” means CPU Host Clock is raised.
Note: For VIA 693A+596B , the “DRAM Clock” is provided with only two choices:
“Host Clock/66MHz”.

Memory Hole A memory block at 15M – 16M is reserved for choice. If “Disabled” is chosen, it means this memory block is not reserved for special use. If “15M-16M” is chosen, it means, this memory block is reserved for other devices.

Read Around write to enable this item will optimize DRAM read & write. If a memory read is addressed to a location where a memory write is held in a buffer content, the memory read will not be sent to DRAM then.

Concurrent PCI/Host Disabled, the CPU bus will be occupied(BPRI asserted) during the entire PCI operation. Enabled, the CPU bus is only requested before ADS#assertion

System BIOS Cacheable Selecting “Enabled” allows the caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Video RAM Cacheable Selecting Enabled allows the caching of the video RAM, resulting in better system performance.

AGP Aperture Size (MB) Select the size of the AGP aperture. The aperture is a portion of the PCI memory dedicated for graphics memory address space. Host cycle that hit the aperture range are forwarded to the AGP without any translation. The choice 4, 8, 16, 32, 64, 128.

AGP-2X Mode “Disabled”, the AGP-2X Mode(2 times in speed) is not supported. “Enabled”, this function is supported.

OnChip USB If “Enabled”, “USB Keyboard Support” will be provided for choice.

USB Keyboard Support If “OnChip USB” is enabled, this item will appear for choice.

Auto Detect DIMM/PCI Clk If this item is enabled, the unused DIMM and PCI slot clock will be disabled. If this item is disabled the unused DIMM and PCI slot will still give out the active clock signal.

Spread Spectrum Enable / Disable this item, the BIOS will Enable / Disable the clock generator spread spectrum for rounding up the clock cycle peak.

CPU Host Clock (CPU/PCI) Use this item to set CPU base clock frequency which includes 66/33MHz, 75/37MHz, 83/41MHz, 100/33MHz, 103/34MHz, 112/37MHz, 124/41MHz, 133/44MHz, 124/31MHz, 133/33MHz , 140/35MHz, 150/37 and default.

Note: After you change the CPU Clock Frequency and the system can not start, please do the following procedures:

1. Turn the system off first.
2. Turn on the system again. Then press and hold the “ Insert ” key at boot.
3. Select the lower frequency in the item of “CPU Host Clock”.
4. Save and Exit Setup.

3-2-4 POWER MANAGEMENT SETUP This screen controls the 'green' features of this mainboard.

ROM PCI/ISA BIOS
POWER MANAGEMENT SETUP
 AWARD SOFTWARE, INC.

ACPI function	: Disabled	Primary INTR	: On
Power Management	: User Define	IRQ 3 (COM 2)	: Primary
PM Control by APM	: Yes	IRQ 4 (COM 1)	: Primary
Video Off After	: Suspend	IRQ 5 (LPT 2)	: Primary
Video Off Method	: DPMS	IRQ 6 (Floppy Disk)	: Primary
		IRQ 7 (LPT 1)	: Primary
Modem Use IRQ	: 3	IRQ 8 (RTC Alarm)	: Disabled
Soft-off by PWRBTN	: Instant-off	IRQ 9 (IRQ2 Redir)	: Secondary
HDD Power Down	: Disabled	IRQ10 (Reserved)	: Secondary
Doze Mode	: Disabled	IRQ11 (Reserved)	: Secondary
Suspend Mode	: Disabled	IRQ12 (PS/2 Mouse)	: Primary
	“ PM Events”	IRQ13 (Coprocessor)	: Disabled
VGA	: Off	IRQ14 (Hard Disk)	: Primary
LPT & COM	: LPT/COM	IRQ15 (Reserved)	: Disabled
HDD & FDD	: On		
DMA/Master	: Off	Esc: Quit	↑↓→← :Select Item
Modem Ring Resume	: Disabled	F1 : Help	PU/PD/+/- : Modify
RTC Alarm Resume	: Disabled	F5 : Old Values	(Shift) F2: Color
		F6 : Load BIOS Defaults	
Wake Up On LAN	: Disabled	F7 : Load Setup Defaults	

ACPI function This item is to set the ACPI (Advanced Configuration Power Interface) function enabled or disabled. The default setting is disabled.

Power Management This category allows you to select the type (or degree) of power saving. Choices are: User Defined, Min Saving, Max Saving. And it is directly related to the following modes : **Doze; Standby; Suspend; HDD Power Down.**

Min. Power Saving	Minimum power management. Doze =1hr.; Standby=1hr.; Suspend=1hr.; HDD Power Down=15min
Max. Power Saving	Doze=1min.; Standby=1min.; Suspend=1min.;HDD Power Down=1min

User Define	Allows you to set each mode individually. Each of the ranges is from 1min. to 1hr. except for HDD Power Down which ranges from 1 to 15min.
-------------	--

PM Control by APM When enabled, an Advanced Power Management mechanism will be activated to enhance the Max. Power Saving Mode and stop the CPU internal clock. If the Max. Power Saving is not enabled, this will be shown as Yes.

If you would like to use Software Power-off Control function, you should select “Yes” in PM Control by APM.

Video Of After This item is to provide choices after system entering power saving mode:

“NA”: Monitor remains on.

“Suspend”: Monitor is blank while system is in Suspend Mode.

“Standby”: Monitor is blank while system is in Standby Mode.

“Doze”: Monitor is blank while system is in Power Saving Mode

Video Off Method This determines the manner in which the monitor is blanked.

V/H SYNC + Blank	This selection will cause the system to turn off the vertical and horizontal sync. ports and write blanks to the video buffer.
Blank Screen	This option only writes blanks to the video buffer.
DPMS	Initial of “Display Power Management Signaling”.

Modem-Use IRQ This item determines the IRQ in which the MODEM can be used. The choices are: 3,4,5,7,9,10,11,NA

Soft-Off by PWR-BTTN *Instant-off* : When you push the power button, the system power will be off immediately. *Delay 4 sec* : when you push the power button, it will enter suspend mode. We need to push the power button and hold it for 4 seconds to turn off the power.

The Following 3 modes are Green PC power saving functions which are only user configurable when ‘User Define’ power management has been selected.

➤ **Doze Mode** When enabled and after the set time of system inactivity, the CPU clock will run at slower speed while all other devices still operate at full speed.

- **HDD Power Down** When enabled and after the set time of system inactivity, the hard disk drive will be powered down while all other devices remain active.
- **Suspend Mode** When enabled and after the set time of system inactivity, all devices except the CPU will be shut off.

PM Events: Events included herein are I/O events whose occurrence can prevent the system from entering a power saving mode or can awaken the system from such a mode. In fact, the system remains alert for anything which occurs on a device which is configured as “ON”, even when the system is in a power down mode. When an I/O device wants to gain the attention of the operating system, it signals this need by causing an “**IRQ**” (Interrupt Request) to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service. When set to “Off”, device activity will neither prevent the system from going into a power management mode nor awaken the system.

The I/O events included herein are:

VGA, LPT & COM, HDD & FDD, DMA/Master, Modem Ring Resume, RTC Alarm Resume.

Wake Up On LAN This event is to “Enable” or “Disable”

Primary INTR This item is to provide setting for IRQ3 to IRQ15. If this item is “ON”, you can set the IRQs with three choices: Primary, Secondary, and Disabled,

3-2-5 PNP/PCI CONFIGURATION This screen configures the PCI Bus slots.

ROM PCI/ISA BIOS
PNP/PCI CONFIGURATION
 AWARD SOFTWARE, INC.

PNP OS Installed	: No	CPU to PCI Write Buffer	: Enabled
Resources Controlled by	: Auto	PCI Dynamic Bursting	: Disabled
Reset Configuration Data	: Disabled	PCI Master 0 WS Write	: Enabled
		PCI Delay Transaction	: Disabled
		PCI#2 Access #1 Retry	: Disabled
		AGP Master 1 WS Write	: Disabled
		AGP Master 1 WS Read	: Disabled
		Assign IRQ for USB	: Enabled
		Esc: Quit	↑↓→← :Select Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift) F2: Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

PNP OS Installed This item allows you to determine PnP OS or not. Choices are Yes or No.

Resource Controlled by The Award Plug and Play BIOS has the capability to automatically configure all of the boot and Plug & Play compliant devices. However, this capability means absolutely nothing unless you are using a Plug and Play OS such as Windows 95. Choices are Auto and Manual.

Reset Configuration Data This item allows you to determine whether to reset the configuration data or not.

CPU to PCI Write Buffer Enable/Disable CPU to PCI POST Write.

PCI Dynamic Bursting Enable/Disable PCI Burst operation.

PCI Master 0 WS Write Enable/Disable PCI Master 0 Wait State Mode.

PCI Delay Transaction This VIA chipset supports delay transaction cycles. Select “Enabled” to support compliance with PCI specification version 2.1.

PCI#2 Access #1 Retry Disabled, PCI#2 will be disconnected until access finished.
Enabled, PCI#2 will be disconnected if maximum retries are attempted without success.

AGP Master 1 WS Write Enable/Disable AGP Master 1 Wait State Write”.

AGP Master 1 WS Read Enable/Disablew AGP Master 1 Wait State Read.

Assign IRQ For USB When this item is enabled, the system will assign an IRQ for USB use. If disabled, no IRQ will be assigned for USB use.

3-2-6 INTEGRATED PERIPHERALS

This section page includes all the items of IDE hard drive and Programmed Input/Output features. See also Section “Chipset Features Setup”.

ROM PCI/ISA BIOS

INTEGRATED PERIPHERALS

AWARD SOFTWARE, INC.

OnChip IDE Channel 0	: Enabled	UART Mode Select	: Normal
OnChip IDE Channel 1	: Enabled	UART 2 Duplex Mode	: Half
IDE Prefetch Mode	: Disabled	RxD , TxD Active	: Hi, Lo
Primary Master PIO	: Auto	IR Transmission Delay	: Enabled
Primary Slave PIO	: Auto	Onboard Parallel Port	: 378/IRQ7
Secondary Master PIO	: Auto	Parallel Port Mode	: ECP
Secondary Slave PIO	: Auto	ECP Mode Use DMA	: 3
IDE Primary Master UDMA	: Auto	EPP Mode Select	: EPP1.7
IDE Primary Slave UDMA	: Auto	PWRON After PWR-Fail	: Off
IDE Secondary Master UDMA	: Auto		
IDE Secondary Slave UDMA	: Auto		
Init Display First	: PCI Slot		
Power On Function			
KB Power On Password	: Enter	Esc: Quit	↑↓→← : Select Item
Hot Key Power On	: Ctrl-F1	F1 : Help	PU/PD/+/- : Modify
KBC input clock	: 8 MHz	F5 : Old Values	(Shift) F2: Color
Onboard FDC Controller	: Enabled	F6 : Load BIOS Defaults	
Onboard Serial Port 1	: 3F8/IRQ4	F7 : Load Setup Defaults	
Onboard Serial Port 2	: 2F8/IRQ3		

OnChip IDE Channel 0; OnChip IDE Channel 1 This setup item allows you to either enable or disable the primary/secondary IDE controller. You might choose to disable the controller if you want to add higher performance or specialized controller.

IDE Prefetch Mode Enable/Disable IDE Read Prefetch Buffer.

Primary Master/Slave PIO ; Secondary Master/Slave PIO

PIO - Programmed Input/Output, it allows the BIOS to tell the controller what it wants and then let the controller and the CPU to complete the task by themselves. This is simpler and faster. Your system supports five modes, 0 - 4, which primarily differ in timing. When **Auto** is selected, the BIOS will select the best available mode.

IDE Primary Master/Slave UDMA; IDE Secondary Master/Slave UDMA Auto, will support the Ultra DMA function. Disabled, will not support the Ultra DMA function.

Init Display First If you set this item to PCI Slot, it will activate the PCI video card first in the multi-displayed environment. The choice: PCI Slot, AGP.

Power On Function The following are choices of Power On functions:

- **KB Power On Password:** This function is available with ATX power only. User can power on the system by setting a password via keyboard. Please refer to Page 5 “Password (via Keyboard) for setting the “Password Power-On “ function. If a set password is forgotten or can not be retrieved, please refer to Page 15 “Clear CMOS” to clear old password and set a new one.
- **Hot Key :** This is also an ATX Power supported function. Please refer to Page 5 “Hot Key (via Keyboard)” for setting this Hot Key Power-on function.

KBC input clock Let user change the keyboard working clock.

On Board FDC Controller This item will enable or disable the floppy disk controller.

On Board Serial Port 1 User can select serial port IRQ. If set to Auto, system will assign an IRQ for it. Note : set to Auto is not recommended.

On Board Serial Port 2 User can select serial port IRQ. If set to Auto, system will assign an IRQ for it. Note : set to Auto is not recommended.

UART Mode Select This lets you select the Infrared mode. Choices are Normal, IrDA, and ASKIR. If you choose IrDA or ASKIR mode, the screen will show another two lines to let you choose ‘RxD TxD Active’ (Hi Lo; Lo Hi; Hi Hi; Lo Lo), and ‘IR Transmission Delay’ (Enabled/Disabled).

On Board Parallel Port Let user select IRQ for parallel port When Disabled, the parallel port will be disabled.

Parallel Port Mode Let user select parallel port protocol. This item is not recommended to change except user has special request.

ECP Mode Use DMA Select a DMA channel for the port. Choices are 3, 1.

EPP Mode Select Let user select EPP version.

PWRON After PWR-Fail When you set “Former State”, this allows you to set whether you want your system to boot up after the power has been interrupted. Otherwise, “Off” leaves your system off after reapplying power.

3-2-7 IDE HDD AUTO DETECTION In CMOS Setup Utility Menu, highlight “IDE HDD Autodetection, and the following screen will show up. If you choose Y from the Y/N choice, the detection result will be printed on the top of the table.

ROM PCI/ISA BIOS
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

Hard Disks	Type	Size	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master :								
Select Primary Master Option (N=Skip) : Y/N								
Options	Size	CYLS	Head	PRECOMP	LANDZ	Sector	Mode	
2(Y)	1337	648	64	0	2594	63	LBA	
1	1339	2595	16	65535	2594	63	NORMAL	
3	1338	1297	32	65535	2594	63	LARGE	
Note : Some OSes (like SCO-UNIX) must use “Normal” for installation								
ESC : Skip								

3-2-9 LOAD BIOS DEFAULTS When your mainboard has problems and needs to trouble shoot the system, you can use this function. The default values loaded only affect the BIOS Features Setup, Chipset Features Setup, Power Management Setup and PNP/PCI Configuration Setup. There is no effect on the Standard CMOS Setup. To use this function, select it from main menu and press <Enter>. A line will appear on the screen asking if you want to load the BIOS default values. Press <Yes> and <Enter> then the BIOS default values will be loaded.

3-2-10 LOAD SETUP DEFAULTS This allows you to load optimal settings which are stored in the BIOS ROM. The default values loaded only affect the BIOS Features Setup, Chipset Features Setup, Power Management Setup and PNP/PCI Configuration Setup. There is no effect on the Standard CMOS Setup. To use this function, select it from main menu and press <Enter>. A line will appear on the screen asking if you want to load the Setup default values. Press <Yes> and <Enter> then the Setup default values will be loaded.

3-2-11 SUPERVISOR PASSWORD / USER PASSWORD This allows you to set the password. The mainboard defaults with password disabled. If you set both supervisor and user passwords, only the supervisor password allows you to enter the BIOS SETUP program.

Enter/Change password: Enter the current password. And at the prompt, key-in your new password (up to eight alphanumeric characters), then press <Enter>. At the next prompt, confirm the new password by typing it again and press <Enter>.

Disable password : Press the <Enter> key instead of entering a new password when the ‘Enter Password’ dialog box appears. A message will appear for confirming that the password is disabled.



CAUTION: If you forget your password, you must clear CMOS first and restart system in order to set up password again. (See “Clear CMOS”).

3-2-12 EXIT WITHOUT SAVING This allows you to exit the BIOS setup utility without recording any new values or changing old ones.

Control Key Description

UP ARROW		Move to previous item
DOWN ARROW		Move to next item
LEFT ARROW		Move to the item in the left hand
RIGHT ARROW		Move to the item in the right hand
Esc KEY	Esc	Main Menu : Quit and not save changes Setup menu : Exit current page and return to main menu
PgUp KEY		Increase the numeric value or make changes
PgDn KEY		Decrease the numeric value or make changes
F1 KEY	Help	General help
F2 KEY	Shift +F2	Change color from total 16 colors
F5 KEY	Old Value	Restore the pervious CMOS value from CMOS
F6 KEY	Load BIOS default	Load the default CMOS value from BIOS default table
F7 KEY	Load setup default	Load Setup default
F10 KEY	Save & Exit Setup	Save all the CMOS changes and Exit setup, only for Main Menu