845GV-ISA Mainboard

User's Manual

Rev: 1.1

Date: 2007.1

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Chapter 1 Package Contents

Your mainboard package contains the following items:

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1 One mainboard
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- 2 One 80-Pin Ultra DMA 66/100 IDE drive ribbon cable
- 3 One 34-Pin Floppy drive ribbon cable
- 4 Software install CD
- 5 One user's manual
- 6 One I/O Backboard

Chapter 2 Introduction

This mainboard has the Intel 845 chipset that contains Intel 82845GV Memory Controller Hub and Intel 82801DB I/O Controller Hub. This mainboard has a Socket-478 support for Intel Pentium4 processors with front-side bus(FSB)speeds up to 400/533,supports DDR200/DDR266 memory bus, supports AC97 audio codec ,integrated AC97 audio that supports full surround sound with up to Two channels, front panel audio output function, provides Ultra DMA66/100 function, the integrated display function technologies without extend display card ,provides Two PCI slots. The mainboard integrated mainboard, VGA card, sound card .

Key Features:

-Chipset: Intel 845GV chipset GMCH: Intel 82845GV; ICH4: Intel 82801DB

-Processor:

Supports Intel Celeron CPU Socket 478 CPU Supports Intel Pentium4 (Northwood) Socket 478 CPU Supports Intel Pentium4 (Willamette) Socket 478 CPU Supports Intel Pentium4 (Prescott) Socket 478 CPU

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Supports Intel Celeron D (Prescott) Socket 478 CPU -Supports 400/533MHz HOST BUS Frequency

-Memory Support:

Supports DDR200/DDR266 Memory; Two 184-pin DIMM slots for DDR SDRAM memory modules

-Integrated display function technologies without extend VGA card Integrated 2D/3D Graphics Controller

-USB Ports

Six USB ports Supports compliant with Universal Serial Bus Specification Revision 2.0

-IDE Port Provides two channel connecting four IDE drives Supports Ultra ATA66/100 synchronous DMA modes

-I/O Ports One floppy port support format 360K/720K/1.2M/1.44M/2.88M disk driver One serial ports One parallel port maximum four extra ports) One PS/2 Keyboard port One PS/2 Mouse One MIDI port One IrDA port support 115.2KB/S transfers data. -Onboard AC' 97 2.0 specification compliant Support 16bit stereo codec Multiple stereo input mixer Provides onboard Line-in jack, Line-out jack, Microphone-in jack

-Expansion Slot

Two PCI slots 2.2 specification compliant

One AGP 4X

One ISA

-Dimension

Micro ATX form factor

Chapter 3 Mainboard Locations S//2MS S/2KB BAT SOCKET478 LPTI 1 Md X248L REV:1. DIMM1 DIMM2 FAN2 Setting OPEN 533 SB1 2 JIP1 40 5-3 umber 0LD 5 CONT Intel 845 SINC CLOCK AGP AC' 97 CD_IN PCI1 88.6 ICH4 PCI2 BIOS 183629D RTL81000 W83628F I/0 ISA F_PANEL ED

Chapter 4 Installation

4.1 Jumper Setting and Slot

FSB CPU Frequency Jumper Setting

JUPER	AUTO (Default)	400	533
JP1	1-2	2-3	OPEN

JP3: Clear CMOS Jumper Setting

1-2 (Default)	Normal
2-3	Clear CMOS

Audio: Front panel Jumper setting

PIN	Function	PIN	Function
1	MIC+	2	Ground
3	Vbias	4	AuD_Vcc(AVCC)
5	AuD_R_Out	6	AuD_R_Out Back
7	N. C.	8	Кеу
9	AuD_L_Out	10	AuD_L_Out Back

USB: Expansion Connector

PIN	Function	PIN	Function
1	VCC: Power	2	VCC: Power
3	D-: Data - Signal	4	D-: Data - Signal
5	D+: Data + Signal	6	D+: Data + Signal
7	GND: Ground	8	GND: Ground
9	KEY	10	NC

Expansion Slots

DDR1/DDR2	184 Pin DDR Memory Slots
PCI1/PCI2	32 bit PCI BUS Expansion Slots
AGP	AGP Expansion Slots
ISA	ISA Expansion Slots

Connectors	
PS/2 (Bottom)	PS/2 Keyboard(Down Purple)
PS/2 (Top)	PS/2 Mouse Header(Up Green)
USB1/2	USB1/2 Connector Port
USB3	USB3 Connector Port
LPT	Printer Connector Port
VGA	VGA Display Connector Port
COM1	Serial Ports COM1 Connector Port
MIDI	MIDI Port
LINE OUT/LINE IN/MIC	Audio Output/Audio Input/Microphone
CD_IN	CD-ROM Audio Input Port
IDE1/IDE2	Primary IDE/Secondary IDE Port
FDD	Floppy Disk Drive Connector Port
PW1	ATX_20 Power Supply Connector Port
PW2	ATX_4 Power Supply Connector Port
FAN 1/2	CPU System Fan Port
IrDA	IrDA Infrared Port

Function Port Panel

.

Power Supply LED	Pin 1:Power Supply Anode; Pin 3, 5: Ground
HDD LED	Pin 2:Power Supply Anode; Pin 4: LED Signal
ATX Power Supply Switch	Pin 10:Switch Signal; Pin 8: Power Supply
	Anode
Reset Switch	Pin 14:Ground;Pin 16:Reset Signal
Speaker Input	Pin 9:Speaker Audio Input; Pin 15: Power
	Supply Anode

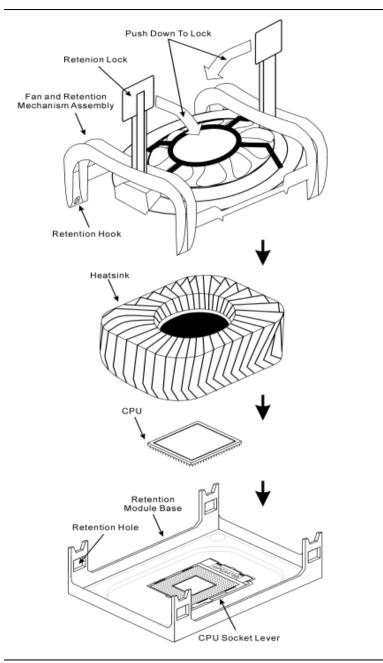
4.2 CPU Installation

This mainboard has a socket478 processor socket. Follow these instructions to install the CPU:

- 1. Unhook the CPU socket's locking lever by pulling it away from socket and raising it to the upright position.
- 2. Match the pin 1 corner of CPU socket to the one of processor, and insert the processor into the socket. Do not use force.
- 3. Push the locking lever down and hook it under the latch on the edge of

socket.

- 4. Apply thermal grease to the top of the CPU.
- 5. Lower the CPU fan/ heatsink unit onto the CPU and CPU socket, and then use the retention module clamps to snap the fan/heatsink into place.
- 6. Plug the CPU fan power cable into the CPU cooling fan power supply connector on the mainboard.

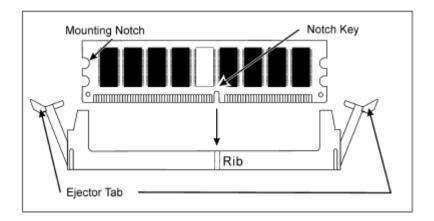


4.3 Memory installation

This mainboard supports DDR200/DDR266 DDR memory, you may install 64/128/256/512MB 184 pin DDR memory. DDR SDRAM uses additional power and ground lines and requires 184-pin 2.5V unbuffered DIMM module rather than the 168-pin 3.3V unbuffered DIMM used by SDRAM.

Follow these instructions to install the Memory:

- 1. Push the latches on each side of the DIMM slot down.
- 2. Align the memory module with the slot. The DIMM slots are keyed with notches and the DIMMs are keyed with cutouts so that they can only be installed correctly.
- 3. Check that the cutouts on the DIMM module edge connector match the notches in the DIMM slot.
- 4. Install the DIMM module into the slot and press it firmly down until it seats correctly. The slot latches are levered upwards and latch on to the edges of the DIMM.
- 5. Install any remaining DIMM modules.



4.4 IDE Devices Installation

IDE devices include hard disk drives, high-density diskette drives, and CD-ROM or DVD-ROM drives, among othes.

The mainboard ships with and IDE cable that can support one or two IDE devices. If you connect two devices to a single cable, you must configure one of the drives as Master and one of the drives as Slave. The documentation of the IDE device will tell you how to configure the device as a Master or Slave device. The Master device connects to the end of the cable.

4.5 Other Device Installation

4.5.1 Floppy Disk Drive Installation

The mainboard ships with a floppy disk drive cable that can support one or two drives. Drives can be 3.5" or 5.25" wide, with capacities of 360K, 720K, 1.2MB, 1.44MB, or 2.88MB.

Install your drives and connect power from the system power supply. Use the cable provided to connect the drives to the floppy disk drive connector floppy.

4.5.2 Sound Connector Port Installation

This mainboard has three audio ports connect audio device.

The left side jack(green) is for a stereo line-out signal. The middle jack (blue) is for a stereo line-in signal. The right side jack (red) is for a microphone.

4.5.3 Clear CMOS (JP3)

This jumper allows you to clear the Real Time Clock (RTC) RAM in CMOS. You can clear the CMOS memory of date, time, and system setup parameters by erasing the CMOS RTC RAM data. The RAM data in CMOS, that include system setup information such as system passwords, is powered by the onboard button cell battery.

- 1. Turn OFF the computer and unplug the power cord.
- Move the jumper cap from pin 1-2(default) to pin 2-3. Keep the cap on pin 2-3 for about 5-10 seconds, then move the cap back to pins1-2.
- 3. Plug the power cord and turn ON the computer.
- Hold down the key during the boot process and enter BIOS setup to re-enter data.

Notel: Except when clearing RTC RAM, never remove the cap on CLRTC1 jumper default position. Removing the cap will cause system boot failure! Note2: You do not need to clear the RTC when the system hangs due to overclocking. For system failure due to overclocking, use the C.P.R. (CPU Parameter Recall) feature. Shut down and reboot the system so BIOS can automatically reset parameter settings to default values.

4.5.4 ATX Power connectors (20-pin ATXPWR1, 4-pin ATX 12V1) These connectors connect to an ATX 12V power supply. The plugs from the power supply are designed to fit these connectors in only one orientation. Find the proper orientation and push down firmly until the connectors completely fit. In addition to the 20-pin ATXPWR1 connector, connect the 4-pin ATX +12V power plug to provide sufficient power to the CPU.

Notel: Make sure that you ATX 12V power supply can provide at least 15A on the +12V lead and at least 2A on the +5-volt standby lead (+5VSB). The minimum recommended wattage is 300W or above for a fully configured system. The system may become unstable and may experience difficulty powering up if the power supply is inadequate.

Note2: Do not forget to connect the 20-pin ATXPWR1 and 4-pin ATX12V1 power plugs. Failure to do so may cause severe damage to the CPU or motherboard!

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Chapter 5 Driver Installation

5.1 Installation Directory

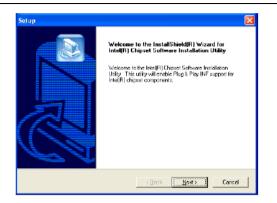
The utility CD is supplied with that mainboard the connects contained in it are showed as below:

Directory	Driver	OS
		Windows 9x
INTEL\INF\XXX	Intel chipset software	Windows 2000/XP
		Windows NT4.0
	Realtek AC'97 Audio	Windows 9x
SOUND\REALTEK\XXX	driver	Windows 2000/XP
	driver	Windows NT4.0
		Windows 9x
INTEL\USB2.0\845	USB 2.0 driver setup	Windows 2000/XP
		Windows NT4.0
		Windows 9x
INTEL\VGA\845	VGA driver setup	Windows 2000/XP
		Windows NT4.0

Before installing audio driver, you must identify the mode of AC' 97 codec. Fox example: If you use Realtek serial codec, you need to enter into the Realtek directory installing.

5.2 Intel Chipset Software Setup

Insert the driver CD, running driver software CD, choose the directory :\ CD-ROM:\INTEL\INF\XXX



Click "NEXT" to continue

Setup	×
License Agreement Please lead the following license agreement carefully.	
Press the PAGE DOWN key to see the rest of the agreement.	
INFEL SOFTWARE LICENSE AGREEMENT (DEM /1HV / ISV Distribution & Single Used) IMPORTANT - READ BEFORE COPYING (INSTALLING OR USING, Diarotiuse or load this valivate and any associated materials (collective), the "Software" (unit) part have carefully read the following terms and conditions. By leading on using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software. Please Also Note:	
Do you accept all the terms of the preceding License Agreement? If you choose No., the setup will close. To install Inte(R) Chipset Software Instalation Utility, you must accept this agreement.	
<u>(Back Yes</u> <u>No</u>	

Select "YES" to continue

Setup 🛛 🔀
Readine Information
Readme.bt
Product Intell®) Closet Sollware Instalation Uliky Prefaces Froduction Version Solution Solution Togen Chapter Version Togen Chapter Version Togen Chapter Version Date Mu/21, 2018 Solution Solution
CONTENTS OF THIS DOCUMENT
retalShioid (Back Cancel

Select "NEXT" to continue



Select "FINISH" to complete the installation.

Select "Finish" to complete the installation

5.3 Sound Driver Setup

5.3.1 Sound driver setup

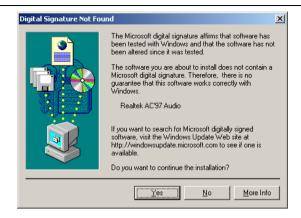
Insert the driver CD, running driver software CD, choose the directory:\CD-ROM:\SOUND\REALTEK\Setup.exe



Select "Next" to continue

tealtek AC'97 Audio Setup (5.	13)	X
Setup Status		
	C/w/INNT/Tene/\alinding.cpl	
InstallSide	Cance	

Continue



Select "YES" to continue

InstallShield Wizard Complete
Setup has finished installing Realitek AC97 Audio on your computer.
O Ves, I want to restait my computer move
No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.

Select "Finish" to complete the installation

6-Channel Sound Output Support

Please follow the steps below for operation (optional):

1. After install sound driver, click "Sound effect", "AC97 Audio configuration" options;

2. Click "Sound configuration", select "6 Channel mode for 5.1 speakers output" options.

3. Click "Sound effect" menu "Environment", you must choose one Sound

effect realization 6-Channel sound output.

5.3.2 Uninstalltion Sound Driver (For Realtek of WIN98 operation system)

Startup to WINDOWS desktop, select "Setup" / "Control Panel", select "Add/Delete" menu select "Avance AC' 97 Audio Driver and Applications", click "Add/Delete", select "language", "confirm" "GO", select "Complete", restart system and program auto delete.

5.4 USB 2.0 driver Setup

USB (Universal Serial Bus), the mainboard implements the new Universal Serial Bus(USB)2.0 specification, extending the connection speed from 12Mbps on USB1.1 to a fast 480Mbps on USB2.0.

5.5 VGA driver setup

Insert the driver CD, running driver software CD, choose the directory:\CD-ROM:\VGA\845 Setup.exe



Select "NEXT" to continue

Intel(R) Extreme Graphics Driver Setup
License Agreement Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User) IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING. Do not use or load this software and any associated materials (collectively, the "Software") undi you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software. Please Also Note: "If you are an Original Equipment Manufacturer (DEM), Independent Hardware Vendor
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Intel(R) Extreme Graphics Driver, you must accept this agreement.
InstallShield

Select "YES" to continue

Intel(R) Extreme Graphics Dr	iver Setup
	InstallShield(R) Wizard Complete The InstallShield(R) Wizard has successfully installed Intel(R) Extreme Graphics Driver. Before you can use the program, you must restart your computer. Image: The start of the start my computer now. Image: The start my computer later. Remove any disks from their drives, and then click Finish to complete setup.
	< Back Finish Cancel

Select "Finish" to complete the installation

Chapter 6 BIOS Setup

The BIOS Setup Utility record settings and information of your computer, such as date and time, the type of hardware installed, and various configuration settings. Your computer applies those information to initialize all the components when booting up and basic function of coordination between system components.

If the Setup Utility configuration is incorrect, it may cause the system to malfunction. It can even stop you computer booting properly. If it happens, you can use the clear CMOS jumper to clear the CMOS memory which has stored the configuration information; or you can hold down the Page Up key while rebooting your computer. Holding down the Page Up key also clears the setup information,

6.1 Main menu



You can use cursor arrow keys to highlight anyone of options on the main menu page. Press **Enter** to select the highlighted option.

Press the **Escape** key to leave the setup utility. Press the **F9** key to go back to menu in BIOS.

Some options on the main menu page lead to tables of items with installed

value that you can use cursor arrow keys to highlight on item, and press PgUp and PgDn keys to cycle through alternative values of that

item. The other options on the main menu page lead to dialog boxes that require your answer Yes or No by hitting the Y or N keys. If you have already changed the setup utility, press F10 to save those changes and exit the utility.

♦ Standard CMOS Features

Setup date, time, floppy type

- Advanced BIOS Features Setup BIOS provides function, for example virus, boot-strap induct
- Advanced Chipset Features
 Setup mainboard chipset parameter, for example DRAM Timing
- Integrated Peripherals Setup include mainboard all peripherals drive
- Power Management Setup Setup CPU, Hard disk, Monitor drive power save mode
- PnP/PCI Configurations
 Setup PnP and PCI interface parameter
- Load Fail-Safe Defaults Setup the default values in system
- Load Optimized Defaults Setup the best performance values in system
- \diamond Set Password

Setup password in system

♦ Save & Exit Setup

Setup save and exit, press Y to save and exit

Exit Without Save Setup Setup without save and exit, press N to without save and exit

6.2 Standard CMOS Features

Date (mm:dd:yy)	Fri, Feb 2 2007	Item Help
Time (hh:mm:ss) • IDE Primary Master • IDE Primary Slave • IDE Secondary Master • IDE Secondary Slave	11 : 18 : 43	Menu Level ► Change the internal clock.
Drive A	[1.44M, 3.5 in.]	
Video	EEGA/VGA J	
Halt On	[All , But Keyboard]	
Base Memory Extended Memory Total Memory	640K 1K 1024K	

♦ Date (mm: dd: yyyy)

These items set up system date

♦ Time (hh: mm: ss)

These items set up system time

♦ Pri/Sec Master/Slave

These items configure devices connected to the Primary and Secondary IDE channels. To configure an IDE hard disk drive, choose Auto. If the Auto setting fails to find a hard disk drive, set it to User, and then fill in the hard disk characteristics manually. If you have a CD-ROM drive, select the setting CD-ROM. If you have an ATAPI device with removable media, select Floptical.

- ♦ Drive A/B
- ♦ Video
- ∻ Halt On
- ♦ Base Memory
- ♦ Expanded Memory
- ♦ Total Memory

Default: EGA/VGA Default: All, But Keyboard

6.3 Advanced BIOS Features

	[Hard Disk]	Item Help
	[CDROM] [Removable]	Menu Level 🕨
	[Enabled]	Henra Hever ,
Onboard Lan Boot ROM		Select Your Boot
Removable Device Priority		Device Priority
Hard Disk Boot Priority		
CD-ROM Boot Priority	[Press Enter]	
Quick Power On Self Test		
Śwap Floppy Drive Boot Up Floppy Seek	[Disabled]	
Boot Up Floppy Seek Boot Up NumLock Status		
	[Fast]	
Security Option	[Setup]	
APIC Mode	[Enabled]	
MPS Version Control For OS	[1.4]	
OS Select For DRAM > 64MB		
Report No FDD For WIN 95		
Full Screen LOGO Show	[Enabled] 🛛 🔻	

∻	First Boot Device	9			Default:	Hard	Disk
	When system boot-	-strap first	time	detect	device.		

♦ Second/Third Boot Device Default: CDROM/Removable
 When system boot-strap first time detect device.

✤ Boot Other Device Default: Enabled

If you enable this item, the system will also search for other boot devices if it fails to find an operating system from the first two locations.

- ♦ Onboard Lan Boot ROM Default: Disabled
 ♦ Hard Disk Boot Priority Default: Press Enter
 - 1. Pri.Master:
 - 2. Bootable Add-in Cards
- ♦ Quick Power On Self Test
 Default: Enabled
- Swap Floppy Drive
 If you have two diskette drives installed and you enable this item,
 drive A becomes drive B and drive B becomes drive A.

Ŷ	Boot Up Floppy Seek	Default:	Disabled
♦	Boot Up NumLock Status	Default:	0n
∻	Gate A20 Option	Default:	Fast
Ŷ	Security Option	Default:	Setup

7	APIC Mode	Default: Enabled
♦	MPS Version Control For OS	Default: 1.4
\diamond	OS Select For DRAM $> 64 \text{MB}$	Default: Non-OS2
\diamond	Report No FDD For WIN 95	Default: No
\diamond	Full Screen Logo Show	Default: Enabled
\diamond	Small Logo (EPA) Show	Default: Enabled
\diamond	CPU L1 & L2 Cache	Default: Enabled
	Leave these items enabled since all	the processors that can be
	installed on this board have internal	L2 cache memory.
\diamond	CPU Feature	Default: Press Enter
	Limit CPUID MaxVal	Default: Disabled
	Limit CPUID MaxVal Thermal Management	Default: Disabled Default: Thermal Monitor 1
♦		
♦	Thermal Management	Default: Thermal Monitor 1
-	Thermal Management BIOS ROM Write Protect	Default: Thermal Monitor 1 Default: Enabled
∻	Thermal Management BIOS ROM Write Protect Video BIOS Shadow	Default: Thermal Monitor 1 Default: Enabled Default: Enabled
♦	Thermal Management BIOS ROM Write Protect Video BIOS Shadow C8000-CBFFF Shadow	Default: Thermal Monitor 1 Default: Enabled Default: Enabled Default: Disabled
 <!--</td--><td>Thermal Management BIOS ROM Write Protect Video BIOS Shadow C8000-CBFFF Shadow CC000-CFFFF Shadow</td><td>Default: Thermal Monitor 1 Default: Enabled Default: Enabled Default: Disabled Default: Disabled</td>	Thermal Management BIOS ROM Write Protect Video BIOS Shadow C8000-CBFFF Shadow CC000-CFFFF Shadow	Default: Thermal Monitor 1 Default: Enabled Default: Enabled Default: Disabled Default: Disabled
 ♦ ♦ ♦ ♦ ♦ 	Thermal Management BIOS ROM Write Protect Video BIOS Shadow C8000-CBFFF Shadow CC000-CFFFF Shadow D0000-D3FFF Shadow	Default: Thermal Monitor 1 Default: Enabled Default: Enabled Default: Disabled Default: Disabled Default: Disabled
 	Thermal Management BIOS ROM Write Protect Video BIOS Shadow C8000-CBFFF Shadow CC000-CFFFF Shadow D0000-D3FFF Shadow D4000-D7FFF Shadow	Default: Thermal Monitor 1 Default: Enabled Default: Enabled Default: Disabled Default: Disabled Default: Disabled Default: Disabled

6.4 Advanced Chipset Features

DRAM Timing Selectable	[By SPD]	Item Help
Active to Precharge Delay DRAM RAS# to CAS# Delay DRAM RAS# Precharge Turbo Mode Memory Frequency For System BIOS Cacheable Uideo BIOS Cacheable Uideo BIOS Cacheable Memory Hole At ISM-16M Delay Prior to Thernal AGP Aperture Size (MB) ** On-Chip UGA Setting **	[3] [J] [Disabled] [PG100] [Enabled] [Disabled] [Enabled] [16 Min] [64] [Enabled]	Menu Level →

	DRAM Timing Selectable	Default:	By SPD
	X CAS Latency Time		2
	X Active to Precharge Delay		6
	X DRAM RAS# to CAS# Delay		2
	X DRAM RAS# Precharge		2
Ŷ	Memory Frequency For	Default:	DDR266
	Memory frequecce enabled select DDR200/DD	R266	
Ŷ	System BIOS Cacheable	Default:	Enabled
	If enable system BIOS read cache		
Ŷ	Video BIOS Cacheable	Default:	Disabled
	If enable Video BIOS read cache		
Ŷ	Memory Hole At 15M-16M	Default:	Disabled
\diamond	Delayed Transaction	Default:	Enabled
Ŷ	Delay Prior to Thermal	Default:	16Min
	Enable system detect DRAM temperature tim	ie	
Ŷ	AGP Aperture Size (MB)	Default	: 64MB
	On-Chip VGA Setting		
	On-Chip VGA	Default	: Enabled
	On-Chip Frame Buffer Size	Default	: 8MB

6.5 Integrated Peripherals

IDE DMA transfer access [Enabled On-Chip Primary PCI IDE [Enabled	
IDE Prinary Master PIO [Auto] IDE Prinary Master PIO [Auto] IDE Prinary Master UDMA [Auto] IDE Prinary Slave PIO On-Chip Secondary CI IDE [Enabled IDE Secondary Master PIO IDE Secondary Master PIO IDE Secondary Slave UDMA [Auto] IDE Secondary Slave UDMA [Auto] IDE Secondary Slave UDMA [Auto] USB Secondary Slave UDMA [Auto] USB Controller [Enabled USB Keyboard Support [Enabled USB Mouse Support [Enabled AC97 Audio [Auto] IDE IDE Secondary First IDE Secondary Slave UDMA [Auto] USB Mouse Support [Enabled OSB Mouse Support [Enabled AC97 Audio [Auto] IDE HDD Block Mode [Enabled POWER ON Function [BUITON]	Menu Level ►
†↓→+:Move Enter:Select +/-/PU/PD:Va F5: Previous Values F6: Fail-Sa	lue F10:Save ESC:Exit F1:General Hel; fe Defaults F7: Optimized Defaults
IDE DMA transfer access	Default: Enabled
On-Chip Primary/ Secondary PCI ID	E Default: Enabled
Chipset inside the first/second c	hannel of PCI IDE interface
IDE Primary/Secondary Master/Slav	e PIO Default: Auto
The first/second IDE primary mast	er/primary slave control PIO mode
IDE Primary/ Secondary Master/Sla	ve UDMA Default: Auto

Default: Enabled

Default: Enabled

Default: Enabled

Default: Auto

Setup USB controller

♦

✧

♦

- ♦ USB 2.0 Controller
 ♦ USB Keyboard Support
- Setup support USB keyboard
- ♦ USB Mouse Support
 ♦ AC97 Audio
 - If use AC97 sound chipset
- ♦ Init Display First
 ♦ IDE HDD Block Mode
 ♦ POWER ON Function
 ♦ Onboard FDC Controller
 - Setup onboard FDC controller

♦	Onboard Serial Port 1	Default: 3F8/IRQ4
\diamond	Onboard Serial Port 2	Default: 2F8/IRQ3
\diamond	UART Mode Select	Default: IrDA
	Setup UART mode select	
\diamond	RxD .TxD Active	Default: Hi.Lo
\diamond	IR Transmission Delay	Default: Enabled
\diamond	UR2 Duplex Delay	Default: Half
\diamond	Use IR Pins	Default: IR-Rx2Tx2
\diamond	Onboard Parallel Port	Default: 378/IRQ7
	Setup select paralled port	
\diamond	Parallel Port Mode	Default: SPP
	Setup paralled port mode	
	X EPP Mode Select	Default: EPP1.7
	X ECP Mode Use DMA	Default: 3

6.6 Power Management Setup

ACPI Function	[Enabled]	 Item Help
HDD [*] Power Down Soft-Off by PUR-BTTN Wake-Up by PCI card Power On by Ring Resume by Alarm × DateCof Month>Alarm × TimeChh:mm:ss> Alarm ** Reload Global Timer	[Disabled] [Disabled] [Disabled] 0 : 0 : 0 Events **	Menu Level ►
Primary IDE 0 Primary IDE 1 Secondary IDE 0	[Disabled] [Disabled] [Disabled]	

♦ ACPI Function

Setup if use ACPI function

- ♦ Power Management
- ♦ Video off Method

Default: Enabled Default: User Define

	Setup video off method	Default: DPMS
\diamond	Video off In Suspend	
	Setup when video off in suspend	Default: Yes
\diamond	Suspend Type	
	Setup suspend type	Default: Stop Grant
\diamond	MODEM Use IRQ	
	Setup modem use IRQ	Default: 3
\diamond	Suspend Mode	Default: Disabled
\diamond	HDD Power Down	Default: Disabled
\diamond	Soft-Off by PWR-BTTN	
	Setup soft-off type	Default: Instant-Off
\diamond	Wake-Up by PCI card	Default: Disabled
\diamond	Power On by Ring	
	Setup if use modem wake up	Default: Enabled
∻	Resume by Alarm	Default: Disabled
	X Date (of Month)	Default: 0
	X Resume Time (hh:mm:ss)	Default: 0:0:0
	Reload Global Timer Events	
¢	Primary/ Secondary IDE 0/1	Default: Disabled
¢	FDD, COM, LPT Port	Default: Disabled
¢	PCI PIRQ [A-D] #	Default: Disabled

6.7 PnP/PCI Configurations

Reset Configuration Data	[Disabled]	Item Help
Resources Controlled By × IRQ Resources × DMA Resources PCI/UGA Palette Snoop	[Auto(ESCD)] Press Enter Press Enter [Disabled]	Menu Level Default is Disabled. Select Enabled to reset Extended System Gonfiguration Data ESCD> when you exit Setup if you have installed a new add-o and the system reconfiguration has caused such a serious conflict that the OS cannot boot

♦ Reset Configuration Data
 When select Enabled the BIOS restart write system configuration data
 Default: Disabled
 ♦ Resources Controlled By

•	nebearceb controlled by	
	System resources parameter setup	Default: Auto(ESCD)
	X IRQ Resources	Default: Press Enter
	X DMA Resources	Default: Press Enter
Ŷ	PCI/VGA Palette Snoop	
	PCI/VGA card color setup	Default: Disabled

Note: The mainboard auto detect CPU frequency, so you needn' t setup CPU frequency by yourself, the CPU can display normal.

6.8 Load Fail-Safe Defaults



If you select this item and press enter a dialog box appears. If you press Y, and then Enter, the setup utility loads a set of fail-safe default values. These default values are not very demanding and they should allow your system to function with most kinds of hardware and memory chips.

Note: It is highly recommended that uses enter this option to load optimal values for accessing the best performance.

6.9 Load Optimized Defaults

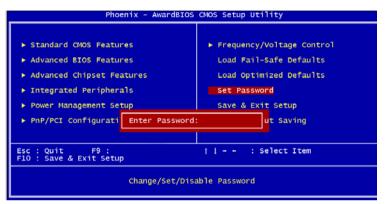


If you select this item and press enter a dialog box appears.

If you press Y, and then Enter, the setup utility loads a set of best-

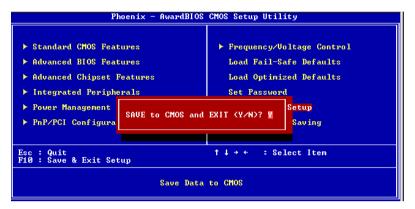
performance default values. These default values are quite demanding and your system might not function properly if you are using slower memory chips or other low-performance components.

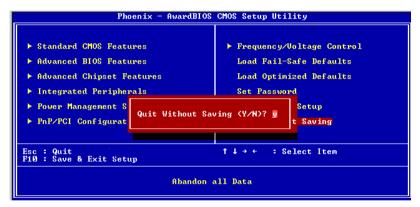
6.10 Change Password



If you highlight this item and press Enter, a dialog box appears that you can enter a supervisor password. You can enter no more than six letters or numbers. Press Enter after you have typed in the password. There will be the second dialog box asking you to retype the password for confirmation. Press Enter after you have retyped it correctly. Then the password is required for the access to the setup utility or for it at start-up, depending on the setting of the password check item in advanced setup.

6.11 Save Exit & Without Save Exit Setup





Highlight this item and press Enter to save the changes that you have made in the setup utility configuration and exit the program. When the save and exit dialog box appears, press Y to save and exit, or press N to exit without saving.