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# 1 Quick Installation

### 1.1 Layout



### 1.2 Item Checklist

- [V] The motherboard
- [V] Operation manual
- [V] ATA/66 cable
- [V] Floppy cable
- [V] Power Installer CD

#### Optional

- [] USB riser kit
- [ ] Thermal Sensor for System
- [ ] Display Cache Riser Card

### 1.3 Jumpers

### 1.3.1 Clear CMOS jumper(CMOS, JP1)





Normal(Default) Clear CMOS

### 1.3.2 CPU FSB select jumper(FSB, JP3)





### 1.3.3 VIO select jumper (VIO, JP10)



#### 1.3.4 Vcore booster jumper (Vcore, JP9)

The motherboard will auto detect the CPU Vcore Voltage. However, there are 16 various vcore setting offered on motherboard to satisfy the needs for overcloking.

# WARN: A wrong voltage setting will cause irreversible pemanent damage to the CPU.





Vcore	JP9A	JP9B	JP9C	JP9D
Auto ( Default )	1-2 ON	1-2 ON	1-2 ON	1-2 ON
1.30V	OFF	OFF	OFF	OFF
1.35V	2-3 ON	OFF	OFF	OFF
1.40V	OFF	2-3 ON	OFF	OFF
1.45V	2-3 ON	2-3 ON	OFF	OFF
1.50V	OFF	OFF	2-3 ON	OFF
1.55V	2-3 ON	OFF	2-3 ON	OFF
1.60V	OFF	2-3 ON	2-3 ON	OFF
1.65V	2-3 ON	2-3 ON	2-3 ON	OFF
1.70V	OFF	OFF	OFF	2-3 ON
1.75V	2-3 ON	OFF	OFF	2-3 ON
1.80V	OFF	2-3 ON	OFF	2-3 ON
1.85V	2-3 ON	2-3 ON	OFF	2-3 ON
1.90V	OFF	OFF	2-3 ON	2-3 ON
1.95V	2-3 ON	OFF	2-3 ON	2-3 ON
2.00V	OFF	2-3 ON	2-3 ON	2-3 ON
2.05V	2-3 ON	2-3 ON	2-3 ON	2-3 ON

#### 1.4 Connectors

### 1.4.1 CPU fan header (J39)

### 1.4.2 System fan header (J41)



Fcpu	
h • 1	1
•	2
- ●	3
Fsys	
•	1
•	2
	5

Pin Assignment 1: SENSE 2:12V 3: GND



- Pin Assignment
- 1: SENSE
- 2:12V
- 3: GND

### 1.4.3 Infrared connector (IR)



•	1	Pin Assignment
•	2	
•	з	1:5V 2:NC
•	4	3:IRRX
•	5	4:GND 5:IRTX

#### 1.4.4 Wake-ON-LAN header





Pin Assignment

1:5VSB 2:GND 3:LAN\_WAKE

#### 1.4.5 Internal Modem header





Pin Assignment

1:5VSB 2:GND 3:Control Pin

# 1.4.6 ATX power connector (J37)



PIN NO	Definition	PIN NO	Definition
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	GROUND	13	GROUND
4	+5V	14	Power
			Supply On
5	GROUND	15	GROUND
6	+5V	16	GROUND
7	GROUND	17	GROUND
8	Power Good	18	-5V
9	+5V Standby	19	+5V
10	+12V	20	+5V

### 1.4.7 System temp.sensor header



# 1.4.8 Front panel connector (J43)



Function	PIN NO.	Definition
PWR_ON (Power/Soft-Off)	1, 13	
ACPI (ACPI LED)	3,4	PIN 3:Anode
		PIN 4:Cathode
ALED (IDE LED)	7,8	PIN 7:Anode
		PIN 8:Cathode
RST (REST)	11, 12	PIN 11:RST
		PIN 12:GND
PLED (System Power LED)	15, 16, 17	PIN 15:VCC
		PIN 16:NC
		PIN 17:GND
SPKR (Speaker)	21, 22, 23, 24	PIN 21:VCC
		PIN 22:GND
		PIN 23:NC
		PIN 24:SPEAK (BUZZ)

### 1.5 Form Factor



### 2 Features

### 2.1 Motherboard Components Placement



NO.	Description
1	ATX Power connector
2	VIA 693A
3	CPU of Slocket 370
4	DIMM slocktets
5	Floppy Disk connector
6	1th and 2th IDE connectors
7	AGP slot
8	VIA VT82C686A
9	ISA slot
10	PCI slots
11	COM2
11	Parallel connector
13	COM1
14	USB ports
15	PS2 Mous / Keyboard

### 2.2 Block Diagram



### 2.3 Specifications

#### Processor/Socket 370

Support 1 processor through Socket370 socket Supports 66M/100M/133MHz FSB Support Intel Celeron (Mendochino, PPGA) CPU from 300A and +. Support Intel Celeron (Cu-128, FCPGA) CPU from 533A to 700+MHz Support Intel Pentium III (Cu-256, FCPGA) CPU from 500 to 1GHz+ Support Cryix Samuel CPU from 433 to 500+MHz

#### **CPU Frequency Select**

Support S/W CPU speed auto detect method Support "Software assign ext. frequency" up to 166MHz (3 Steps Bye Bye Jumper) Support "Software assign CPU Multipier" from 3X to 12X Support Vcore selection by jumper Support VIO selection by jumper

#### Memory

Support PC66/PC100/PC133 SDRAM Support EDO,SDRAM,ESDRAM,VCM SDRAM Support 16M/64M/256M SDRAM technology Maximum memory up to 1.25GB/768MB when using 256M/ 64M-16M technology Support 3.3V Unbuffered / Registered DIMM Support Single-sided/Double-sided DIMMs Support ECC memory module

#### Graphics

Supports 2X AGP mode

#### IDE

Support 2 channel IDE interface up to 4 IDE Devices. Support Ultra DMA Bus Master with 66 MB/s burst data transfer rate. Support PIO mode up to Mode 4. Support LS120/ZIP drive.

#### USB

Support 2 UHCI Universal Serial Bus Port

#### Management

Support ACPI 1.0 and APM Support PCI PME# signal Support SMBus

#### **Expansion Slot**

Three DIMM sockets One AGP Slot Five PCI Slots One ISA Slot Two IDE connectors One FDC connectors

#### **Power Plane**

Support VRM 8.4 Support adjustable Vcore (16 settings 1.3~2.05V by 0.05V) Support adjustable Vio (Normal/Increase 5% & Increase 10%)

#### Others

Form Factor ATX 30.5 X 19.3 cm

## 3 Hardware Setup

### 3.1 Before Installation

For installation, you may need some or all of the following tools: Medium size flat blade screwdriver Medium size Phillips head screwdriver A 3/16 inch nut driver or wrench

Users must follow these guidelines to ensure the motherboard is protected during installation.

1.Make sure your computer is powered-off wheneven work in with inside components

2. The motherboard, like all other electronic equipment, is sensitive to static. Please take the proper precautions when handling it. If possible, ground yourself by touching a metal table or desk. keep the board in its conductive wrapping until it is configured and ready to be installed in your system.

3.Keep all magnets away from both your hard and floppy disk drives, especially magnetic screwdrivers. Keep both floppy and hard disks apart if disassembed.

4.Keep water and liquids away from your computer and its components.



### 3.2 Install the Processor

The CPU should have a fan attached to it to prevent overheating. If this is not the case, then purchase a fan before you turn on your system.



Be sure that there is sufficient air circulation across the processors heatsink by regularly checking that your CPU fan is working. Without sufficient circulation, the processor could overheat and damage both the processor and the motherboard. You may install an auxiliary fan, if necessary.

#### Chapter 3

#### Step1:

Locate the ZIF socket and open it by first pulling the lever of socket upward.





#### Step2:

Insert the CPU into the socket. Please keep the lever right angle when inserting CPU.



#### Step3:

When inserting the CPU please note the correct orientation as shown. The notched corner should point toward the end of the lever.





#### Step4:

Push the lever down to close the socket.







#### Step 5:

Attach the heatsink onto the CPU.



#### Step6:

Push the clip of heatsink downward to hock the ear of socket firmly.





#### Step7:

Finally, attach the fan cable to the CPU fan header FCPU.





### 3.3 Install Memory Modules

The motherboard has three Dual Inline Memory Module (DIMM) sockets and supports the maximum memory size up to 1.5GB. These DIMM sockets only support 3.3V unbuffered SDRAM modules. The motherboard also support SPD (Serial Presence Detect) architecture to provide the best choice for performance vs. stability.

#### Step 1:Open latches of DIMM socket



Step 2: Proofread the RAM module to the DIMM Socket.



Step 3:Insert the RAM module into the DIMM socket.



Step 4:Press the latches into the notches of the RAM module.



# 3.4 ATX Power Supply Connector

#### 3.4.1 Power on procedures

STEP	Description
1	After all connections are made, close thesystem case over.
2	Be sure that all switches are off.
3	Connect the power cord into the power suppply located on the back of your system case.
4	Connect the power coard a power outlet that is equipped with a surge protector.
5	Many of the power supply support 110V/220V by a switch setting. Switch your power supply to the correct supply voltage.
6	Turn on your system in the following order a. The monitor b. The external devices. c. The computer system.



The power LED on the front panel of the chassis will light. After few seconds, the system will then run poweron tests. Some additional messages will appear on the screen during the test. If you do not see anything within 30 seconds from the time you turn on the power, the system may have failed a power-on test. Recheck the jumper settings and connections or call your retailer for assistance.

#### **3.4.2** Power off procedures

STEP	Description
1	Exit from all the software applications.
2	shut down your operating system.
3	Switch off power button. If you are using Win 9X/2000/NT/98Me, the power supply should turm off automatically after Windows shut down.
4	Turn off all external devices.
5	Turn off your monitor.

### 3.5 Back Panel

Function	color	Description
PS2/Mous- e	Green	This connector can be used to support a PS/2 mouse
PS2/ keyboard	Purple	This connector can be used to support a PS/2 keyboard.
Universal Serial Bus	Black	This motherboard has two USB ports, any USB-compatible peripherals and/or hub can be connected into either USB port.
Serial port COM1& COM2	Teal	Two serial port is ready for a modem or other serial devices.
Parellel port	Burgundy	This connector is used for printers, or other parallel devices.



The PS/2 mouse and PS/2 keyboard can be autodetected by this motherboard. That means if you plug the PS/2 keyboard into the mouse connector, it still can work without any trouble and vice versa. It is recommended that you turn off the computer before connecting or disconnecting keyboard and/or mouse.

## 4 BIOS Setup

### 4.1 PhoenixNet Introduction

**PhoenixNet** is a *service* that provides PC users with best-of-breed, free, software services to support their PC hardware and software and to turn their computer into a powerful tool for communication, entertainment, education and business

#### 4.1.1 Internet Launch System

The PhoenixNet Internet Launch System (ILS) is a patentpending technology built into the firmware to enable online PC users worldwide to communicate with PhoenixNet and to receive the free PhoenixNet services. ILS resides safely within ROM and is activated the first time a user launches a PhoenixNet-enabled PC with a Windows 98 Operating System.

#### 4.1.2 PhoenixNet Online Services

When the PhoenixNet ILS detects an Internet connection, it makes contact with the PhoenixNet server and delivers userselectable services from PhoenixNet's Internet Partners. These services are delivered to the user as hotlinks on the desktop and in the web browser or, as applications that **PhoenixNet automatically packages, downloads and installs.** 

#### 4.1.3 PhoenixNet Online Services

Manage & protect your computer and your files Antivirus.com Driveway Help.com

Turn your computer into a communication tool RocketTalk FireTalk Adobe ActiveShare

Turn your computer into an entertainment center Real JukeBox NetRadio

Save time and money when shopping online MySimon CNET.com

#### Best of the WebjK

Portals: Lycos Snap Excite Yahoo ISPs:AOL

phoenix	AwardBIOS <sup>®</sup>	11:59 pm	phoenix net
Checking y	our computer hardwa	are:	
Processors Intel Celeron 866MHz	Memory: 128MB	Drive(s): HD 1: 4.6 GB HD 2: 10 G8 HD 3: 1.5 GB HD 4: 1.5 GB	Virus Scan: Pre=05 Scan Starting
Courses United Tables	press Tab key for Bi	05 information.	(nondr 1996 Kanto latinitation)

#### 4.1.4 User Boot

1	User reads system information from graphic Launch Screen.
2	User registers MS Windows and completes MS OOBE.
3	User accepts/Rejects PhoenixNet service.
4	User accepts/Rejects PhoenixNet ISP partnery.
5	PhoenixNet and ISP icon appear on desktop.

### 4.1.5 Internet Access

1	PhoenixNet sets desktop icons & browser defaults.
2	New browser window appears linking to <i>www.phoenixnet.com</i> .
3	User selects Phoenixnet partner software & services.
4	User enters name, e-mail and country
5	PhoenixNet downloads and installs selected partner software in the background, with one mouse-click.
6	User receives monetary reward by e-mail.
7	User receives ongoing PhoenixNet services to enhance their PC and Internet experience.

### 4.2 BIOS Setup

#### 4.2.1 Upgrade BIOS

The BIOS can be upgraded from a diskette with the Award Flash utility — AWDFLASH.EXE. The BIOS image file, and update utility are available from IWILL's WEB site: **www.** *iwill.net* 

#### 4.2.2 Enter BIOS setup program

Power-on the system by either pressing the Power-On button, or by using any of the power-on features provided by the motherboard. Then, press the <Del> key after the Power-On Self Test (POST), and before the scanning of IDE devices. Simply look for the message "Press DEL to enter SETUP" displayed at the bottom of the screen during the boot up process. If the message disappears before you've had a chance to respond, you can restart the system by Turning off the system power then turn it on again, or Pressing the "RESET" button on the system case, or Pressing <Ctrl>, <Alt> and <Del> keys simultaneously.



Generally, the BIOS default settings have been carefully chosen by the system manufacturer to provide the absolute maximum performance and reliability. It is very dangerous to change any setting without full understanding. We strongly recommend that you. DO NOT update your BIOS if the system works perfectly. DO NOT change any setting unless you fully understand what it means.

#### 4.2.3 Using BIOS setup program

ΛUp	Move to the previous field		
√Down	Move to the next field		
←Left	Move to the field on the left hand side		
→Right	Move to the field on the right hand side		
<esc></esc>	Quit from setup program without saving changes, or Exit from current menu page and return to main menu page		
<pgup> or &lt;+&gt;</pgup>	Select the previous value for a field		
<pgdn> or &lt;-&gt;</pgdn>	Select the next value for a field		
<f1></f1>	General Help		
<f2></f2>	Item Help		
<f5></f5>	Previous Values		
<f6></f6>	Fail-Safe Defaults		
<f7></f7>	Optimized Defaults		
<f10></f10>	Save the current value and exit setup program		

If the system is no longer able to boot after changing the settings, the only way to recover it is to clear the data stored in RTC CMOS. To reset the RTC CMOS data, take the JP1 jumper cap off pins 1-2, place onto pins 2-3, and then place back onto pins 1-2 again. This will return the RTC to the default setting. Then, get into the BIOS setup program , choose Load Fail-Safe Defaults ; Load Optimized Defaults, and select the original manufacturer default settings in your CMOS.

#### 4.3 Main Menu

The main menu allows you to select from several setup pages. Use the arrow keys to select among these pages and press <Enter> key to enter the sub-menu. A brief description of each highlighted selection appears at the bottom of the screen.



### 4.4 Standard CMOS Features

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software Standard CMOS Feature

Data (mm:dd:yy) Time (hh:mm:ss) IDE Primary Master IDE Primary Slave IDE Secondary Master IDE Secondary Slave	Wed, July 19 2000 16: 53: 24 Press Enter None Press Enter None Press Enter None Press Enter None	item Help Menu Level►
Drive A Drive B Floppy 3 Mode Support	1.44M, 3.5 in. None Disabled	
Video Halt On	EGA/VGA All errors	
Base Memory Extended Memory Total Memory	640K 64512K 65536K	

Move Enter Select +/-/PU/PD:Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fall-Safe Defaults F7: Optimized Defaults

#### 4.4.1Date

This field specifies the current date. The date format is <month>, <day>, and <year>.

#### 4.4.2 Time

This field specifies the current time. The time format is <hour>, <minute>, and <second>. The time is calculated based on the 24-hour (military-time) clock.
# 4.4.3 IDE Primary Master / Primary Slave / Secondary Master / Secondary Slave

Press "Enter" to enter next page for detail hard drive setting.

4.4.3.1 IDE HDD Auto-Detection

Auto-Detect the HDDs Capacity, and its parameters, ex: Cylinder, Head and Sector.

4.4.3.2 IDE Primary Master / Primary Slave / Secondary Master / Secondary Slave

This field specifies type of drive that corresponds to the drive installed in your system. If you select User, please specify the correct number of Cylinders, Heads, and Sectors.

Manual	Selecting anual lets you set the remaining fields on this screen. Selects the type of fixed disk.
Auto <b>(Default Vaule)</b>	BIOS automatically fills in the values for the cylinders, heads and sectors fields.
None	Any Disk Drives are attached

4.4.3.3 Capacity Auto Display your disk drive size

4.4.3.4 Access MODE

This field specifies the IDE translation mode.

NORMAL	Specifies traditional CHS addressing mode.
LARGE	Specifies extended CHS translation mode
LBA	Specifies LBA translation mode.
AUTO <b>(Default Vaule)</b>	BIOS specifies translation method automatically.

4.4.3.5 Cylinders

Set the number of cylinders for this hard disk.

4.4.3.6 Heads

Set the number of read/write heads

4.4.3.7 Precomp

Setting a value of 65535 means no hard disk

4.4.3.8 Sectors

Set the number of sectors per track

# 4.4.4 Drive A / Drive B

This field specifies the traditional type of floppy drives.

None (*Drive B default)	Any Floppy drive is connected	
360K, 5.25 in.	Specifies extended CHS translation mode	
1.2M, 5.25 in.	A 1.2M floppy drive is connected	
720K, 3.5 in.	A 720K floppy drive is connected.	
1.44M, 3.5 in. <b>(*Drive B default)</b>	A 1.44M floppy drive is connected	
2.88M, 3.5 in.	A 2.88M floppy drive is connected	

# 4.4.5 Floppy 3 Mode Support

3 Mode floppy drive is a type of 3.5-inch drive used by NEC PC98 computers. It supports both 1.2M and 1.44M formats using the same drive. This field specifies which drive supports 3 Mode. When a floppy drive is specified to support 3 Mode, the respective drive setting in "Drive A / Drive B" field will be invalid.

Disabled <b>(Default Value)</b>	No 3 Mode drive is connectedd
Drive A	A 3 Mode drive is connected as drive A
Drive B	A 3 Mode drive is connected as drive B
Both	Both drive A and drive B are 3 Mode drives

#### 4.4.6 Video

EGA/VGA <b>(Default Value)</b>	Specifies EGA or VGA adapterd	
CGA 40	Specifies CGA adapter with 40 column mode	
CGA 80	Specifies CGA adapter with 80 column mode	
MONO	Specifies Monochrome adapter	

# 4.4.7 Halt On

All Errors <b>(Default Value)</b>	Each time the BIOS detects a non-fatal error, the system will stop and display an error message
No Errors	The system will stop for any errors that are detected
All, But Keyboard	The system will stop for any errors except keyboard error
All, But Diskette	The system will stop for any errors except diskette error
All, But Disk/Key	The system will stop for any errors except diskette and key board errors

### 4.4.8 Base Memory

The POST (Power-On Self Test) determines the amount of base (conventional) memory installed in the system. The value of the base memory is typically 640K. This field has no options.

# 4.4.9 Extended Memory

The BIOS determines how much extended memory is present during the POST. This is the amount of memory located above 1MB in the processor's memory address map. This field has no options.

# 4.4.10Total Memory

Displays the total memory available in the system

# 4.5 Advanced BIOS Features

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software Advanced BIOS Feature

Anti-Virus Protection CPU Internal Cache External Cache CPU L2 Cache ECC Checking Proccessor Number Feature Quick Power On Self Test First Boot Device Second Boot Device Boot Other Device Boot Other Device Swap Floppy Drive Boot Up Floppy Seek Boot Up NumLock Status Gate A20 Option Typematic Rate Setting Typematic Rate (Chars/sec) Typematic Delay (Msec) Security Option OS Select For DRAM >64MB Report No FDD For WIN 95 Video BIOS Shadow C8000-CBFFF Shadow D0000-D3FFF Shadow D4000-D7FFF Shadow D6000-DFFFF Shadow	Disabled Enabled Disabled Disabled Enabled Floppy HDD-0 SCSI Enabled Disabled Disabled 6 250 Setup Non-OS2 NO Enabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled	Item Help Menu Level►
---	---	--------------------------

→↑←↓:Move Enter Select +/-/PU/PD:Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

# 4.5.1 Anti-Virus Protection

When this function is enabled, the BIOS monitor the boot sector and partition table of the hard disk drive for any attempt at modification. If an attempt is made, the BIOS will halt the system and then display an error message. Afterwards, if necessary, you can run an anti-virus program to locate and remove the problem before any damage is done.

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

Enable, Disabled (Default Value)

# 4.5.2 CPU Internal Cache

This field configures the CPU internal cache (L1 cache).

Enable (Default Value), Disabled

# 4.5.3 External Cache

This field configures the system's external cache (L2 cache).

```
Enable (Default Value), Disabled
```

# 4.5.4 CPU L2 Cache ECC Checking

This field specifies whether the CPU L2 cache supports ECC or not.

Enable, Disabled (Default Value)

#### 4.5.5 Proccessor Number Feature

Enable, Disabled (Default Value)

# 4.5.6 Quick Power On Self Test

This field allows the system to skip certain tests while booting. This will decrease the time needed to boot the system.

Enable (Default Value), Disabled

# 4.5.7 First / Secondary / Third / Other Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items.

Floppy, LS/ZIP, HDD-0, SCSI, CDROM, HDD-1, HDD-2, HDD-3, LAN, Disabled

# 4.5.8 Swap Floppy Drive

When enabled, floppy drives A and B will be exchanged without the user physically changing the connection on the cable.

Enable, Disabled (Default Value)

# 4.5.9 Boot Up Floppy Seek

Seeks disk drives during boot up. Disabling speeds boot up.

Enable(Default Value), Disabled

# 4.5.10Boot Up Num Lock Status

This field determines the configuration of the numeric keypad after system boot up. If On, the keypad uses numbers keys. If Off, the keypad uses arrow keys.

ON (Default Value), Off

# 4.5.11Gate A20 Option

This field configures how the gate A20 is handled. The gate A20 is a device used to address memory above 1 MB. At first, the gate A20 was handled from a pin on the keyboard. While some keyboards still provide this support, it is more common, and much faster, for modern system chipsets to provide support for gate A20.

Fast	GateA20 signal supported by core logic.
Normal <b>(Default Vaule</b> )	GateA20 signal supported by keyboard controller.

# 4.5.12Typematic Rate Setting

This field determines if the typematic rate is to be used. When enabled, the BIOS will report (after a moment) that the key has been depressed repeatedly. When disabled, the BIOS will report only once if a key is held down continuously. This feature is used to accelerate cursor movements using the arrow keys.

Enable, Disabled (Default Value)

# 4.5.13Typematic Rate (Chars/Sec)

When Typematic Rate Setting enabled, this field specifies how many characters will be displayed in one second when a key is held down continuously.

6 (Default Value) 8,10, 12,15,20,24,30

# 4.5.14Typematic Delay (Msec)

When enabled, typematic delay allows you to select the time delay between when the key is first pressed and when the acceleration begins.

250msec (Default Value) 500msec, 750msec, 1000msec

# 4.5.15Security Option

This field configures how the system security is handled. It works conjunction with SETTING SUPERVISOR / USER PASSWORD page to control the security level of the system.

Setup <b>(Default Value)</b>	System needs a password to enter BIOS setup program
System	System needs a password to boot

# 4.5.16OS Select for DRAM >64MB

When enabled, this field allows you to access the memory that is over 64MB under OS/2.

OS2, Non-OS2 (Default Value)

# 4.5.17Report No FDD For WIN 95

For a floppy diskless system that runs Windows 95, this field should be set to Yes.

YES, NO (Default Value)

# 4.5.18Video BIOS Shadow

When enabled, the video BIOS will be copied to system memory and increase the video speed.

Enable(Default Value), Disabled

# 4.5.19C8000-CBFFF/CC000-CFFFF/D0000-D3FFF Shadow D4000-D7FFF/D8000-DBFFF/DC000-DFFFF Shadow

Enable, Disabled (Default Value)

# 4.6 Advanced Chipset Features

This setup page is used to specify advanced features available through the chipset. The default settings have been chosen carefully for most operating conditions. DO NOT change the value of any field in this setup page without full understanding.

SDRAM Cycle Length SDRAM Bank Interleave DRAM Clock DRAM Parity/ECC check DRAM Parity/ECC check Memory Hole System BIOS Cacheable Video RAM Cacheable AGP Aperture Size AGP-2X Mode PCI Dynamic Bursting PCI Delay Transaction OnChip USB Port USB Keyboard Under DOS	3 By SPD Host CLK Disabled Disabled Enabled Enabled Enabled Enabled Enabled Disabled Disabled Disabled	Item Help enu Level►
--	--	-------------------------

# **SDRAM Settings**

The first chipset settings deal with CPU access to SDRAM. The default timings have been carefully chosen and should only be altered if data is being lost. Such a scenario might well occur if your system had mixed speed SDRAM chips installed. Longer delays might result, however this preserves the integrity of the data held in the slower memory chips.

# 4.6.1 SDRAM Cycle Length

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. Do not reset this field from the default value specified by the system designer.

2, 3 (Default Value)

# 4.6.2 SDRAM Bank Interleave

Select numbers of Bank to Bank to realize fast and seamless data access mode amony many different pages.

By SPD (Default Vaule), 2 Banks, 4 Banks

# 4.6.3 DRAM Clock

This field allows you to select the DRAM operating frequency to get better performance.

Host Clk <b>(Default Value)</b>	DRAM clock is the same speed as Front Side Bus
HCLK-33 MHz	DRAM clock is set 33 MHz less than the Front Side Bus
HCLK+33 MHz	DRAM clock is set 33 MHz more than the Front Side Bus

# 4.6.4 DRAM Parity/ECC check

Enable, Disabled (Default Value)

# 4.6.5 Memory Hole

In order to improve performance, certain space in memory is reserved for ISA cards. This memory must be mapped into the memory space below 16MB.

15M-16M, Disabled (Default Value)

# 4.6.6System BIOS Cacheable

When enable accesses to the system BIOS will be cached

Enable (Default Value), Disabled

# 4.6.7 Video RAM Cacheable

When enabled, access to the video memory located at A0000H to BFFFFH will be cached.

Enable, Disabled (Default Value)

# 4.6.8 AGP Aperture Size

This field specifies the size of system memory that can be used for AGP graphics aperture.

4M,8M,16M,32M,64M (Default Value), 128M

# 4.6.9 AGP-2X Mode

This item allows you to enable/disable the AGP-2X Mode.

Enable (Default Value), Disabled

# 4.6.10PCI Dynamic Bursting

When enabled, every write transaction goes to the write buffer, and burstable transactions will then burst on the PCI bus, and non-burstable transactions won't burst on the PCI bus.

When disabled, if the write transaction is a burst transaction, the information goes into the write buffer and burst transfers are later performed on the PCI bus. If the transaction is not a burst transaction, PCI write occurs immediately (after a write buffer flush).

Enable (Default Value), Disabled

# 4.6.11PCI Delayed Transaction

The chipset has embedded 32-bit posted writer buffer to support delayed transaction cycles. When enable, the system is compliant with PCI specificationversion 2.2.

Enable (Default Value), Disabled

# 4.6.12OnChip USB Port

This should be enabled if your system have USB ports external on the system board and you wish to use it. Even when so equipped, if you add a higher performance controller, you will need to disable this feature.

Enabled, Disabled (Default Value)

# 4.6.13USB Keyboard Under DOS

Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have a USB keyboard under DOS.

Enabled, Disabled (Default Value)

# 4.7 Integrated Peripherals

CMOS Setup Utility-Copyright Integrated	(C) 1984-2000 Peripherals	Award Software
On-Chip IDE Channel0 On-Chip IDE Channel1 Primary Master PIO Secondary Master PIO Secondary Master PIO Primary Master UDMA Primary Slave UDMA Secondary Master UDMA Secondary Master UDMA Secondary Slave UDMA Init Display First IDE HDD Block Mode Onboard FDC Controller Onboard Serial Port 1 Onboard Serial Port 2 COM 2 Mode Select RxD TxD Active IR Duplex Mode Onboard Parallel Port Onboard Parallel Mode ECP Mode Use DMA Parallel Port EPP Type	Enabled Enabled Auto Auto Auto Auto Auto Auto Auto Auto	Item Help Menu Level►

→↑←↓:Move Enter Select + /-/PW/PD:Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

# 4.7.1 On-Chip Primary IDE Channel 0

This field enables or disables the onboard IDE controller.

Enable (Default Value), Disabled

# 4.7.2 On-Chip Secondary IDE Channel 1

This field enables or disables the onboard IDE controller.

Enable (Default Value), Disabled

# 4.7.3 Primary Master / Slave PIO Secondary Master / Slave PIO

Mode 3

Mode 4

These fields configure the PIO (Programmable Input Output) transfer mode for each IDE devices. The maximum transfer rates of each PIO mode are listing as follow:

PIO Mode 1 PIO Mode 2 PIO Mode 3 PIO Mode 4	<ul> <li>5.2 MB/sec</li> <li>8.3 MB/sec</li> <li>11 MB/sec</li> <li>16.6 MB/sec</li> </ul>
Auto <b>(Default Valu</b>	e) Negotiated with device automatically
Mode 0	Use Mode 0 timing to access device
Mode 1	Use Mode 1 timing to access device

Use Mode 3 timing to access device

Use Mode 4 timing to access device

### 4.7.4Primary Master / Slave UDMA Secondary Master / Slave UDMA

If you select Auto, the IDE controller uses Ultra DMA 33/66 Mode to access Ultra DMA-capable IDE devices.

Disabled, Auto (Default Value)

# 4.7.5 Init Display First

This item allows you to decide which slot to activate first, either PCI slot or AGP slot.

PCI Slot ,AGP (Default Value)

# 4.7.6 IDE HDD Block Mode

When enabled, the IDE controller will use the faster block mode to access devices.

Enable (Default Value), Disabled

# 4.7.7 Onboard FDC Controller

This field enables or disables the onboard floppy controller.

Enable (Default Value), Disabled

# 4.7.8 Onboard Serial Port 1 / 2

These fields configure the onboard serial ports. There are several port addresses and IRQ channels to select from.

3F8 / IRQ 4 (Default Vaule)	Port address 3F8h, IRQ 4
2F8 / IRQ 3	Port address 2F8h, IRQ 3
3E8 / IRQ 4	Port address 3E8h, IRQ 4
2E8 / IRQ 3	Port address 2E8h, IRQ 3
Auto	BIOS assigns port address and IRQ channel automatically.
Disabled.	Disables serial port

# 4.7.9 COM2 Mode Select

A second serial port is using a serial port bracket connected from the motherboard to an expansion slot opening.

Standard (Default Value), HPSIR, ASKIR

4.7.9.1RxD, TxD Active

When setting the field to either IrDA or ASKIR, you must select the active level of receiving and transmission signal.

Hi, Lo (Default Value) /Lo, Hi/Lo, Lo/Hi, Hi

4.7.9.2IR Duplex Mode

When setting the field to either HPSIR or ASKIR, you must select the mode of receiving and transmitting signals.

Half (Default Value) ,Full

# 4.7.10Onboard Parallel Port

This field configures the onboard parallel port. There are several port addresses and IRQ channels to select from.

378 / IRQ 7 (Default Value)	Port address 378h, IRQ 7
278 / IRQ 5	Port address 278h, IRQ 5
3BC / IRQ 7	Port address 3BCh, IRQ 7
Disabled	Disables parallel port

#### 4.7.11 Parallel Port Mode

This field configures the operating mode of an onboard parallel port. Ensure you know the specifications of your parallel port devices before selecting field.

```
Normal(Default Value), EPP, ECP, ECP+EPP
```

# 4.7.12ECP Mode Use DMA

When the Parallel Port Mode field is configured as ECP, it needs a DMA channel for data transfer. This field specifies the DMA channel for ECP parallel port use.

1	Use DMA channel 1
3(Default Value)	Use DMA channel 1

# 4.7.13EPP Mode Select

When the Parallel Port Mode field is configured as EPP, ECP+EPP mode, the EPP version needs to be specified. Please refer to ypur peripheral document before selecting field.

EPP1.7	Use EPP 1.7 protocol
EPP1.9 <b>(Default Value)</b>	Use EPP 1.9 protocol

# 4.8 Power Management Setup

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software Power Management Setup

|--|

 Wove Enter Select +/-/PU/PD:Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fall-Safe Defaults F7: Optimized Defaults

Each power-saving mode has a respective timer. The value of the timer can be assigned or reloaded and it will count down to zero. When the timer equals to zero, the system will be forced into the related suspend or power-saving mode. If any predefined signal or event is detected during the timer counting period, the timer restarts automatically.

# 4.8.1 Power Management

This feature allows the user to select the default parameters for the power-saving mode.

Min saving	When idle for one hour, the system entersuspend mode.	
Max Saving	When idle for fifteen minutes, the system enters suspend mode.	
User Define (Default Vaule)	User can specify the time the system enters suspend mode.	

#### 4.8.1.1 APM HDD Power Down Timer

This field specifies the time the system enters HDD power down. It is available only when the Power Management field is set to User Define.

1Min, 2Min, 3Min, 4Min, 5Min, 6Min, 7Min, 8Min, 9Min, 10Min,11Min, 12Min,13Min, 14Min, 15Min, Disable **(Default Value)** 

#### 4.8.1.2 APM Doze Timer Mode

This field specifies the timer value of Doze Mode. It is available only when the Power Management field set to User Define.

1Min, 2Min, 4Min, 6Min, 8Min, 10Min, 20Min, 30Min, 40Min, 1Hour, Disable **(Default Value)** 

#### 4.8.1.3 APM Suspend Timer

This field specifies the time the system enters powersaving mode. It is available only when the Power Management field is set to User Define.

1Min, 2Min, 4Min, 6Min, 8Min 10Min, 20Min,30Min, 40Min, 1Hour, Disable (Default Value)

# 4.8.2 PM Control by APM

When enabled, an Advanced Power Management (APM) protocol will be activated to handle the power-saving mode.

NO, Yes (Default Value)

# 4.8.3 Video off Option

This field specifies the method that video subsystem used for power saving.

Always ON	Monitor will remain on during power saving modes.
Suspend Off ( <b>Default Value)</b>	Monitor blanked when the systems enters the Suspend modes
All Modes Off	Monitor blanked when the system enters any power saving mode.

#### 4.8.4 Video off Method

V/H SYNC Blank <b>(Default Vaule)</b>	Turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.	
Blank Screen	Screen Writes blanks to the video buffer onlye.	
DPMS Support	Initial display power management signaling with DPMS.	

# 4.8.5MODEM Use IRQ

This determines the IRQ in which the Modem can use.

```
3(Default Value) , 4, 5, 7, 9,11, NA
```

# 4.8.6 PWR-Off Mode by PWR-BTTN

This field specifies the function of power button.

Instant-Off (Default Vaule)	When power button pressed, the system turns off immediately
Delay 4 Sec.	After the power button has been pressed and held for four seconds, the system turns off

# 4.8.7 Wake Up Events

These 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 effect, the system remains alert for anything that occurs to a device configured and recognized by the system, even when the system is in a power down mode.

4.8.7.1 VGA

When ON, your can set the VGA to awaken the system.

OFF (Default Value), ON

4.8.7.2 LPT & COM

When On, any activity from one of the listed system peripheral devices or IRQs wakes up the system.

LPT/COM (Default Value), COM, LPT, None

4.8.7.3 HDD & FDD

When On, any activity from either hard disk drive or floppy disk drive wakes up the system.

ON (Default Value), OFF

#### 4.8.7.4 DMA master

When On, the system can be resumed from power saving mode by any DMA master activity signal.

#### OFF (Default Value), ON

4.8.7.5 Wake up by PCI card

When enabled, you can "wake-up" your system using a PCI rev.2.2 card, such as a WOL card, connected in your PCI slot.

Enabled, Disabled (Default Value)

4.8.7.6 Wake Up by Ring/LAN

When enabled, the PC can power-on through an external modem connected to your PC. For example, you may send an e-mail message to your PC from another location, and this will power-on your PC. When using this feature, you must have a modem, and your PC must be turned off.

#### Enabled, Disabled (Default)

4.8.7.7 PWROn/Resume by Alarm

When enabled, you can set the date and time to automatically power-on your PC (similar to an alarm clock). The alarm from RTC (real-time clock) automatically turns on the system.

Enabled	Sets Date (0-31) and Timer (hr, min, sec) to power-on the PC. When date is set to 0, the Timer is set for every day.
Disabled <b>(Default Vaule)</b>	Disables RTC alarm function

4.8.7.8 Primary INTR

#### ON ,OFF, Default (Default Vaule)

4.8.7.9Primar INTR

#### ON, OFF, Disabled (Default Value)

#### 4.8.7.10IRQs Activity Monitoring

When On, any event that occurs will awaken the system after it has powered-down. The following is a list of IRQs, or Interrupt Requests, which can be exempted much as the COM ports and LPT ports above can. When an I/O device wants to gain the attention of the operating system, it signals this by causing an IRQ to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service.

# 4.9 PnP/PCI Configurations

PNP OS Installed Reset Configuration Data	NO Disabled	item Help Menu Level►
Resources Controlled By IRQ Resources	Auto(ESCD) Press Enter	
PCI/VGA Palette Snoop PCI1 IRQ PCI2/ IRQ PCI3 IRQ PCI4/PCI5 IRQ	Disabled Use Auto Use Auto Use Auto	

# 4.9.1 PNP OS Installed

The field specifies whether a Plug and Play operating system is installed.

Yes, NO (Default Value)

# 4.9.2 Reset Configuration Data

Normally, you leave this field Disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system can not boot.

Enable, Disabled (Default Value)

# 4.9.3 Resources Controlled By

The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as WindowsÒ98/95/NT. If you set this field to "manual" choose specific resources by going into each of the sub menu that follows this field (a sub menu is preceded by a "Ø").

Manual	Resources controlled by the user.
Auto(ESCD) <b>(Default Vaule)</b>	Resources controlled by BIOS automatically.

#### 4.9.3.1 IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt. 4.9.3.1.1IRQ3/4/5/7/9/10/11/12/14/15 assigned to

PCI Device Reserved (Default Value)

# 4.9.4 PCI / VGA Palette Snoop

This field controls the ability of a primary PCI graphics controller to share a common palette with an ISA/VESA video or MPEG card.

Enabled	PCI VGA co-works with ISA MPEG card
Disabled <b>(Default Vaule)</b>	All cases except above.
4.9.4.1-5 PCI 1 IRC PCI 2 IRQ PCI 3 IRQ PCI 4/PCI These fields PCI slot. Th which uses	5 s set how IRQ use is determined for each ne default setting for each field is Auto, auto-routing to determine IRQ use.
Auto (Default Val	u <b>e)</b> 3, 4, 5, 7, 9, 10,11,12,14,15

# 4.10 PC Health Status

This page is monitoring your status of computer. On the screen displays CPU/System temperature, FAN speed, and voltages.

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software PC Health Status

# 4.11 Iwill Smart Setting

CMOS Setup Utility-Copyright(C) 1984-2000 Award Software Iwill smart Setting				
THE CPU IS THE CPU ID IS THE CPU EXPECT SPEED IS CPU Micro Code Updated to		ltem Help Menu Level►		
Spread Spectrum CPU/PCI Clock CPU Clock Ratio BIOS-ROM Flash Protect	Disabled 66/33 MHz X 3 Non-Flash			

#### CPU FREQUENCY SETUP

In general, when adjusting the CPU frequency, you should select a matched bus frequency for both the CPU and the motherboard. The reason is that your CPU can only communicate with its external components at the same speed at which the components operate. In other words, if your motherboard bus speed is 100 MHz, you should start by selecting 100 MHz (as a "base") to set the CPU frequency. This frequency is also referred to as the "system bus frequency" or external frequency.

**To understand how does CPU works**, and how does it related to FSB and multiplier, here is the example:

CPU speed = FSB x Multiplier (CPU Ratio)

800Mhz = 100Mhz x 8

#### How to setup CPU frequency in IWILL Smart Setting

IWILL provides a triple stepping system bus selection in VA series motherboards. It allows user to select various FSB speed ranging from  $66MHz \sim 133Mhz$ . This section will describe how does this works.





- Leave JP3 pin 1-2 ON & pin 3-4 ON, allows user to select the following FSB. Auto(Default)
- Leave JP3 pin 9-10 ON & JP3 pin 11-12 ON, allows user to select the following FSB.
   66 MHz.
- Leave JP3 pin 11-12 ON , allows user to select the following FSB.
   100MHz
- Leave JP3 pin1-12 OFF , allows user to select the following FSB.
   133MHz

#### For example:

If you purchased a 800 MHz (133Mhz FSB) Intel® Pentium III CPU, leaves JP3 pin1-12 OFF. Enter IWILL Smart Setting<sup>™</sup>, setup your CPU frequency by selecting 133 MHz (system bus frequency) x 6 (multiplier), which equals 800MHz (your CPU frequency), saves it in before leaving the BIOS setting to complete the CPU frequency setting.

If you purchased a 800 MHz (100Mhz FSB) Intel® Pentium III CPU, leave JP3 pin 11-12 ON. Enter IWILL Smart Setting<sup>™</sup>, setup your CPU frequency by selecting 100 MHz (system bus frequency) x 8 (multiplier), which equals 800MHz (your CPU frequency), saves it in before leaving the BIOS setting to complete the CPU frequency setting. If you purchase a 533 MHz (66Mhz FSB) Intel® Celeron CPU, leave JP3 pin 9-10 ON & JP3 pin 11-12 ON. Enter IWILL Smart Setting<sup>™</sup>, setup your CPU frequency by selecting 66MHz (system bus frequency) x 8 (multiplier), which equals 533 MHz (your CPU frequency), saves it in before leaving the BIOS setting to complete the CPU frequency setting.

However, the fact is, most of the CPU in the market now comes with multiplier locked. No effect will be taken even the multiplier setting is altered in the IWILL Smart Setting. Furthermore, a higher system bus frequency (FSB) has a much better performance than a slower system bus frequency.

# Note: BIOS will auto-detect and display your CPU Ratio (Multiplier).

# 4.11.1Spread Spectrum

This item configures radiation emitted from the system. When enabled, system will release less radiation.

#### Enabled, Disabled (Default Value)

# 4.11.2CPU/PCI Clock

This field allows user to adjust the CPU external and to show the PCI clock.

# 4.11.3CPU Clock Ratio

3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8 8.5, 9, 9.5, 10, 11.5, 12

Note:BIOS will auto-detect and display your CPU Ratio



Over-clocking is not guaranteed. Users must have substantial knowledge of proper CPU relative to adjusting CPU speeds. Over-clocking should be done only by experienced engineers who conduct tests.

# 4.11.4BIOS-ROM Flash Protect

Non-Fresh <b>(Default Vaule</b> )	By BIOS
Freshable	By BIOS

# 4.12 Load Fail Safe Defaults

When you press <Enter> on this item you get a confirmation dialog box with a message similar to: Pressing 'Y' loads the BIOS default values for the most stable, minimal-performance system operations.



# 4.13 Load Optimized Defaults

When you press <Enter> on this item you get a confirmation dialog box with a message similar to:


# 4.14 Set Supervisor/ User Password Setting



These setup pages are used for password setting. When a password has been enabled and the Security Option field is set as Setup, you will be required to enter the password every time you try to enter BIOS Setup program. This prevents an unauthorized person from changing any part of your system configuration. Additionally, if the Security Option field is set as Boot, the BIOS will request a password every time your system boot. This would prevent unauthorized use of your computer.

In you wish to use this function, bring the cursor to this field, then press <Enter>. The computer will display the message, "Enter Password". Type your password and press <Enter>. After the message onfirm Password" is displayed, re-type your password. The Supervisor Password function will be in effect after you save and exit setup.

To disable a password, bring the cursor to this field, then press <Enter>. The computer will display the message, "Enter Password". Press <Enter>. A message will confirm that the password is disabled. Once the password is disabled, the system will boot and you can enter setup program freely.

# 4.15 Save & Exit Setup

Saves current CMOS value and exit BIOS setup program.

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## 4.16 Exit Without Saving

Abandons all CMOS value changes and exits BIOS setup program.

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# 5 Power Installer CD

# 5.1 Software Installation

The attached Power Installer CD contains all the necessary drivers, utilities. It provides an easy way for users to install the needed drivers without going through a complicated process. The Power Installer CD is able to auto-detect and display the drivers, utilities needed for your motherboard.

# 5.1.1 What's inside Power Installer CD for this motherboard

Driver	Software Utility
Service Pack Driver	PC-Cillin Anti-Virus
USB device driver	Hardware Monitor Utility
High Point XStore Pro	Suspend To Disk Guide
Award Patch File	Adobe Acrobat Reader
User's Manual	Audio Application Utility (For Windows 98/NT only)
	Make Driver Exit

# 5.2 How to use the Power installer CD

The Power Installer CD supports the Auto Run program under Windows 98/95/2000 and Windows NT operating systems. All the necessary drivers, utilities and manual for this motherboard will show on the screen.

Power Installer does not support a keyboard at this moment. You must use a mouse to install it.

#### 5.2.1 How to view manual

This Power Installer CD includes detailed information of all manuals for every motherboard manufactured. Please insert the Power Installer CD into the CD-ROM drive; Click the "View Manual" item, and select the product that you want to view.

## 5.3 How to make driver diskette

#### 5.3.1 Without O.S. installed

This bootable Power Installer CD also allows you to boot up your system, even when the OS has not been installed. During the boot-up process, you can perform Diskette Creator, which will automatically make the driver diskettes you need. Follow the instructions below to make your own device driver floppy diskettes if you have a CD-ROM with IDE interface. If you have already installed SCSI CD-OM, please make sure your SCSI host adapter supports bootable CD-ROM, and then proceed directly to step 8, and then finish the procedure.

-	
STEP 1	First, power-on or <b>boot</b> your system.
STEP 2	Press < <b>Del</b> > key during boot sequence to enter CMOS Setup Utility.
STEP 3	Use arrow keys to select ADVANCED BIOS FEATURES on the menu, then press Enter.
STEP 4	Select <b>First Boot Device</b> and change the default setting to <b>CDROM</b> using Page Up /Page Down key.
STEP 5	Press < <b>Esc</b> > key to go back to CMOS SETUP Utility menu.
STEP 6	Press < <b>F10</b> > to select Save and Exit Setup.
STEP 7	Press <b>Y</b> then Enter to complete. Now you are able to boot up the system from the CD-ROM.
STEP 8	Insert the Power Installer CD into the CD-ROM drive and re-start the computer.
STEP 9	The Diskette Creator will now execute automatically for making your own driver disketes.
STEP10	Make the desired driver diskettes according to the instructions displayed on screen.

#### 5.3.2Under windows 2000/98/98SE/98Me/NT

You may just click on the software **Make Driver Diskettes Utility** shown on screen, then select the driver you need, follow the messages shown on screen to complete.

#### 5.4 Install driver

#### 5.4.1 How to install Service Pack Driver

You may just click on the **Service Pack Driver** shown on screen that needs to be installed, then follow the prompts to complete setup.

#### 5.4.2 How to install USB device driver

This should be **enable of On chip USB Port** (Select Advanced Chipset Features on the menu.) if you install the USB device driver.

You may just click on the **USB device driver** Driver shown on screen that needs to be installed, then follow the prompts to complete setup.

#### 5.4.3How to Install High Point XStore Driver

You may just click on the **High Point XStore Driver** shown on screen that needs to be installed, then follow the prompts to complete setup.

#### 5.4.4 How to install Award Patch Driver

You may just click on the **Award Patch Driver** shown on screen that needs to be installed, then follow the prompts to complete setup.

# 5.5 Install Software Utility

#### 5.5.1 How to use PC-Cillin Anti-Virus program

Simply click on the **PC-Cillin Anti-Virus** shown on screen that be installed, then follow the prompts to complete setup.

#### 5.5.2 How to use Hardware Monitoring Utility

You may just click on the **Hardware Monitor Utility** shown on screen then follow the prompts to complete setup.

#### 5.5.3 How to use Suspend To Disk Guide

Please follow the steps on the document to complete setup.

#### 5.5.4 How to use Adobe Acrobat Reader

You may just click on the **Adobe Acrobat Reader** shown on screen then follow the prompts to complete setup.