

AR-B1642  
Socket-370 Pentium III  
INDUSTRIAL GRADE  
CPU BOARD  
User's Guide

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## 0. PREFACE

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### 0.2 WELCOME TO THE AR-B1642 CPU BOARD

This guide introduces the Acrosser AR-B1642 CPU Board.

Use information provided in this manual describes this card's functions and features. It also helps you start, set up and operate your AR-B1642. General system information can also be found in this publication.

Please refer to the chapter introduction if you have not already installed this board. Check the packing list before you install and make sure the accessories are completely included.

### 0.3 BEFORE YOU USE THIS GUIDE

Please refer to the Chapter 1, "Introduction" in this guide, if you have not already installed this AR-B1642. Check the packing list before you install and make sure the accessories are completely included.

AR-B1642 CD provides the newest information regarding the CPU card. Please refer to the files of the enclosed utility CD. It contains the modification and hardware & software information, and adding the description or modification of product function after manual printed.

### 0.4 RETURNING YOUR BOARD FOR SERVICE

If your board requires any services, contact the distributor or sales representative from whom you purchased the product for service information. If you need to ship your board to us for service, be sure it is packed in a protective carton. We recommend that you keep the original shipping container for this purpose.

You can help assure efficient servicing for your product by following these guidelines:

1. Include your name, address, daytime telephone, facsimile number and E-mail.
2. A description of the system configuration and/or software at the time of malfunction.
3. A brief description of the problem occurred.

### 0.5 TECHNICAL SUPPORT AND USER COMMENTS

Users comments are always welcome as they assist us in improving the quality of our products and the readability of our publications. They create a very important part of the input used for product enhancement and revision.

We may use and distribute any of the information you provide in any way appropriate without incurring any obligation.

You may, of course, continue to use the information you provide.

If you have any suggestions for improving particular sections or if you find any errors on it, please send your comments to Acrosser Technology Co., Ltd. or your local sales representative and indicate the manual title and book number.

Internet electronic [mail to:Sales@acrosser.com](mailto:Sales@acrosser.com)

[acrosser@tp.globalnet.com.tw](mailto:acrosser@tp.globalnet.com.tw)

### 0.6 STATIC ELECTRICITY PRECAUTIONS

Before removing the board from its anti-static bag, read this section about static electricity precautions. Static

electricity is a constant danger to computer systems. The charge that can build up in your body may be more than sufficient to damage integrated circuits on any PC board. It is, therefore, important to observe basic precautions whenever you use or handle computer components. Although areas with humid climates are much less prone to static build-up, it is always best to safeguard against accidents that may result in expensive repairs. The following measures should be sufficient to protect your equipment from static discharge:

Touch a grounded metal object to discharge the static electricity in your body (or ideally, wear a grounded wrist strap).

When unpacking and handling the board or other system components, place all materials on an anti-static surface. Be careful not to touch the components on the board, especially the "golden finger" connectors on the bottom of the board.

# 1. INTRODUCTION

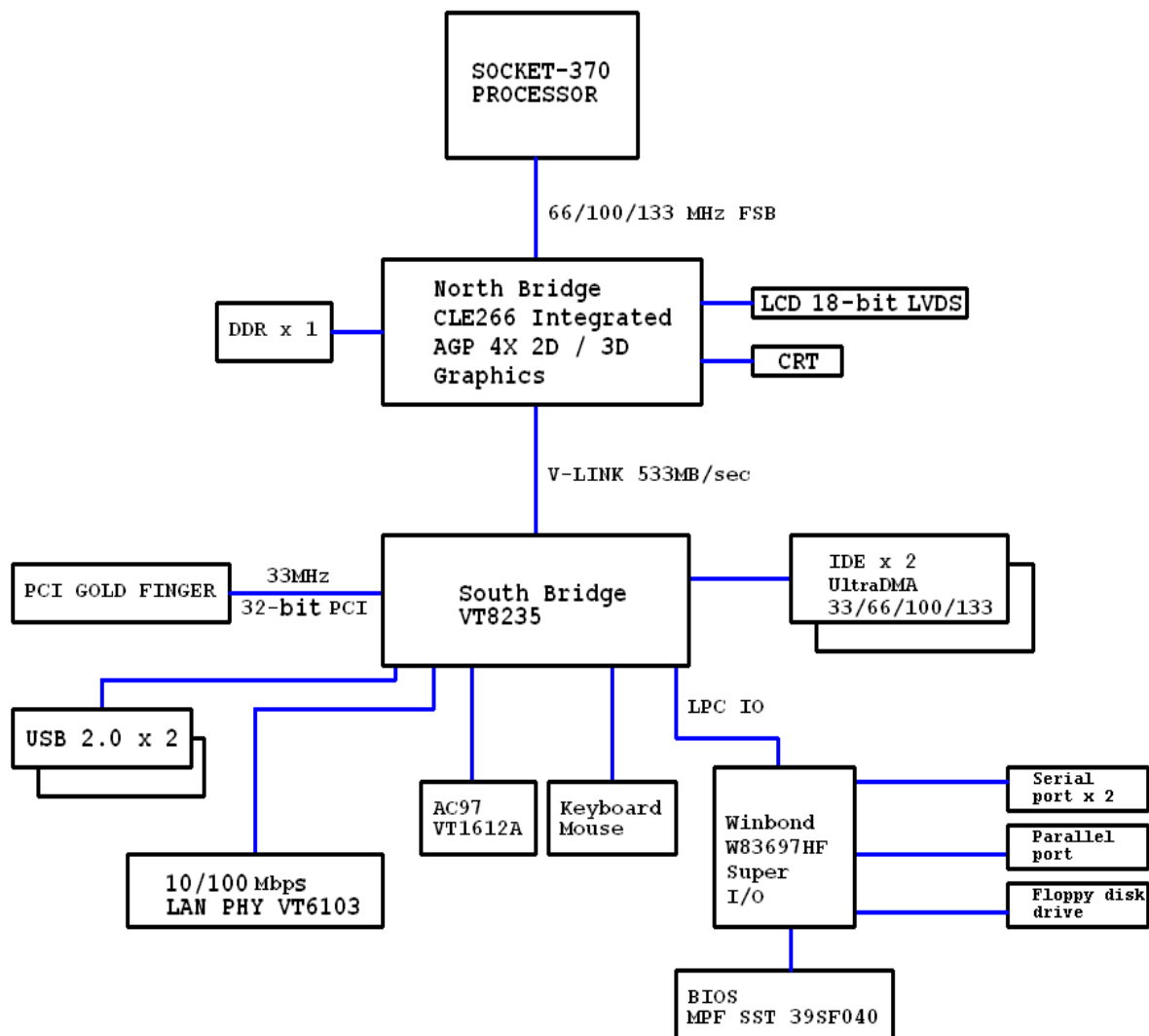
Welcome to the AR-B1642 PCI Single Board Computer. AR-B1642 provides a flexible system that allows users to choose the performance of system as their wish. AR-B1642 supports Socket-370 Pentium III (Coppermine and Tualatin), Intel Celeron, Via C3 processors with speed up to 1.26GHz with FSB 133/100/66 MHz. AR-B1642 is equipped with high performance VIA ® advanced chipset CLE266 version CD (North Bridge VT8623-CE plus South Bridge VT8235-CD). This product is designed for the system manufacturers, integrators, or VARs that want to provide all the performance, reliability, and quality at a reasonable price.

AR-B1642 provides one 184-pin DIMM socket that supports up to 1 GB DDR266/DDR200 (PC2100/PC1600) Double Data Rate (DDR) SDRAM. The DDR interface allows zero wait state bursting between the DRAM and the data buffer at 100/133 MHz.

AR-B1642 also provides on board VGA (CRT and 18-bit LVDS), one LAN that support 100 Base-TX/10 Base-T, AC97 Codec for Audio Line in and Line out, and two USB 2.0 ports with poly fuse protection.

The most eyes popping characteristic of AR-B1642 is its graphic/video accelerator that is integrated into CLE266 North Bridge. It provides internal AGP 4X performance along with 128-bit 2D Graphics Accelerator, 128-bit 3D Graphics Accelerator and DVD playback with MPEG-2 base.

Based on all of the features above, AR-B1642 is an ideal solution for consumers that are looking for high-speed performances with flexible option for further upgrade at a reasonable price.



## 1.1 SPECIFICATIONS

- **CPU:** Socket-370 (Pentium III, Pentium III Tualatin, Intel Celeron, Via C3).
- **DMA channels:** 7.
- **Interrupt levels:** 15.
- **Chipset:** VIA® CLE266 (VT8623 Integrated 2D, 3D, and MPEG-2 graphics accelerator and VT8235).
- **Memory:** Provide one 184-pin DIMM socket, which supports DDR266/200 DDR SDRAM. The memory capability can up to 1GB.
- **VGA Controller:** Embedded VGA controller.
- **Display Interface:** CRT – D-SUB 15-pin connector. Resolution up to True Color (32 bits) 1400x1050.  
LCD – for 18-bit LVDS interface. 2x13x2.00mm box header connector. Resolution can up to 1280x1024 (SXGA).
- **UltraDMA-133/100/66/33 IDE Interface:** Two Enhanced IDE channels. The south bridge VT8235 supports UltraMDA-133/100/66/33 IDE interface. To support UltraDMA-133/100/66/33 Hard disk drive, a specified cable (80-conductor ribbon cable) must be available.
- **Floppy disk drive interface:** Supports 2.88 MB, 1.44MB, 1.2MB, 720KB, or 360KB floppy disk drive.
- **Serial ports:** Two high-speed 16550 compatible UARTs ports with 16-byte send/receive FIFOs.  
COM1: One D-SUB 9-pin connector.  
COM2: On-board one 2x5x2.54mm box header.
- **Parallel port:** On-board one 2x13x2.0mm pin header that supports one IEEE1284 compatible Bi-directional ports.
- **USB port:** On-board one 2x5x2.54mm pin header that supports two USB 2.0 compatible ports.
- **Audio: Onboard AC'97 Codec:** Supports two channel Left/Right Line in/Line out.
- **Watchdog timer:** Software programmable 1~255 sec(s) / minute(s).
- **On-board Integrated Fast Ethernet:** Meets IEEE 802.3 and 100BASE-TX/10BASE-T standards.
- **PS/2 Keyboard Port & PS/2 Mouse Port:** One PS/2 connector and On-board one JST2.0mm 6-pin header.
- **Power Consumption: +5V@4.0A, +12V@2.0A.**  
Test system list as below:  
Main board: AR-B1642.  
CPU: INTEL Pentium III 700MHz.  
Memory: KINGSTONE KVR400X64C3A/256MB.  
HDD: HITACHI HDS722512VLAT20.  
OS: Windows 2000 professional service pack 4.  
Test program: 3Dmark2001  
**Note: Different hardware or software choice will cause different power consumption.**
- **Operating Temperature: 0°C ~ 60°C** (CPU needs Cooling Fan)

## 1.2 PACKING LIST

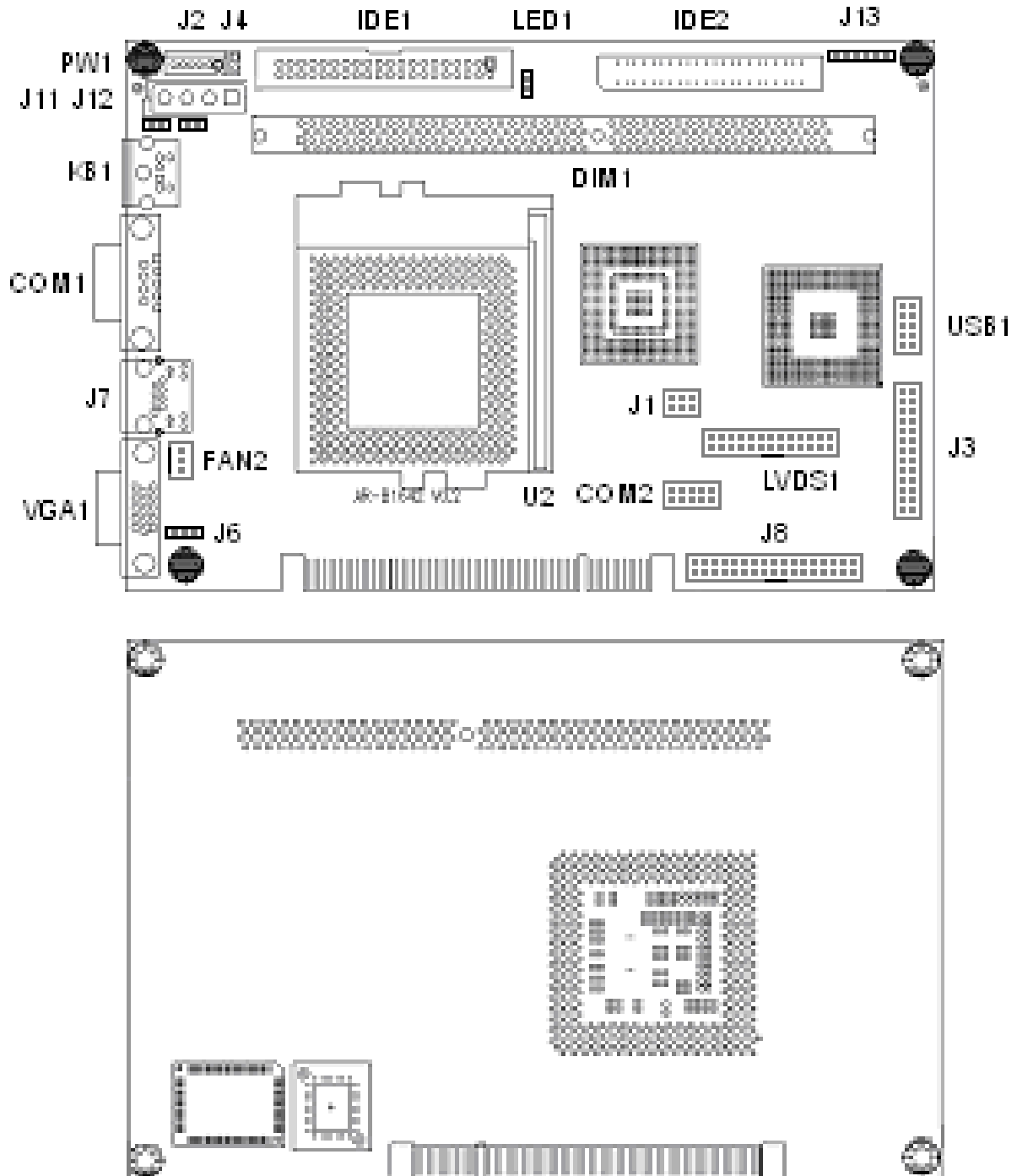
In addition to this User's Manual, the AR-B1642 package includes the following items:

- The quick setup manual.
- 1 AR-B1642 CPU board.
- 1 Software utility CD.
- 1 Hard disk drive adaptable cable for 3.5" hard disk.
- 1 Hard disk drive adaptable cable for 2.5" hard disk.
- 1 Floppy disk drive adaptable cable.
- 1 Keyboard / Mouse adaptable cable.
- 1 USB adaptable cable mounted on one bracket.
- 1 Audio adaptable cable.
- 1 D-SUB 9-pin plus D-SUB 25-pin adaptable cable mounted on one bracket.

## 2. INSTALLATION

This chapter describes how to install the AR-B1642. At first, the layout of AR-B1642 is shown, and the unpacking information that you should be careful is described. The following lists the jumpers and switches setting for the AR-B1642's configuration.

### 2.1 AR-B1642'S LAYOUT

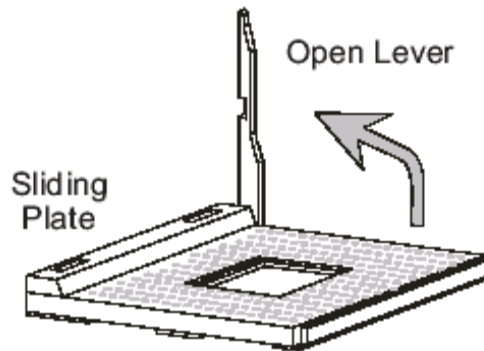


## 2.2 INSTALLING THE CPU

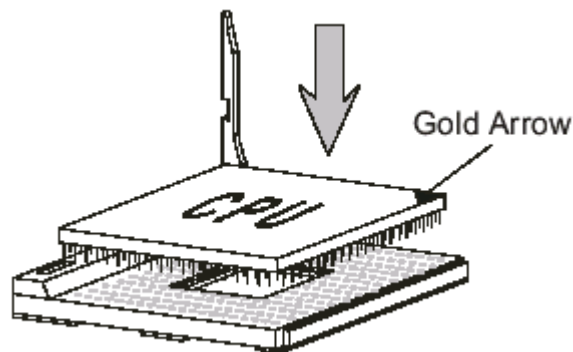
The AR-B1642 supports Intel Pentium III (FC-PGA/FC-PGA2) and Celeron processors. The Board uses a CPU socket called Socket-370 for easy CPU installation. The CPU should always have a Heat Sink and a cooling fan attached to prevent overheating.

### CPU Installation Procedures:

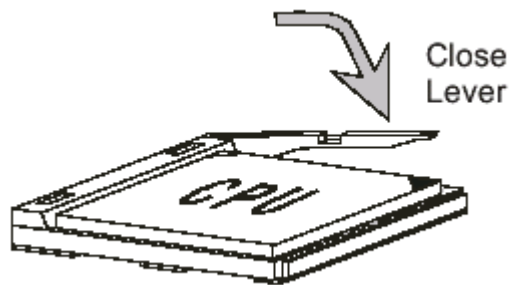
1. Pull the lever sideways away from the socket. Then, raise the lever up to a 90-degree angle.



2. Look for the gold arrow. The gold arrow should point towards the end of lever. The CPU will only fit in the correct orientation.



3. Hold the CPU down firmly, and then close the lever to complete the installation.



**NOTE:** Ensure that the CPU heat sink and the CPU top surface are in total contact to avoid CPU overheating problem that would cause your system to hang or be unstable.



## 2.3 INSTALLING THE MEMORY MODULE - DIMM

The AR-B1642 supports one 184-pin DIMM socket for a maximum total memory of 1GB in DDR SDRAM type. The memory module capacities supported are 128MB, 256MB, 512MB, and 1GB.

Installing and Removing DIMM:

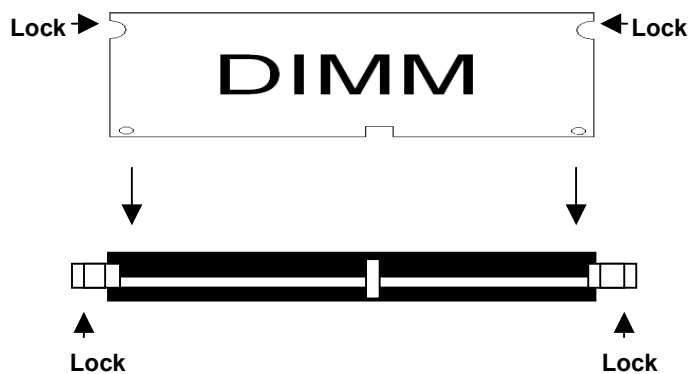
To install the DIMM, locate the memory socket on the board and perform the following steps:

Hold the DIMM so that the two keys of the DIMM align with those on the memory slot.

Gently push the DIMM in an upright position until the clips of the slot close to hold the DIMM in place when the DIMM touches the bottom of the slot.

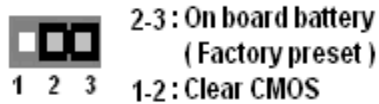
To remove the DIMM, press the clips with both hands.

### DDR SDRAM MODULE SOCKET (DIM1)



Top View of DIMM Socket

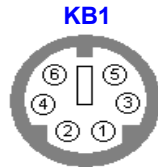
## 2.4 CMOS BATTERY HEADER (J6)



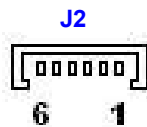
### 3. CONNECTION

This chapter describes how to connect peripherals, switches and indicators to the AR-B1642 board.

#### 3.1 EXTERNAL / INTERNAL KEYBOARD AND MOUSE CONNECTOR / HEADER (KB1 / J2)



PIN	SIGNAL
1	KB DATA
2	MS DATA
3	+5V
4	GND
5	KB CLK
6	MS CLK

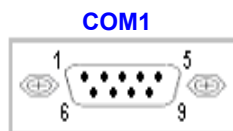


PIN	SIGNAL
1	MS DATA
2	KB DATA
3	GND
4	+5V
5	MS CLK
6	KB CLK

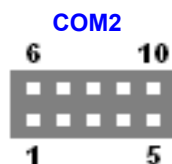
#### 3.2 KEYBOARD AND MOUSE LOCK / UNLOCK HEADER (J11 / J12)



#### 3.3 EXTERNAL / INTERNAL SERIAL PORT CONNECTOR / HEADER (COM1 / COM2)



PIN	SIGNAL	PIN	SIGNAL
1	/DCDA	6	/DSRA
2	RXDA	7	/RTSA
3	TXDA	8	/CTSA
4	/DTRA	9	/RIA
5	GND		



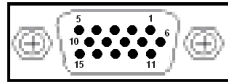
PIN	SIGNAL	PIN	SIGNAL
1	/DCDB	6	/DSRB
2	RXDB	7	/RTSB
3	TXDB	8	/CTSB
4	/DTRB	9	/RIB
5	GND		

#### 3.4 LAN CONNECTOR (J7)



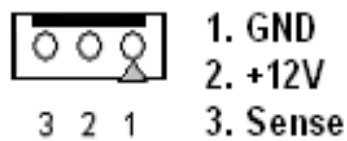
PIN	SIGNAL	PIN	SIGNAL
1	TX+	5	NC
2	TX-	6	RX-
3	RX+	7	NC
4	NC	8	NC

### 3.5 VGA CONNECTOR (VGA1)

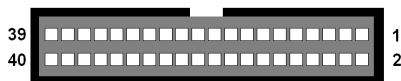


PIN	SIGNAL	PIN	SIGNAL
1	RED	9	+5V
2	GREEN	10	GND
3	BLUE	11	NC
4	NC	12	SDA
5	GND	13	HSYNC
6	GND	14	VSYNC
7	GND	15	SCL
8	GND		

### 3.6 CPU FAN POWER HEADER (FAN2)

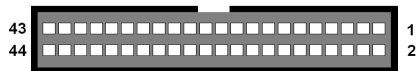


### 3.7 HARD DISK DRIVE 40-PIN HEADER (IDE1)



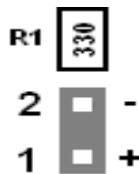
PIN	SIGNAL	PIN	SIGNAL
1	/RESET	2	GND
3	PDATA 7	4	PDATA 8
5	PDATA 6	6	PDATA 9
7	PDATA 5	8	PDATA 10
9	PDATA 4	10	PDATA 11
11	PDATA 3	12	PDATA 12
13	PDATA 2	14	PDATA 13
15	PDATA 1	16	PDATA 14
17	PDATA 0	18	PDATA 15
19	GND	20	N.C
21	PDDREQ	22	GND
23	/PDIOW	24	GND
25	/PDIOR	26	GND
27	PIORDY	28	GND
29	/PDDACK	30	GND
31	IRQ14	32	N.C
33	PDA1	34	GPIOA
35	PDA0	36	PDA2
37	/PDCS1	38	/PDCS3
39	/HD_LED1	40	GND

### 3.8 HARD DISK DRIVE 44-PIN HEADER (IDE2)



PIN	SIGNAL	PIN	SIGNAL
1	/RESET	2	GND
3	SDATA 7	4	SDATA 8
5	SDATA 6	6	SDATA 9
7	SDATA 5	8	SDATA 10
9	SDATA 4	10	SDATA 11
11	SDATA 3	12	SDATA 12
13	SDATA 2	14	SDATA 13
15	SDATA 1	16	SDATA 14
17	SDATA 0	18	SDATA 15
19	GND	20	N.C
21	SDDREQ	22	GND
23	/SOIOW	24	GND
25	/SOIOR	26	GND
27	SIORDY	28	GND
29	/SDDACK	30	GND
31	IRQ15	32	N.C
33	SDA1	34	/LID
35	SDA0	36	SDA2
37	/SDCS1	38	/SDCS3
39	/HD_LED2	40	GND
41	+5V	42	+5V
43	GND	44	N.C

### 3.9 HARD DISK INDICATIVE LED HEADER (LED1)

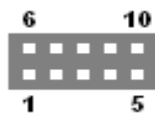


### 3.10 AUDIO LINE IN / LINE OUT HEADER (J13)



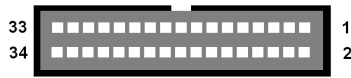
PIN	SIGNAL	PIN	SIGNAL
1	LINE IN L	4	LINE OUT L
2	GND	5	GND
3	LINE IN R	6	LINE OUT R

### 3.11 USB HEADER (USB1)



PIN	SIGNAL	PIN	SIGNAL
1	+5V	6	+5V
2	TX0-	7	TX1-
3	TX0+	8	TX1+
4	GND	9	GND
5	GND	10	GND

### 3.12 FLOPPY DISK DRIVE HEADER (J8)



PIN	SIGNAL	PIN	SIGNAL
1	GND	2	DRVDEMO
3	GND	4	NC
5	GND	6	NC
7	GND	8	/INDEX
9	GND	10	/MOA
11	GND	12	/DSB
13	GND	14	/DSA
15	GND	16	/MOB
17	GND	18	/DIR
19	GND	20	/STEP
21	GND	22	/WD
23	GND	24	/WE
25	GND	26	/TRAKO
27	GND	28	/WP
29	GND	30	/RDATA
31	GND	32	/HEAD
33	GND	34	/DSKCHG

### 3.13 PARALLEL PORT HEADER (J3)



PIN	SIGNAL	PIN	SIGNAL
1	/STB	2	/AFD
3	PD0	4	/ERR
5	PD1	6	/INIT
7	PD2	8	/SLIN
9	PD3	10	GND
11	PD4	12	GND
13	PD5	14	GND
15	PD6	16	GND
17	PD7	18	GND
19	/ACK	20	GND
21	BUSY	22	GND
23	PE	24	GND
25	SLCT	26	NC

### 3.14 LCD HEADER – LVDS INTERFACE (LVDS1)

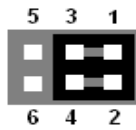


PIN	SIGNAL	PIN	SIGNAL
1	TX0-	2	GND
3	TX0+	4	GND
5	TX1-	6	LCD_VDD
7	TX1+	8	LCD_VDD
9	TX2-	10	NC
11	TX2+	12	GND
13	TXCLK-	14	GND
15	TXCLK+	16	+12V
17	NC	18	+12V
19	NC	20	GND
21	+5V	22	NC
23	LCD_VDD	24	NC
25	LCD_VDD	26	NC

**+5V @ 2A , +12V @ 2A**

The ratings of +5V and +12V here were be limited by individual fuse.

### 3.15 LCD DRIVING VOLTAGE HEADER (J1)

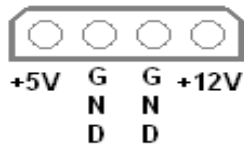


1-3 、 2-4 : +3.3V ( Factory preset )  
3-5 、 4-6 : +5V

### 3.16 RESET BUTTON HEADER (J4)



### 3.17 AT POWER HEADER (PW1)



### 3.18 DDR SDRAM MODULE SOCKET (DIM1)

### 3.19 CPU SOCKET (U2)

## 4. WATCHDOG TIMER

This section describes the use of Watchdog Timer. AR-B1642 is equipped with a programmable time-out period watchdog timer that enable user to reset the system after a time out occur. Users can use simple program to enable the watchdog timer, and program the timer in range of seconds or minutes, with maximum 255 seconds/minutes. Once you enable the watchdog timer, the program will start the count down and when counting down to zero the system will generate a reset signal to reset the system.

### 4.1 WATCHDOG TIMER SETTING

The watchdog timer is a circuit that maybe be used from your program software to detect crash or hang up. The Watchdog timer is automatically disabled after reset. Once you enabled the watchdog timer, your program should trigger the watchdog timer every time before it times out. After you trigger the watchdog timer, the timer will be set to zero and start to count again. If your program fails to trigger the watchdog timer before times out, it will generate a reset pulse to reset the system.

Please refer to the following table in order to properly program Watchdog function

Users could test watchdog function under 'Debug' program as follows:

<b>C:&gt;debug</b>	To enter debug mode.
-o 2e 87	
-o 2e 87	To enter extended function mode, interruptible double-write.
-o 2e 07	To point to Logical Device Number Reg.
-o 2f 08	To Select logical device 8.
-o 2e 30	
-o 2f 01	To activate the logical device.
-o 2e 29	
-o 2f 20	To determine the function as Watchdog.
-o 2e f3	To select register F3 (to select count mode; second or minute)
-o 2f 05	To write 05 to CRF3 (for minute), default is 01 (for second)
-o 2e f4	To select CRF4 (to set Watchdog Timer Value)
-o 2f 02	To set the Watchdog timer to 2 minutes. (00 to disable, max FF)
-o 2e aa	To exit extended function mode.
-q	To quit debug mode

## 5. BIOS CONSOLE

This chapter describes the AR-B1642 BIOS menu displays and explains how to perform common tasks needed to get up and running, and presents detailed explanations of the elements found in each of the BIOS menu. The following topics are covered:

- Main
- Advanced
- Peripherals
- PnP/PCI
- PC Health
- Boot
- Exit

### BIOS SETUP OVERVIEW

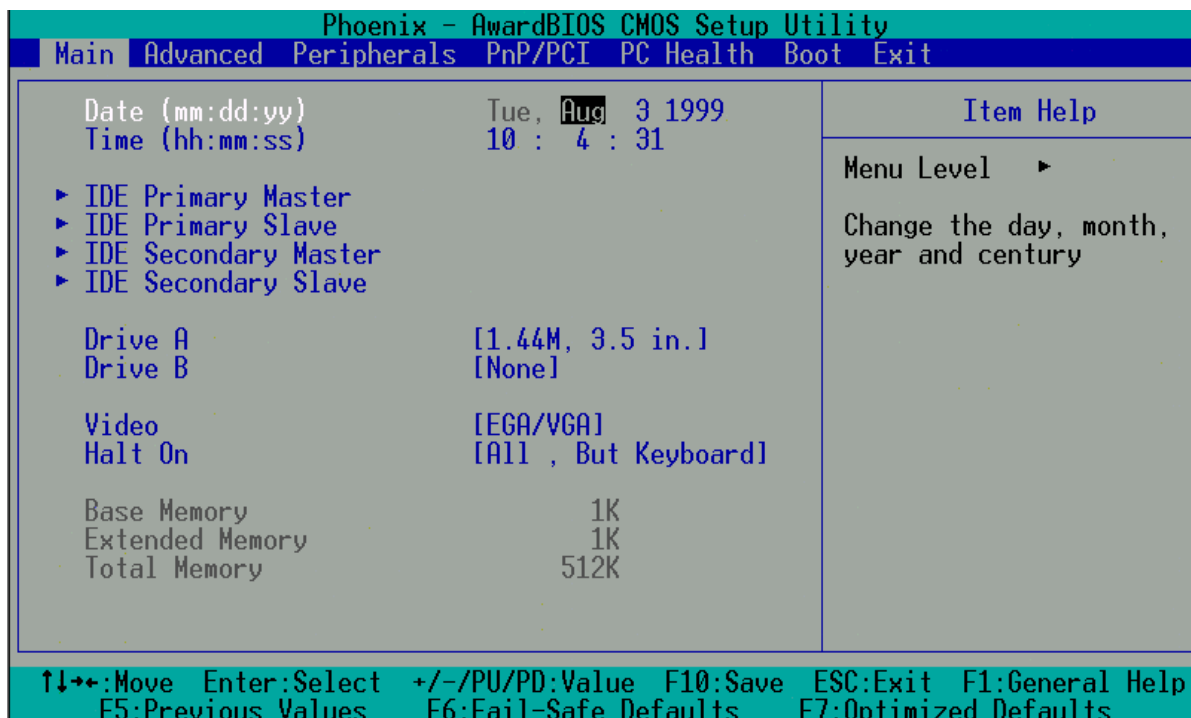
The BIOS is a program used to initialize and set up the I/O system of the computer, which includes the ISA bus and connected devices such as the video display, diskette drive, and the keyboard. The BIOS provides a menu-based interface to the console subsystem. The console subsystem contains special software, called firmware that interacts directly with the hardware components and facilitates interaction between the system hardware and the operating system.

The BIOS default values ensure that the system will function at its normal capability. In the worst situation the user may have corrupted the original settings set by the manufacturer.

After the computer is turned on, the BIOS will perform diagnostics on the system and display the size of the memory that is being tested. Press the [Del] key to enter the BIOS setup program, and then the main menu will show on the screen.

#### 5.1 MAIN

The BIOS setup main menu includes some options. Use the [Up/Down] arrow key to highlight the option that you wish to modify, and then press the [Enter] key to select the option and configure the functions.



#### Main

The <Main> option allows you to record some basic system hardware configuration and set the system clock and error handling. If the CPU board is already installed in a working system, you will not need to select this option anymore.



### Date & Time Setup

Highlight the <Date> field and then press the [Page Up]/[Page Down] or [+] / [-] keys to set the current date. Follow the month, day and year format.

Highlight the <Time> field and then press the [Page Up]/[Page Down] or [+] / [-] keys to set the current date. Follow the hour, minute and second format.

The user can bypass the date and time prompts by creating an AUTOEXEC.BAT file. For information on how to create this file, please refer to the MS-DOS manual.

### Hard Disk Setup

The BIOS supports various types for user settings, The BIOS supports <Pri. Master>, <Pri. Slave>, <Sec. Master> and <Sec. Slave> so the user can install up to two hard disks. For the master and slave jumpers, please refer to the hard disk's installation descriptions.

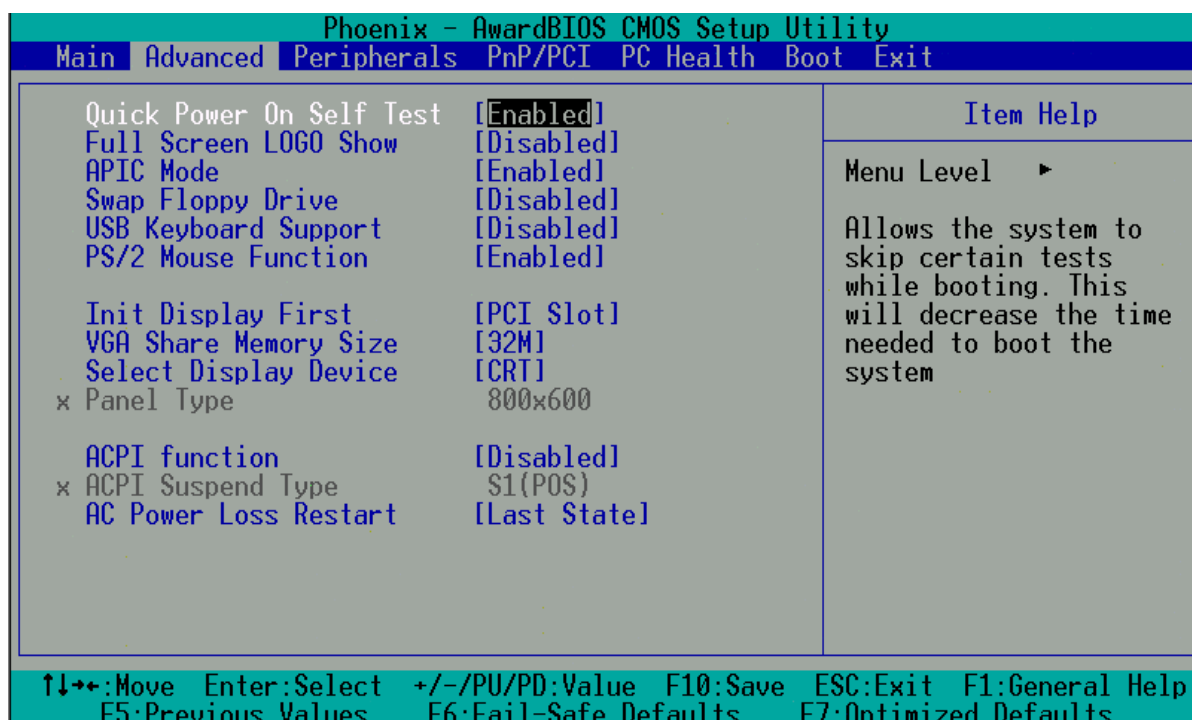
### Floppy Setup

The <Main> option records the types of floppy disk drives installed in the system.

To enter the configuration value for a particular drive, highlight its corresponding field and then select the drive type using the up-arrow or down-arrow key.

## 5.2 ADVANCED

The <Advanced > option consists of configuration entries that allow you to improve your system performance, or let you set up some system features according to your preference. Some entries here are required by the CPU board's design to remain in their default settings.



### Advanced

#### Quick Post

This category speeds up Power On Self Test (POST) after you power on the computer. If it is set to Enabled, BIOS will shorten or skip some check items during POST.

These options determine where the system looks first for an operating system.

#### USB Keyboard Support

This option can enable or disable USB keyboard function.

***PS/2 Mouse Function***

This option can enable or disable PS/2 mouse function.

***Panel Type***

This option can be set resolution of LCD as 640x480 or 800x600 or 1024x768.

***ACPI Function***

This item allows you to enable or disable the Advanced Configuration and Power Management (ACPI).

***ACPI Suspend Type***

This item will set which ACPI suspend type will be used.

S1 (POS)

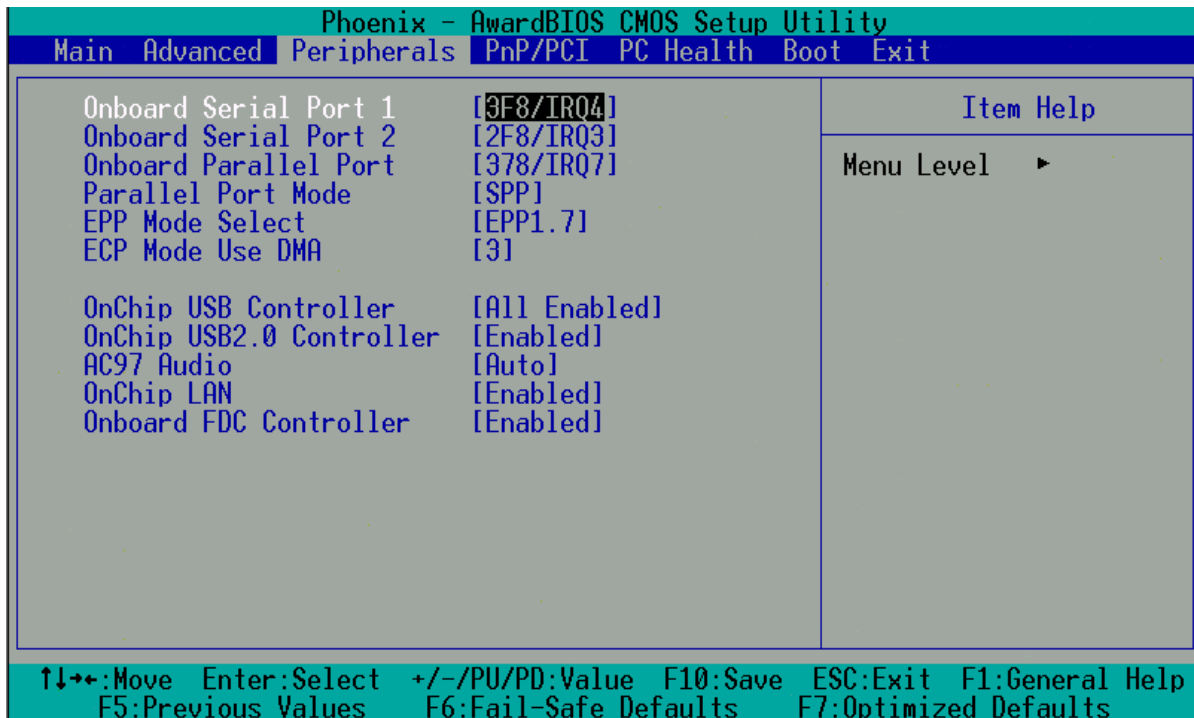
The S1 sleeping state is low wake-up latency sleeping state. In this state, no system context is lost (CPU or chipset) and hardware maintains all system contexts.

S3 (STR)

The S3 state is a low wake-up latency sleeping state. In this state, all system contexts are lost except system memory. CPU, cache, and chipset context are lost in this state. Hardware maintains memory context and restores some CPU and L2 configuration context.

## 5.3 PERIPHERALS

This option controls the configuration of the board's chipset. Control keys for this screen are the same as for the previous screen.



### Peripherals

#### **Onboard Serial Port 1**

#### **Onboard Serial Port 2**

These options enable the serial port 1 and 2.

#### **Onboard Parallel Port**

This option enables the parallel port.

#### **Parallel Port Mode**

This option specifies the parallel port mode.

Default setting is Standard Parallel Port (SPP).

Extended Capabilities Port (ECP) and Enhanced Parallel Port (EPP) are both bi-directional data transfer schemes that adhere to the IEEE 284 specifications.

#### **OnChip USB Controller**

This item allows you to decide to enable or disable the on-board USB Controller.

#### **OnChip USB2.0 Controller**

This item allows you to decide to enable or disable to enhance USB controller as USB2.0 mode.

#### **AC97 Audio**

This item allows you to decide to enable or disable the AC'97 Audio.

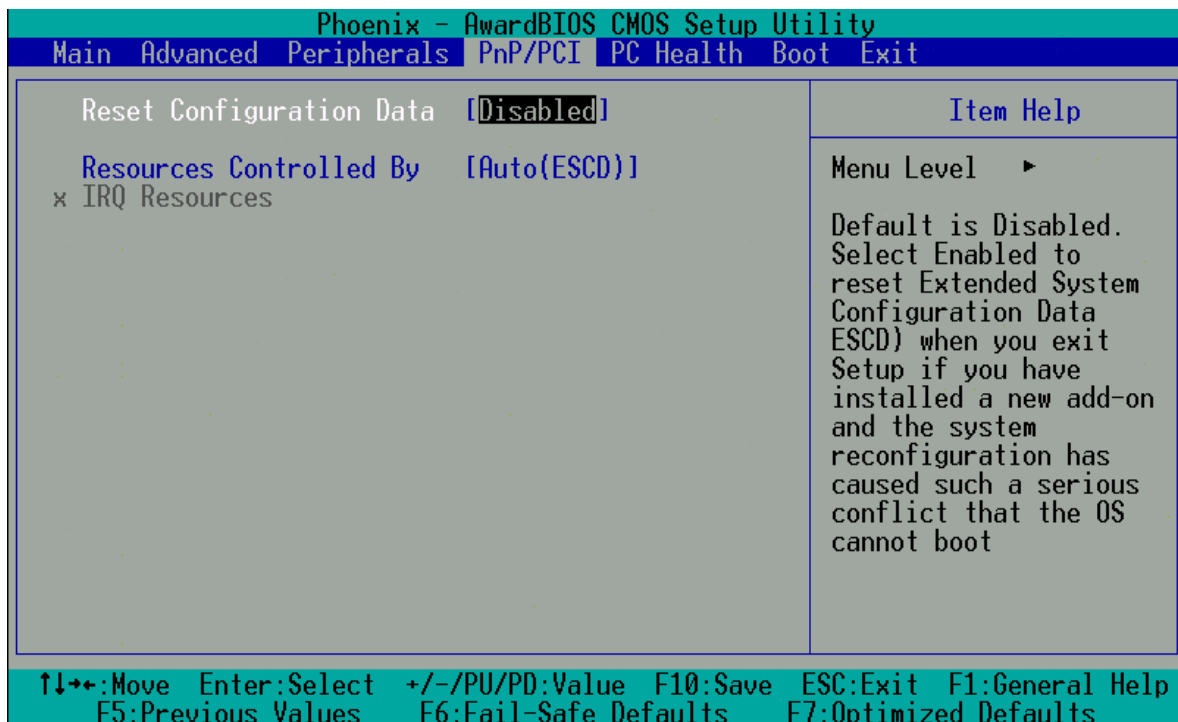
#### **OnChip LAN**

This item allows you to decide to enable or disable the on-board LAN.

#### **Onboard FDC Controller**

This item allows you to decide to enable or disable the on-board FDC Controller.

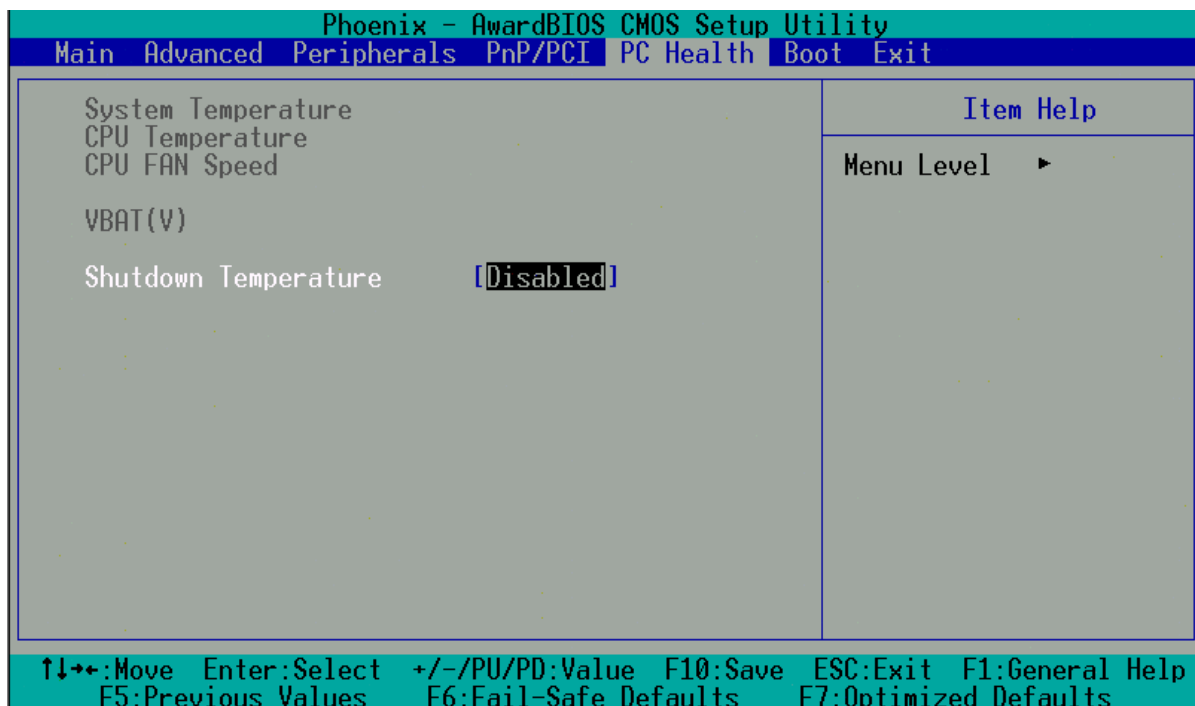
## 5.4 PNP/PCI



### PnP/PCI

## 5.5 PC HEALTH

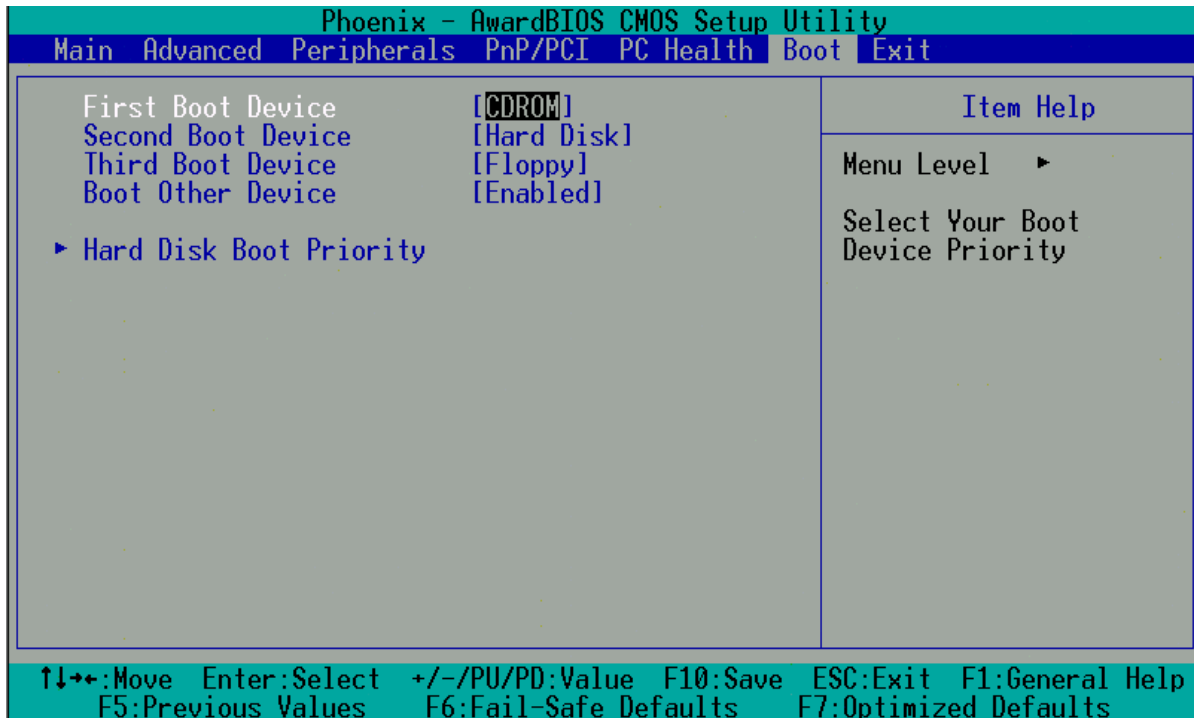
This section allows User to view some hardware information of the system, include Temperatures, CPU's fan speed, and battery voltage.



### PC Health

## 5.6 BOOT

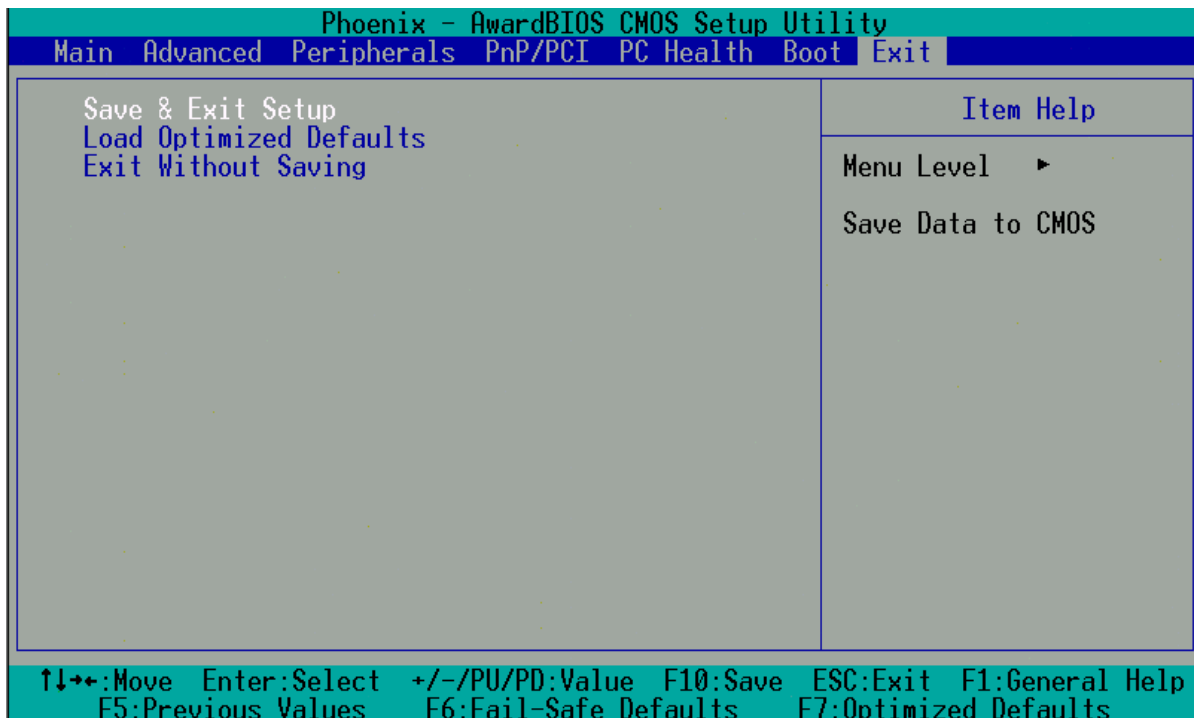
Boot sequence setup.



### Boot

## 5.7 EXIT

This section is used to exit the BIOS main menu. After making your changes, you can either save them or exit the BIOS menu and without saving.



### Exit

## 5.8 BIOS UPDATE

The BIOS program instructions are contained within computer chips called FLASH ROMs that are located on your system board. The chips can be electronically reprogrammed, allowing you to update your BIOS firmware without removing and installing chips.

The AR-B1642 provides the FLASH BIOS update function for you to easily to update BIOS.

Please follow these operating steps to update BIOS:

- Step 1: You must boot up system into MS-DOS mode first. Please don't detect files CONFIG.SYS and AUTOEXEC.BAT.
  
- Step 2: In the MS-DOS mode, you should execute the AWDFLASH program to update BIOS.
  
- Step 3: Follow all messages then you will update BIOS smoothly.

## APPENDIX A. IO ADDRESS MAPPING

I/O MAP	ASSIGNMENT
0000-000F	DMA controller
0010-001F	System board resource
0020-0021	Interrupt controller
0022-003F	System board resource
0040-0043	System Timer
0044-005F	System board resource
0060-0060	Standard 101/102-Key or Microsoft Natural Keyboard
0061-0061	System speaker
0062-0063	System board resource
0064-0064	Standard 101/102-Key or Microsoft Natural Keyboard
0065-006F	System board resource
0070-0073	System CMOS / real time clock
0074-007F	System board resource
0080-0090	DMA controller
0091-0093	System board resource
0094-009F	DMA controller
00A0-00A1	Interrupt controller
00A2-00BF	System board resource
00C0-00DF	DMA controller
00E0-00EF	System board resource
00F0-00FF	Math processor
0170-0177	Secondary IDE controller
01F0-01F7	Primary IDE controller
0294-0297	System board resource
02F8-02FF	Serial port (COM2)
0376-0376	VIA Bus Master PCI IDE Controller Secondary IDE controller (dual fifo)
0378-037F	Parallel port (LPT1)
03B0-03BB	VIA / S3G UniChrome IGP
03C0-03DF	VIA / S3G UniChrome IGP
03F2-03F5	Floppy Disk Drive controller
03F6-03F6	VIA Bus Master PCI IDE Controller Primary IDE controller (dual fifo)
03F7-03F7	Floppy Disk Drive controller
03F8-03FF	Serial port (COM1)
04D0-04D1	System board resource

## APPENDIX B. INTERRUPT REQUEST (IRQ)

SETTING	HARDWARE USING THE SETTING
00	System timer
01	Standard 101/102-Key or Microsoft Natural Keyboard
02	Programmable interrupt controller
03	Serial Port (COM2)
04	Serial Port (COM1)
05	ACPI IRQ Holder for PCI IRQ Steering VIA PCI to USB Enhanced Host Controller
06	Standard Floppy Disk Drive Controller
07	Parallel Port (LPT1)
08	System CMOS / real time clock
09	SCI IRQ used by ACPI bus
10	ACPI IRQ Holder for PCI IRQ Steering Viny1 AC'97 Codec Combo Driver (WDM) VIA Tech 3038 PCI to USB Universal Host Controller
11	ACPI IRQ Holder for PCI IRQ Steering ACPI IRQ Holder for PCI IRQ Steering VIA Rhine II Fast Ethernet Adapter VIA Tech 3038 PCI to USB Universal Host Controller VIA Tech 3038 PCI to USB Universal Host Controller VIA / S3G UniChrome IGP
12	PS/2 Compatible Mouse
13	Numeric data processor
14	VIA Bus Master PCI IDE Controller Primary IDE controller (dual fifo)
15	VIA Bus Master PCI IDE Controller Secondary IDE controller (dual fifo)