

white bream

AWARD BIOS

| Version | Date | Author | Comment | Copyright © White Bream, 2011 |
|---------|-------------|-----------|------------------|-------------------------------|
| 0.1 | Mar 1, 2008 | Henk Blik | Initial document | |
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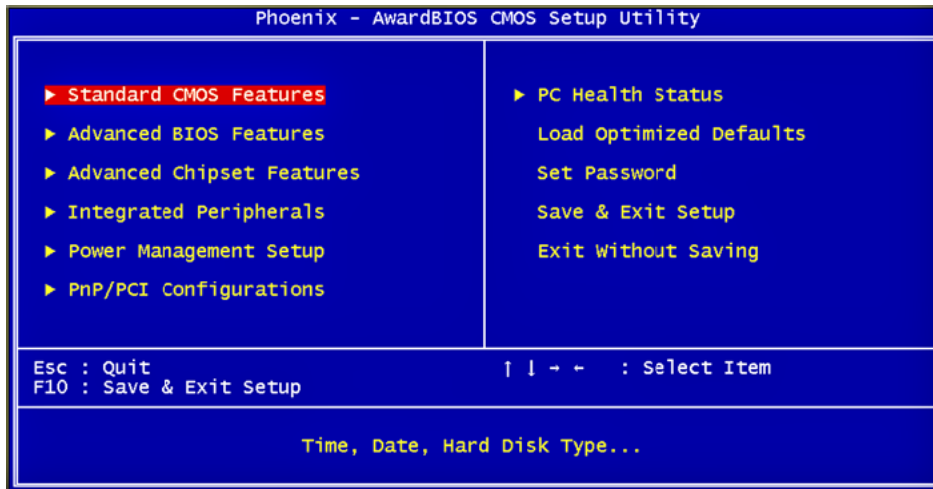
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|---|-------------------|---|--|
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The Award BIOS (Basic Input/Output System) installed in your computer system's. The BIOS provides for a standard device such as disk drives, serial ports and parallel ports. It also adds password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.



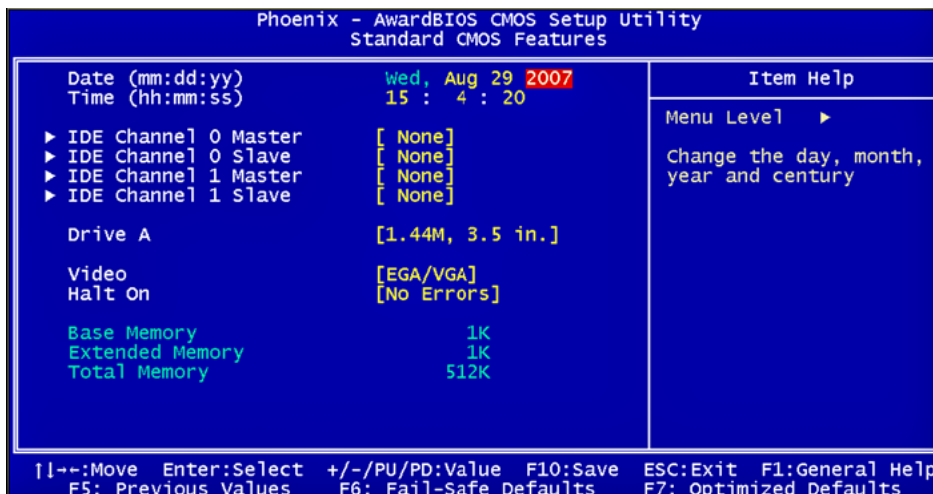
I Setup

The Award BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the Award BIOS is immediately activated. Pressing the key immediately allows you to enter the Setup utility. If you a little bit late press the key, POST (Power On Self Test) will continue with its test routines, thus preventing you from invoking the Setup. If you still wish to enter Setup, restart the system by pressing the "Reset" button or simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys. You can also restart by turning the system Off and back On again. The following message will appear on the screen:

Press to Enter Setup

In general, you press the arrow keys to highlight items, <Enter> to select, the <PgUp> and <PgDn> keys to change entries, <F1> for help and <Esc> to quit. When you enter the Setup utility, the Main Menu screen will appear on the screen. The Main Menu allows you to select from various setup functions and exit choices.

2 Standard CMOS Features



“Standard CMOS Features” allows you to record some basic hardware configurations in your computer system and set the system clock and error handling. If the CPU card is already installed in a working system, you will not need to select this option.

You will need to run the Standard CMOS option, however, if you change your system hardware configurations, such as onboard battery fails, or the configuration stored in the CMOS memory was lost or damaged.

Date

To set the date & time, highlight the “Date” & “Time” and use the <PgUp>/<PgDn> or +/- keys to set the current time.

IDE Primary HDDs / IDE Secondary HDDs

The onboard PCI IDE connectors provide Primary and Secondary channels for connecting up to four IDE hard disks or other IDE devices. Each channel can support up to two hard disks; the first is the “Master” and the second is the “Slave”. Press <Enter> to configure the hard disk. The selections include Auto, Manual, and None. Select ‘Manual’ to define the drive information manually. You will be asked to enter the following items:

- Cylinder: Number of cylinders
- Head: Number of read/write heads
- Precomp: Write precompensation
- Landing Zone: Landing zone
- Sector: Number of sectors
- The Access Mode selections are as follows:
- CHS (HD < 528MB)
- LBA (HD > 528MB and supports Logical Block Addressing)
- Large (for MS-DOS only)
- Auto

Drive A / Drive B

These fields identify the types of floppy disk drive A or drive B that has been installed in the computer. The available specifications are:

- None (default), 360K, 5.25 in. 1.2M, 5.25 in.
- 720K, 3.5 in. 1.44M, 3.5 in. 2.88M, 3.5 in.

Video

This field selects the type of video display card installed in your system.

You can choose the following video display cards:

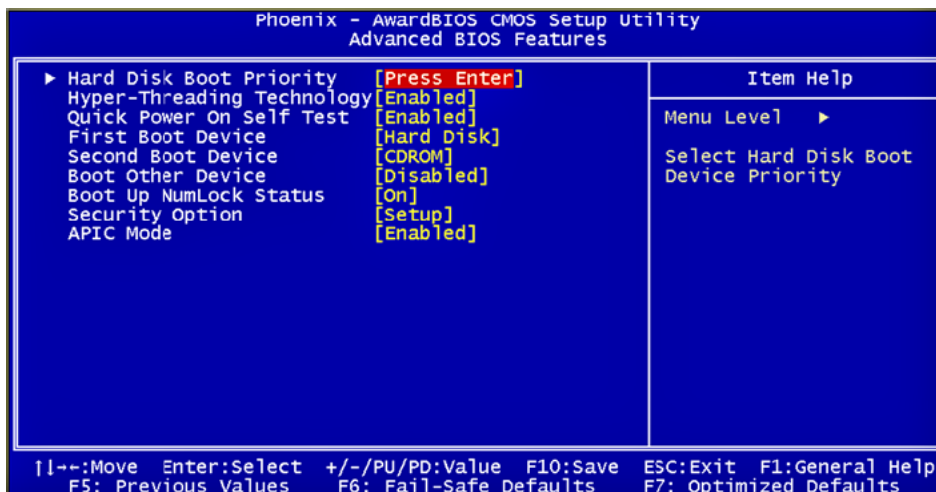
- EGA/VGA For EGA, VGA, SEGA, SVGA or PGA monitor adapters. (default)
- CGA 40 Power up in 40 column mode.
- CGA 80 Power up in 80 column mode.
- MONO For Hercules or MDA adapters.

Halt On

This field determines whether or not the system will halt if an error is detected during power up.

- All errors Whenever the BIOS detects a non-fatal error, the system will stop and you will be prompted.
- No errors (default) The system boot will not be halted for any error that may be detected.
- All, But Keyboard The system boot will not be halted for a keyboard error; it will stop for all other errors.
- All, But Diskette The system boot will not be halted for a disk error; it will stop for all other errors.
- All, But Disk/Key The system boot will not be halted for a keyboard or disk error; it will stop for all others.

3 Advanced BIOS Features



Hard Disk Boot Priority

It allows you to set the priority for hard disk boot. When you press enter, the selections shows the current hard disks used in your system as well as the “Bootable Add-in Card” that is relevant to other boot sources media such as SCSI cards and LAN cards.

Hyper-Threading Technology

If enabled, when your processor supports Hyper-Threading Technology.
Setting: Disabled, Enabled (Default).

Quick Power On Self Test

When enabled, it speeds up the Power On Self Test (POST) after the system is turned on.
If it is set to Enabled, BIOS will skip some items.
Setting: Disabled, Enabled (Default).

First/ Second Boot Device

These fields determine the drive that the system searches first for an operating system. The options available include Floppy, Hard Disk, CDROM, USB-FDD, USB-ZIP, USB-CDROM, LAN and Disabled.

Boot Other Device

It allows the system to search for an OS from other devices other than the ones selected in the First/ Second Boot Device.
Setting: Disabled (Default), Enabled.

Boot Up NumLock Status

It allows you to activate the NumLock function after you power up the system.
Setting: Off, On (Default).

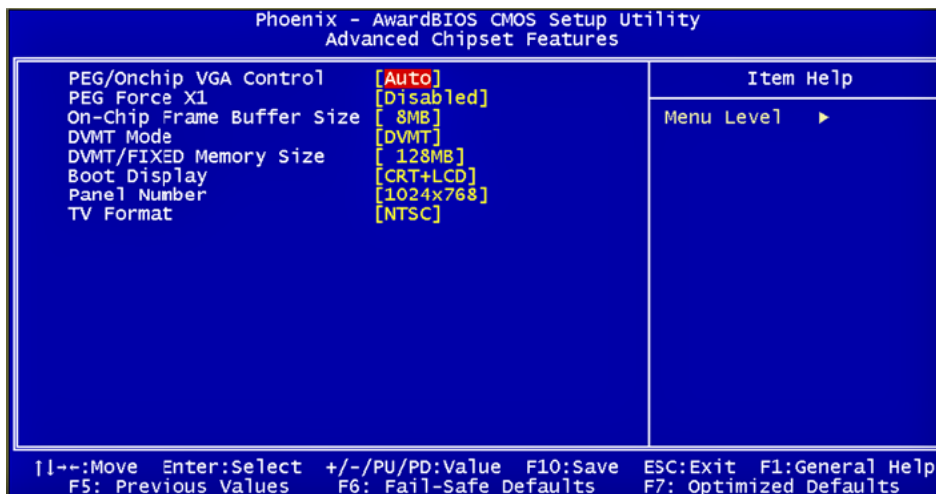
Security Option

It allows you to limit access to the System and Setup.
When you select System, the system prompts for the User Password every time you boot up. When you select Setup, the system always boots up and prompts for the Supervisor Password only when the Setup utility is called up.
Setting: Setup (Default), System.

APIC Mode

APIC stands for Advanced Programmable Interrupt Controller.
Setting: Disabled, Enabled (Default).

4 Advanced Chipset Features



PEG/Onchip VGA Control

Setting: Onchip VGA, PEG Port, Auto (Default).

PEG Force X1

Setting: Disabled (Default), Enabled.

On-Chip Frame Buffer Size

Setting: 1MB, 8MB (Default).

DVMT Mode

Setting: FIXED, DVMT (Default), BOTH.

DVMT/FIXED Memory Size

Setting: 64MB, 128MB (Default), 224MB.

Boot Display

Setting: CRT, LCD, CRT+LCD (Default), TV.

Panel Number

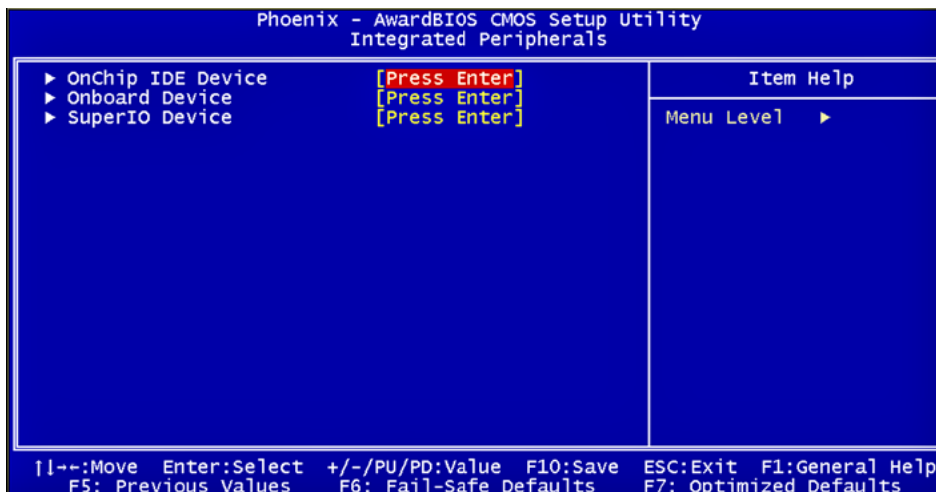
It allows you to select the LCD Panel type as below:

Setting: 640x480, 800x600, 1024x768 (Default), 1280x1024, 1400x1050, 1400x1050, 1600x1200, 1280x768, 1680x1050, 1920x1200

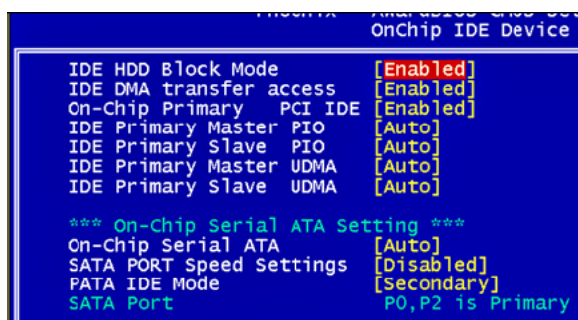
TV Format

Setting: NTSC (Default), PAL.

5 Integrated Peripherals



5.1 OnChip IDE Device



IDE HDD Block Mode

It allows HDD controller to use the fast block mode to transfer data to and from HDD.
Setting: Disabled, Enabled (Default).

IDE DMA Transfer Access

Setting: Disabled, Enabled (Default).

On-Chip Primary PCI IDE

The integrated peripheral controller contains an IDE interface with support for two IDE channels. Select Enabled to activate each channel separately.

Setting: Disabled, Enabled (Default).

IDE Primary Master/Slave PIO

It allows your system HDD controller to run faster. Rather than having the BIOS issue with a series of commands that transferring to or from the disk drive, PIO (Programmed Input/Output) allows the BIOS to communicate with the controller and CPU directly. When Auto is selected, the BIOS will select the best available mode.

Setting: Auto (Default), Mode 0, Mode 1, Mode 2, Mode 3, Mode 4.

IDE Primary Master/Slave UDMA

It allows your system to improve disk I/O throughput to 33MB/sec with the Ultra DMA33 feature.

Setting: Disabled, Auto (Default).

On-Chip Serial ATA

Setting: Disabled Disabled SATA controller

Auto (Default) Auto arrange by BIOS.

Combined Mode PATA and SATA are combined. Max.of 2 IDE drives in each channel.

Enhanced Mode Enable both SATA and PATA. Max. of 6 IDE drivers are supported.

SATA Only SATA is operating in legacy mode.

SATA PORT Speed Settings

Setting: Disabled (Default), Force GEN I, Force GEN II.

PATA IDE Mode

Setting: Secondary (Default).

5.2 Onboard Device



USB Controller

Setting: Enabled (Default), Disabled.

USB 2.0 Controller

For using USB 2.0, it is necessary OS drivers must be installed first. Please update your system to at least Windows 2000 SP4 or Windows XP SP2.

Setting: Enabled (Default), Disabled.

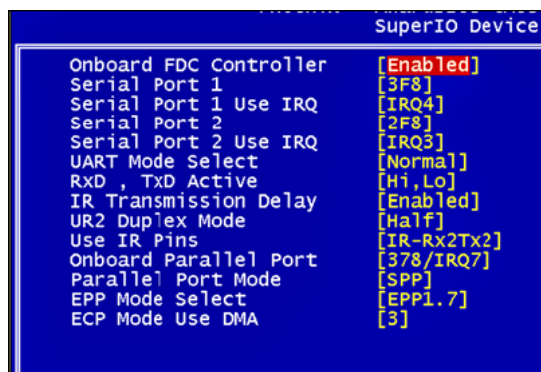
USB Keyboard Support

Setting: Disabled (Default), Enabled.

AC97 Audio

Setting: Auto (Default), Disabled.

5.3 SuperIO Device



Onboard FDC Controller

Select "Enabled" if you wish to use it. Select "Disabled" if you don't wish to use it.

Setting: Disabled, Enabled (Default).

Serial/Parallel Port

It allows you to select the serial and parallel ports with their addresses.

Setting: Serial Port 1 3F8/IRQ4 (Default)

Serial Port 2 2F8/IRQ3 (Default)

Parallel Port 378/IRQ7 (Default)

UART Mode Select

It determines the UART 2 mode in your computer.

Setting: IrDA, ASKIR, Normal (Default).

RxD, TxD Active

Setting: Hi,Hi , Hi,Lo (Default) , Lo,Hi , Lo,Lo.

IR Transmission Delay

Setting: Disabled, Enabled (Default).

UR2 Duplex Mode

Setting: Full, Half (Default).

Use IR Pins

Setting: RxD2,TxD2 , IR-Rx2Tx2 (Default).

Parallel Port Mode

Setting: SPP (Default), EPP, ECP, ECP+EPP, Normal

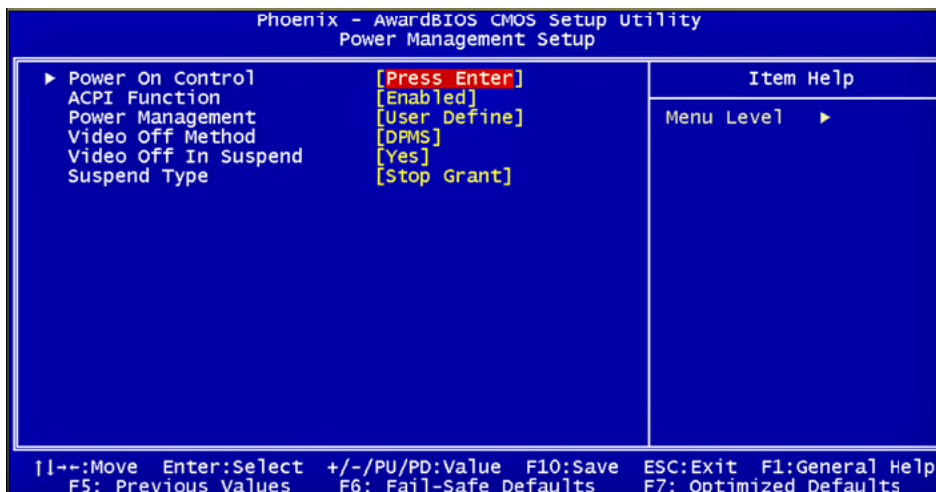
EPP Mode Select

Setting: EPP1.9, EPP1.7 (Default)

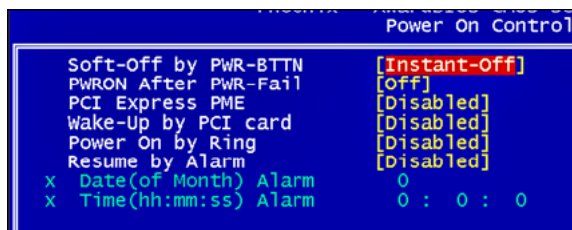
ECP Mode Use DMA

Setting: 1, 3 (Default).

6 Power Management Setup



6.1 Power On Control



Soft-Off by PWR-BTTN

It defines the power-off mode when using an ATX power supply. In the Instant Off mode, it allows powering off immediately upon pressing the power button. In the Delay 4 Sec mode, the system powers off when the power button is pressed for more than 4 seconds or enters the suspend mode when pressed for less than 4 seconds.

Setting: Instant-off (Default), Delay 4 Sec.

PWRON After PWR-Fail

It allows the system power on or off when power returns from a power failure status.

Setting: Off (Default), On, Former-Sts.

PCI Express PME

Setting: Disabled (Default), Enabled.

Wake-Up by PCI Card

It allows the system to wake up from a signal received from a PCI card such as a LAN card.

Setting: Disabled (Default), Enabled.

Power On by Ring

It enables or disables the power on of the system through the modem connected or LAN.

Setting: Disabled, Enabled (Default).

Resume by Alarm

It enables or disables the resumption of the system operation. When enabled, the user is allowed to set the Date and Time.

Setting: Disabled (Default), Enabled.

ACPI Function

It supports ACPI (Advance Configuration and Power Interface).

Setting: Enabled (Default), Disabled.

Power Management

It allows you to select the type of power saving management modes.

Setting: User Define (Default) Each of the ranges is from 1 min. to 1hr.

Except for HDD Power Down which ranges from 1 min. to 15 min

Min Saving Minimum power management

Max Saving Maximum power management

Video Off Method

It defines the Video Off features.

Setting: Blank Screen Writes blanks to the video buffer

V/H SYNC + Blank blank the screen and turn off vertical and horizontal scanning

DPMS (Default) Allowing BIOS to control the video display.

Video Off In Suspend

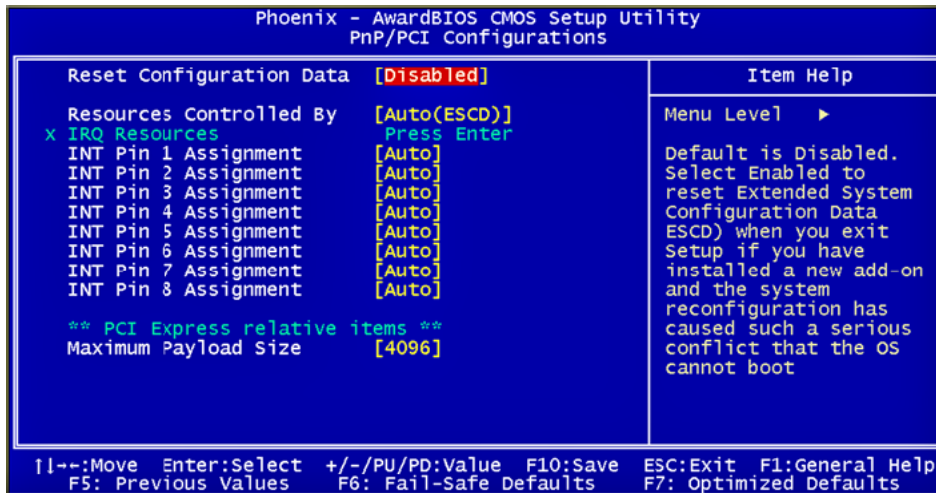
When enabled, the video is off in suspend mode.

Setting: No, Yes (Default).

Suspend Type

Setting: Stop Grant (Default), PwrOn Suspend.

7 PNP/PCI Configurations



Reset Configuration Data

It allows you to determine whether to reset the configuration data or not.

Setting: Disabled (Default), Enabled.

Resources Controlled By

This PnP BIOS can configure all of the boot and compatible devices with the use of a PnP operating system.

Setting: Auto(ESCD) (Default), Manual.

IRQ Resources

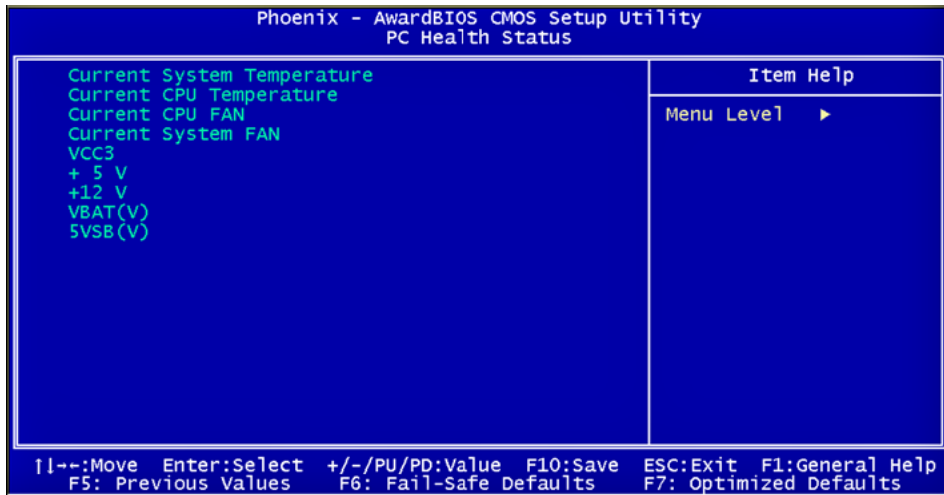
It allows you to configure the IRQ Resources.

Maximum Payload Size

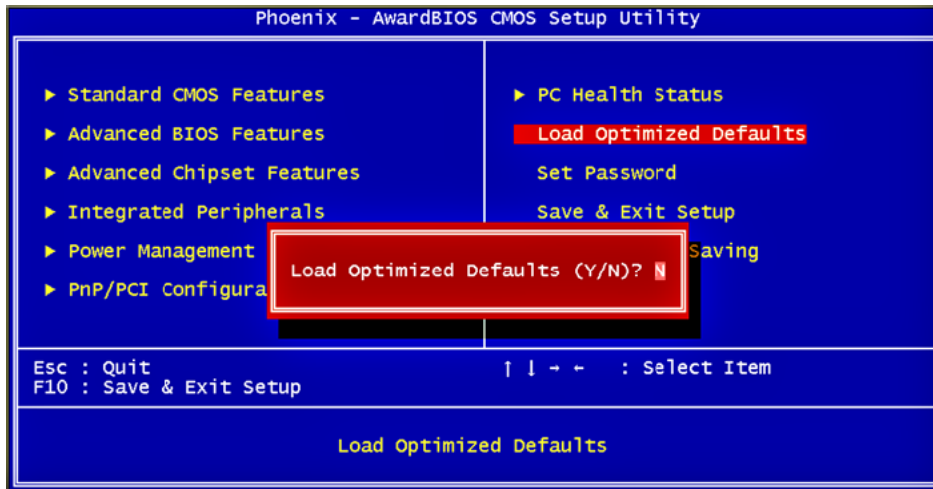
It allows you to set maximum TLP payload size for PCI Express devices, the unit is byte.

Setting: 128, 256, 512, 1024, 2048, 4096 (Default).

8 PC Health Status



9 Load Optimized Defaults



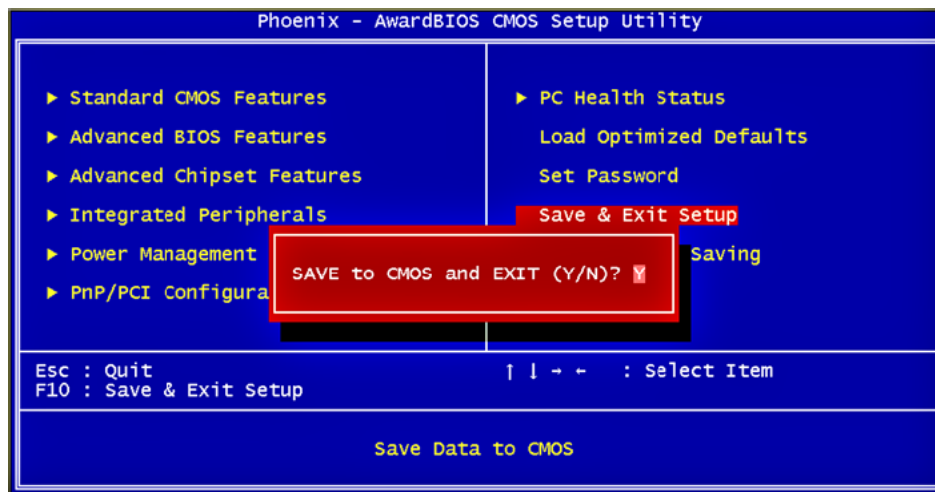
It allows you to load the default values to your system configuration. The default setting is optimal and enabled all high performance features.

10 Set Password



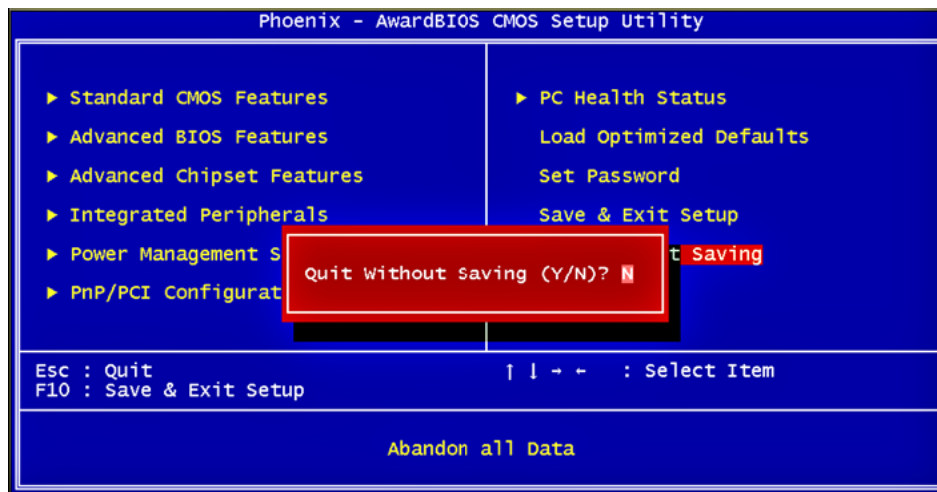
Using Password to set a password that will be used exclusively on the system. To specify a password, highlight the type you want and press <Enter>. The Enter Password: message prompts on the screen. Type the password, up to eight characters in length, and press <Enter>. And the system confirms your password by asking you to type it again. After setting a password, the screen automatically returns to the main screen. To disable a password, just press the <Enter> key when you are prompted to enter the password. A message will confirm the password to be disabled. Once the password is disabled, the system will boot, then you can enter BIOS Setup freely.

II Save & Exit Setup



Typing “Y”, you will quit the setup utility and save all the changes into the CMOS memory.
Typing “N”, you will return to Setup utility.

12 Exit Without Saving



Typing "Y" will quit the Setup utility without saving the modifications.

Typing "N" will return you to Setup utility.

13 BIOS Beep Sound code list

Beep Sound Message

- 1 short (Beep) System booting is normally
- 2 short (Beep) CMOS setting error
- 1 long - 1 short (Beep) DRAM error
- 1 long - 2 short (Beep) Display card or monitor connected error
- 1 long - 3 short (Beep) Keyboard error
- 1 long - 9 short (Beep) ROM error
- Long (Beep) continuous DRAM hasn't inset correctly
- Short (Beep) continuous POWER supply has problem