AR-B5250

3.5” SBC Supporting on-Board Intel Celeron-M 1GHz Zero Cache Celeron-M 600MHz 512KB Cache Processor or Pentium M / Celeron M socket type

User Guide

Edition: 1.2
Book Number: AR-B5250 09.03.017

Table of Contents

0. PREFACE

0.1 COPYRIGHT NOTICE AND DISCLAIMER

0.2 WELCOME TO THE AR-B5250 CPU BOARD

This guide introduces the Acrosser AR-B5250 CPU Board.

Use information provided in this manual describes this card's functions and features. It also helps you start, setup and operate your AR-B5250. General system information can also be found in this publication.

0.3 BEFORE YOU USE THIS GUIDE

Please refer to the Chapter 3, "Setting System," in this guide, if you have not already installed this AR-B5250. Check the packing list before you install and make sure the accessories are completely included.

AR-B5250 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

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-B5250 3.5” SBC AT/ATX Single Board Computer. The AR-B5250 is 3.5” SBC board with onboard Intel Petium-M or Celeron -M processor and QG82910GMLE + ICH6M Chipset. The memory contents one DDR2 SO-DIMM socket which supports up to 1GB of memory.

Graphics display functionality is provided by Build-in Graphic Processor that supports CRT display and LVDS interface with Single or Dual channel panel specifications. Ethernet connectivity comes from the Intel 82574L 10/100/1000 M Ethernet controller.

1.1 PACKING LIST

In addition to this *User's Manual*, the AR-B5250 package includes the following items:

- AR-B5250 AT/ATX Single Board
- Quick User Guide
- Utility CD(Include driver and Manual)

Accessory set ACC-5250 series for purchase separately

- ATX/AT POWER cable (ATX1/ CN4) x 1
- Audio cable (AUDIO1) x 1
- USB Cable (with screws) x 1
- PS/2 to PS/2 Y-cable (KM1) x 1
- Serial port cable (COM) x 4
- SATA HDD Cable (SATA1) x 1
- SATA POWER cable (CON1) x 1

1.2 SPECIFICATIONS

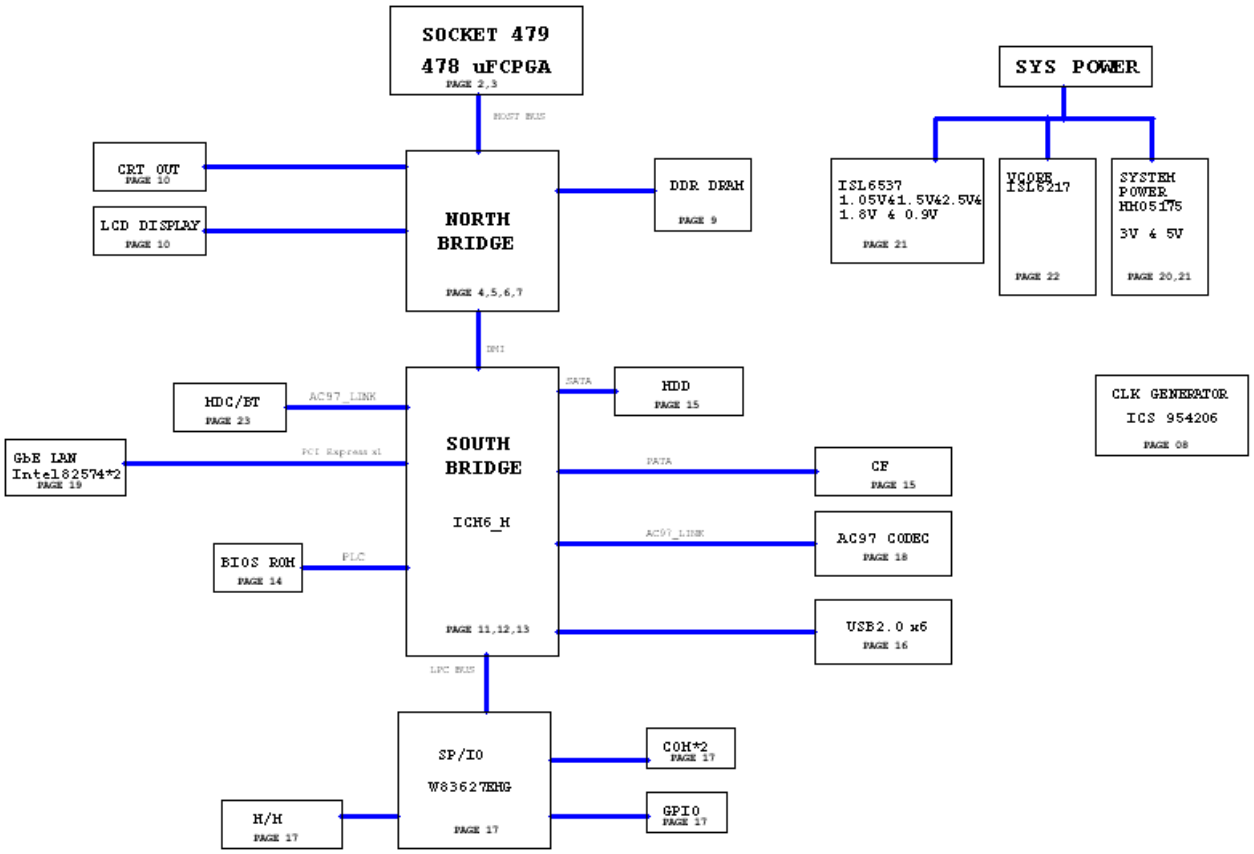
Specifications (Proposed Specifications)

Components		Description	
Board	Dimension (L x W)	146mm x 102mm	Standard 3.5" SBC
Processor	CPU Type	● Socket 478 support Intel Pentium M / Celeron M FSB 400MHz ● Intel Celeron-M 1GHz / 0KB Cache(On-Board) ● Intel Celeron M 600MHz / 512KB	
Chipsets	System Chipsets	Intel 910GMLE & ICH6M	
Memory	Max Memory	1G Bytes	
	Memory Type	1 x DDR2 400 SDRAM	SO-DIMM Socket
Display	Controller	■ Mobile Intel 910GML Express chipset supports Intel Graphics Media Accelerator 900	
	VGA	Resolution up to 2048x1536	1 x VGA
	LVDS	Dual channel 18 bit	Hirose DF13
External I/O Peripherals *	Keyboard / Mouse	1 x PS/2	Mini Din 6-Pin
	USB	4 x USB 2.0	Stack Receptacle
	LAN	2 x GbE (Intel 82574L) Supporting Wake-On-LAN (WOL)	RJ-45
	Compact Flash	1 x CF Socket with latch	Sharing with Primary IDE Channel
Internal I/O Peripherals *	Audio	AC' 97 (ALC655) 1 x Line-In (R/L) 1 x Line-Out (R/L) 1 x MIC-In	5x2, 2.0mm Pin Header
	Serial	3 x RS-232 (+12V required for COM)	5x2, 2.0mm Pin Header
		1 x RS-232/422/485 (Jumper Select) RS-422/485 is optional. (+12V required for COM)	7x2, 2.0mm Pin Header
	USB	2 x USB 2.0	5x2, 2.0mm Pin Header
	SATA	1 x SATA 150	SATA connector And power connector
	GPIO	8-bit GPIO	5x2,2.0mm Pin Header
	LED	1 x Power LED 1 x HDD LED	Pin Header
Others	CPU Fan	1 x Fan (with +12V)	Pin Header
	Reset Button	1 x Reset	Pin Header
	Buzzer	1 x Buzzer	
	CMOS	1 x CMOS Clear	Jumper
	Battery	1 x 3.0V 220mAH Lithium battery	
	Serial Port Select	RS-232 or RS-422/485	Jumper
	Watchdog Timer	By Seconds/Minutes (1~255 sec)	
	Power Management	Meet ACPI 2.0	
Management	Hardware Monitoring	CPU Voltage CPU Temperature FAN Speed Voltage Monitor (12V, 5V)	BIOS Support
	Power Requirements	Single +12V PS_ON & +5VSB (ATX)	Mini-fit 4.2mm 2*2Pin

	Operating Temperature	0~60C degree	
	Storage Temperature	-20~80C degree	
	Relative Humidity	5~90% at 40 degree, non-condensing	
Environment	EMC	Design to meet CE/FCC Class A	
	Lead-Free	RoHS compliance	

Model name:
AR-B5250CM1GZC : Onboard CPU Celeron M 1GHz / 0KB Cache
AR-B5250CM6C: Onboard CPU Celeron M 600MHz / 512KB
AR-B5250 : Socket type CPU

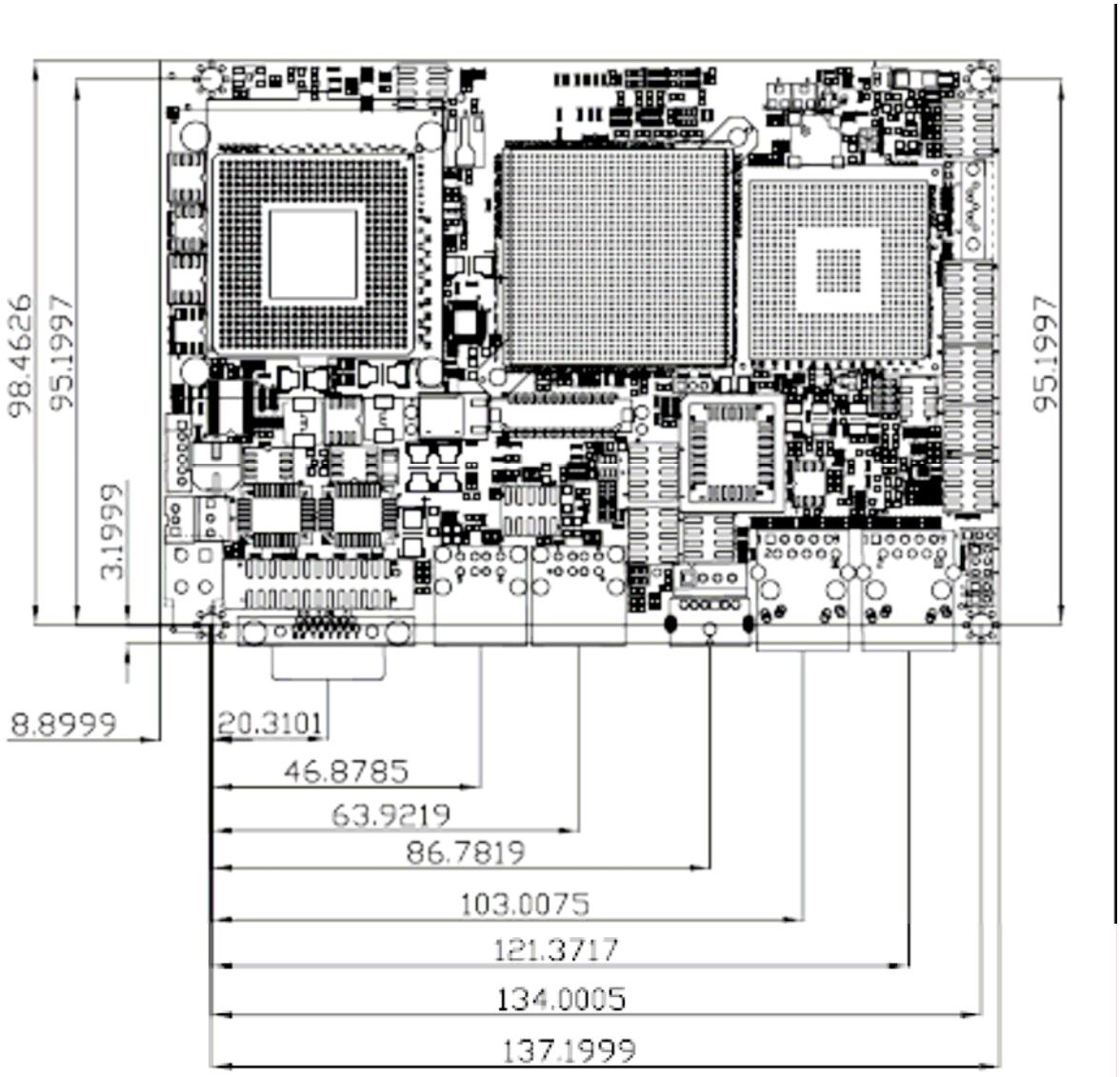
1.3 BLOCK DIAGRAM

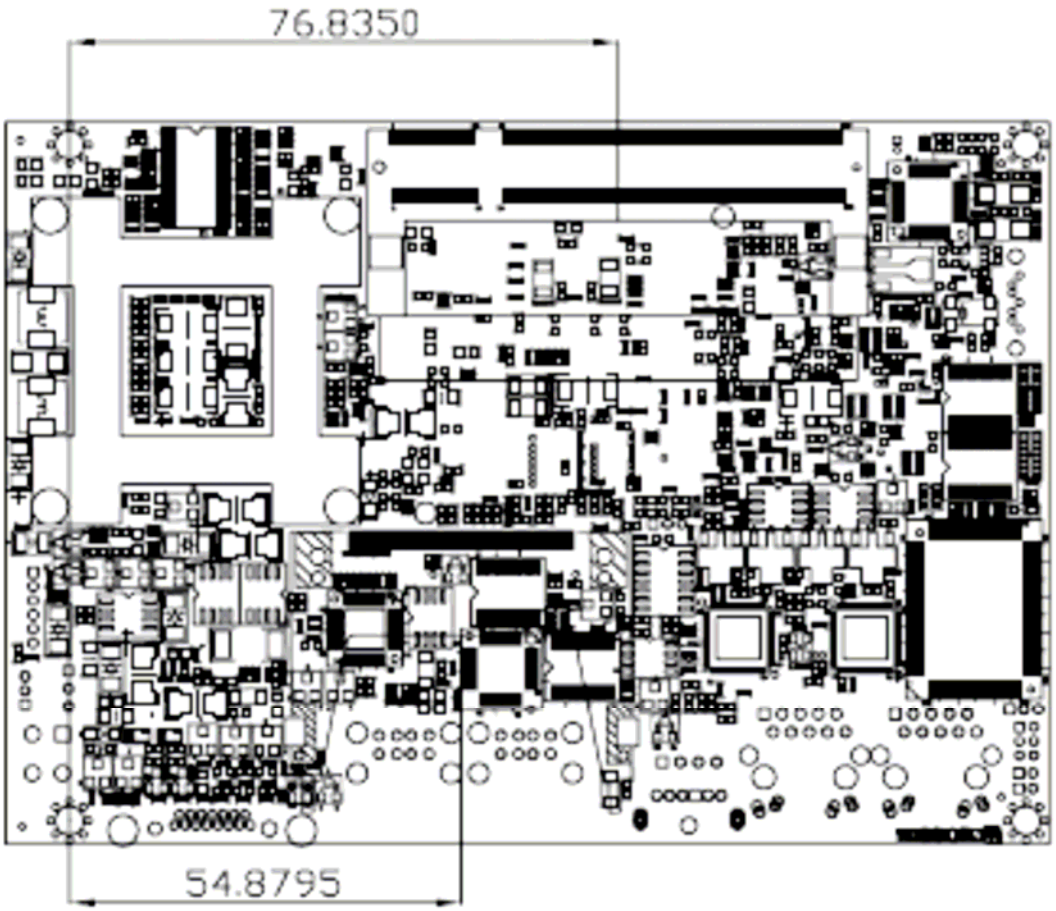


2. INSTALLATION

This chapter describes how to install the AR-B5250. At first, the layout of AR-B5250 is shown, and the unpacking information that you should be careful is described. The jumpers and switches setting for the AR-B5250's configuration are as below.

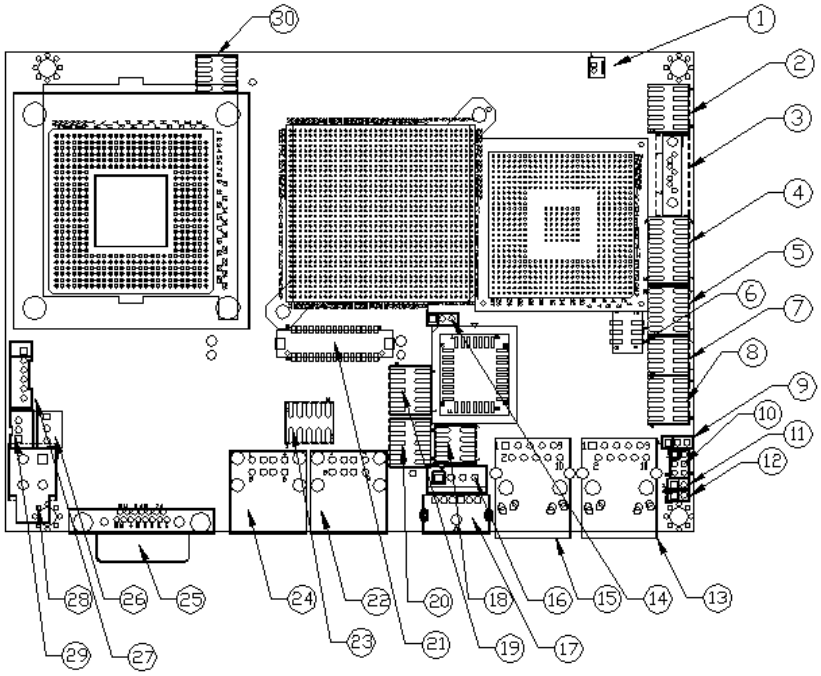
2.1 AR-B5250'S BOARD DIMENSIONS



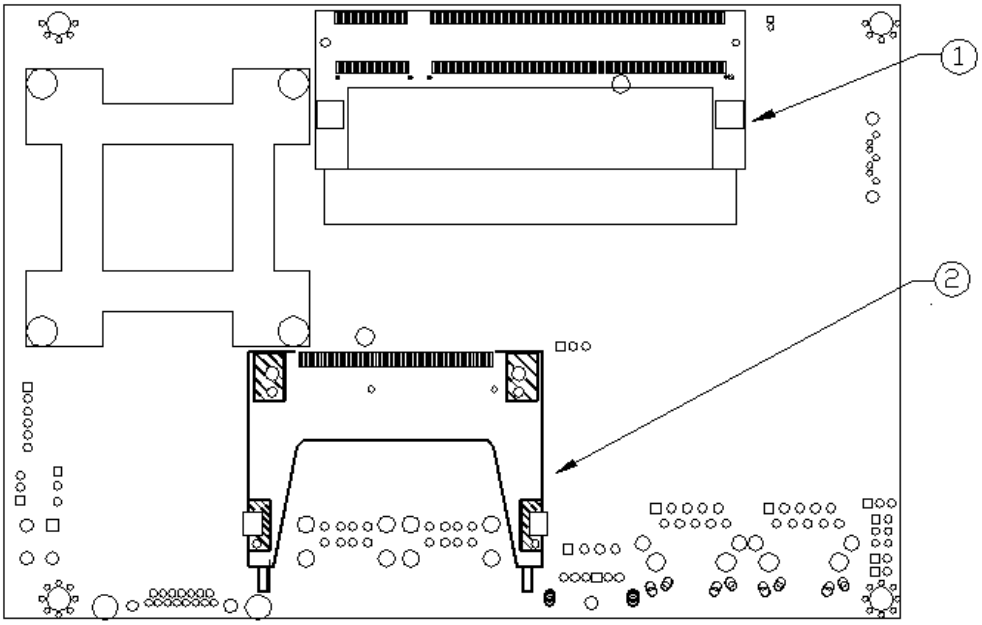

76.8350
54.8795

3. CONNECTION

The connectors on AR-B5250 allows you to connect external devices such as USB devices, serial port drives, hard disk devices, etc. The following table lists the connectors on AR-B5250 and their respective functions.



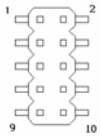
1. COMS BAT CONNECTOR
2. AUDIO
3. SATA CONNECTOR
4. COM1
5. COM2
6. RS232/422/485 SELECT
7. COM1/2 SELECT RI OR +12V
8. GPIO
9. COM CLAER CONNECTOR
10. PANEL CONNECTOR
11. POWER LED
12. HD LED
13. LAN1
14. LCD VCC SELECT
15. LAN2
16. SATA POWER
17. KB/MS
18.COM3/4SELECTRIOR+12V
19. COM3
20. COM4
21. LVDS CONNCTOR
22. USB CONNECTOR
23.INTERNALUSBCONNECTOR
24. USB CONNECTOR
25. VGA
26. CPU FAN
27. INVERTER CONNECTOR
28. AT
29. ATX
30. CPU SELECT JUMPER



1.DDR2ONNECTOR
2.CF CONNECTOR

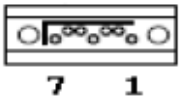
3.1 BATTERY CONNECTOR (CN2)

3.2 AUDIO CONNECTOR (AUDIO1)



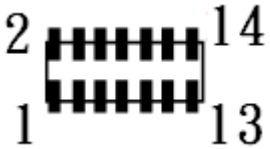
PIN	SIGNAL	PIN	SIGNAL
1	LINE OUT R	2	LINE OUT L
3	GND	4	GND
5	LINE IN R	6	LINE IN L
7	MIC IN	8	GND
9	GND	10	GND

3.3 SATA CONNECTOR (SATA1)



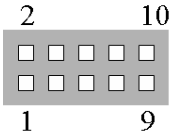
PIN	SIGNAL	PIN	SIGNAL
1	GND	2	Tx+
3	Tx-	4	GND
5	Rx+	6	Rx-
7	GND		

3.4 COM1 (COM1)



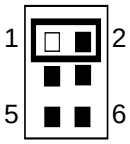
PIN	SIGNAL	PIN	SIGNAL
1	/DCD	2	/DSR
3	RXD	4	/RTS
5	TXD	6	/CTS
7	/DTR	8	/RI
9	GND	10	
11	TX+	12	TX-
13	RX+	14	RX-

3.5 COM2 (COM2)



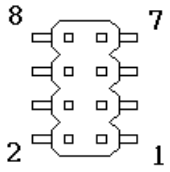
PIN	SIGNAL	PIN	SIGNAL
1	/DCDB	2	/DSRB
3	RXDB	4	/RTSB
5	TXDB	6	/CTSB
7	/DTRB	8	/RIB
9	GND		

3.6 RS232/422/485 SWITCH (JP12)



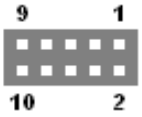
SET	SIGNAL
1-2	**RS232**
3-4	**RS422**
5-6	**RS485**

3.7 COM1/2 SELECT RI OR +12V(JP11)



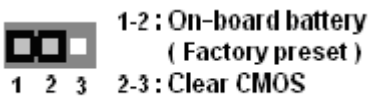
PIN	SIGNAL	PIN	SIGNAL
1	NRIA	2	NRIA_12V
3	+12V	4	NRIA_12V
5	NRIB	6	NRIB_12V
7	+12V	8	NRIB_12V

3.8 GPIO (GPIO1)

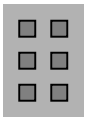


PIN	SIGNAL	PIN	SIGNAL
1	GPIO0	2	VCC
3	GPIO1	4	GPIO7
5	GPIO2	6	GPIO6
7	GPIO3	8	GPIO5
9	GND	10	GPIO4

3.9 CMOS CLEAR (JP5)



3.10 PANEL CONNECTOR (J1)



SET	SIGNAL
1-2	SPEAKER
3-4	POWER BOTTERN
5-6	RESET

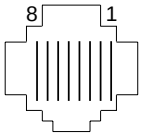
3.11 LED (JP8)

PIN	SIGNAL
JP8	POWER LED

3.12 LED (JP9)

PIN	SIGNAL
JP9	HD LED

3.13 RJ45 CONNECTOR (LAN1)

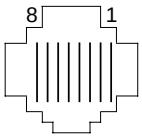


PIN (LAN1	FUNCTION
1	TPTX+
2	TPTX -
3	TPRX+
4	Not Used
5	Not Used
6	TPRX -
7	Not Used
8	Not Used

3.14 LVDS POWER SELECTOR (JP4)

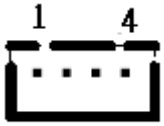
SET	SIGNAL
1-2	**3.3V**
2-3	**5V**

3.15 RJ45 CONNECTOR (LAN2)



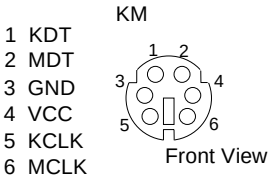
PIN (LAN1	FUNCTION
1	TPTX+
2	TPTX -
3	TPRX+
4	Not Used
5	Not Used
6	TPRX -
7	Not Used
8	Not Used

3.16 SATA POWER CONNECTOR (CON1)

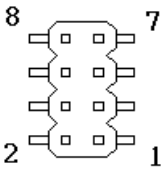


SET	SIGNAL
1	+12V
2	GND
3	+3.3V
4	+5V

3.17 KEYBOARD/MOUSE CONNECTOR (KM1)

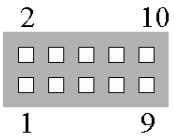


3.18 COM3/4 SELECT RI OR +12V(JP10)



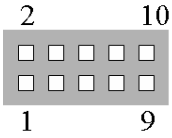
PIN	SIGNAL	PIN	SIGNAL
1	NRIA	2	NRIA_12V
3	+12V	4	NRIA_12V
5	NRIB	6	NRIB_12V
7	+12V	8	NRIB_12V

3.19 COM3 (COM3)



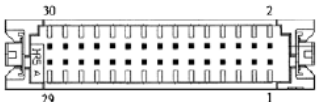
PIN	SIGNAL	PIN	SIGNAL
1	/DCDB	2	/DSRB
3	RXDB	4	/RTSB
5	TXDB	6	/CTSB
7	/DTRB	8	/RIB
9	GND		

3.20 COM4 (COM4)



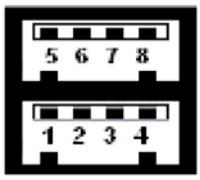
PIN	SIGNAL	PIN	SIGNAL
1	/DCDB	2	/DSRB
3	RXDB	4	/RTSB
5	TXDB	6	/CTSB
7	/DTRB	8	/RIB
9	GND		

3.21 LVDS CONNECTOR (LVDS1)



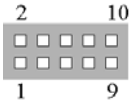
PIN	SIGNAL	PIN	SIGNAL
1	VCC_LVDS	2	GND
3	RXEC-	4	RXEC+
5	GND	6	RXE2-
7	RXE2+	8	GND
9	RXE1-	10	RXE1+
11	RXE3+	12	RXE3-
13	RXE0+	14	RXE0-
15	GND	16	RXOC+
17	RXOC-	18	GND
19	RXO2+	20	RXO2-
21	DDCLK	22	RXO1+
23	RXO1-	24	DDDATA
25	RXO0+	26	RXO0-
27	RXO3+	28	RXO3-
29	VCC_LVDS	30	VCC_LVDS

3.22 EXTERNAL USB (USB2)



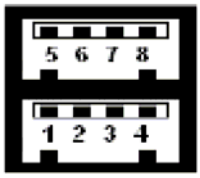
PIN	SIGNAL	PIN	SIGNAL
1	**+5V**	**5**	**+5V**
2	**USB0-**	**6**	**USB1-**
3	**USB0+**	**7**	**USB1+**
4	**GND**	**8**	**GND**

3.23 INTERNAL USB CONNECTOR (USB3)



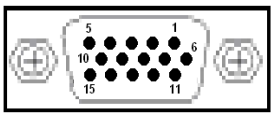
PIN	SIGNAL	PIN	SIGNAL
1	+5V	2	+5V
3	USB0-	4	USB1-
5	USB0+	6	USB1+
7	GND	8	GND
9	GND	10	GND

3.24 EXTERNAL USB (USB1)



PIN	SIGNAL	PIN	SIGNAL
1	+5V	5	+5V
2	USB0-	6	USB1-
3	USB0+	7	USB1+
4	GND	8	GND

3.25 DB-15 VGA CONNECTOR (VGA1)

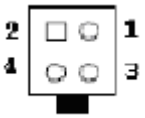


PIN	SIGNAL	PIN	SIGNAL
1	RED	9	**+5V**
2	GREEN	10	GND
3	BLUE	11	NC
4	NC	12	SDA
5	GND	13	HSYNC
6	GND	14	VSYNC
7	GND	15	SCL
8	GND		

3.26 CPU FAN (FAN1)

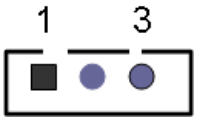
PIN	SIGNAL
1	GND
2	+12V
3	SENSE

3.27 AT POWER INPUT (ATX1)



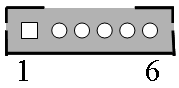
SET	SIGNAL
1	GND
2	GND
3	+12V
4	+12V

3.28 ATX FUNCTION CONNECTOR (CON3)



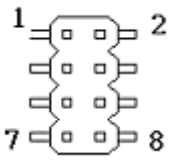
SET	SIGNAL
1	GND
2	PS_ON
3	+5V_SUS

3.29 INVERTER POWER (CN1)



PIN	SIGNAL	PIN	SIGNAL
1	**+12V**	2	**+12V**
3	GND	4	BKLTEN
5	GND	6	BKLTCTL

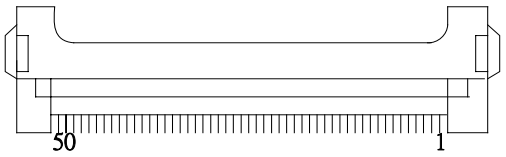
3.30 CPU SELECT JUMPER (JP1)

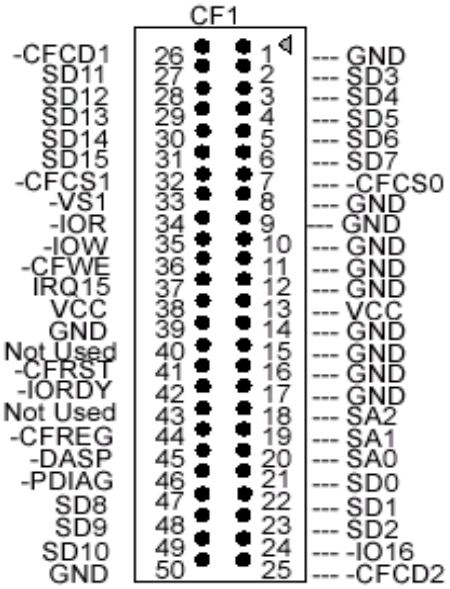


SET	SIGNAL
7-8SHORT	**DOTHAN**
7-8 OPEN	**BANINES**

3.31 DDR2 SO-DIMM (DDR2SODIMM1)

3.32 CF SOCKET (CN3)





4. WATCHDOG TIMER CONFIGURATION

4.1 WATCHDOG TIMER SETTING

The WDT (Watch Dog Timer) is used to generate a variety of output signals after a user programmable count. The WDT is suitable for use in the prevention of system lock-up, such as when software becomes trapped in a deadlock. Under these sorts of circumstances, the timer will count to zero and the selected outputs will be driven. Under normal circumstance, the user will restart the WDT at regular intervals before the timer counts to zero.

The watchdog timer is a circuit that maybe 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 or trigger the IRQ 9 signal in order to tell your system that the watchdog time is out.

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

```
C:>debug

o 2E 87   ;Extended Functions Enable Register

o 2E 87   ;Extended Functions Enable Register

o 2E 07   ;EFIR=EFER (Extended Functions Index Register)
                      point to Logical Device Number Reg.

o 2F 08   ; Select logical device 8, (Watchdog Function)

o 2E 30   ; Device Active register

o 2F 01   ;update CR30 with value 01H

o 2E F5 ; Select Watchdog count mode seconds or minutes

o 2F 02   ; Default is second and KBRST mode.

o 2E F6 ; Select Watchdog Timer Value

o 2F 08   ;update CRF6 with value 08H ,(8sec reset)
```

```
// Set Watchdog
outportb(IO_Port_Address,0x87);      // (EFER) Extended Functions Enable Register
outportb(IO_Port_Address,0x87);

outportb(IO_Port_Address,0x2D);      // Point to Global Reg.
                                     // Select Multi-Function pin, (Bit0=0 Watchdog Function)
outportb(IO_Port_Address+1,(inportb(IO_Port_Address+1)&0xFE));

outportb(IO_Port_Address,0x07);      // Point to Logical Device Number Reg.
outportb(IO_Port_Address+1,0x08);  // Select logical device 8, (Watchdog Function)

outportb(IO_Port_Address,0x30);      // Device Active register
outportb(IO_Port_Address+1,0x01);

outportb(IO_Port_Address,0xF5);      // Select Watchdog count mode seconds or minutes
outportb(IO_Port_Address+1,0x02);       // Default is second and KBRST mode.

outportb(IO_Port_Address,0xF6);      // Set Watchdog Timer Value
outportb(IO_Port_Address+1,Time);  // 0x00 to disable, max 0xFF
```

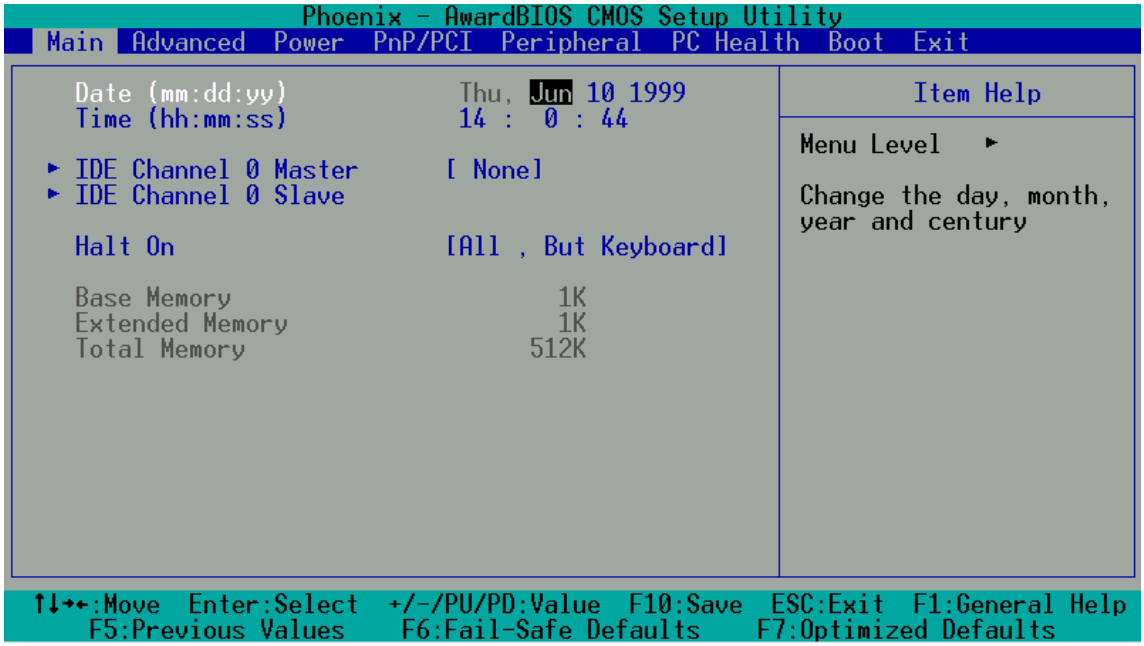
5. BIOS CONSOLE

This chapter describes the AR-B5250 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 menus. The following topics are covered:

- Main Setup
- Advanced Chipset Setup
- Power Setup
- Peripherals Setup
- PnP/PCI Setup
- PC Health Setup
- Boot Setup
- Exit Setup

5.1 MAIN SETUP

The <Main Setup> choice allows you to record some basic hardware configuration in your computer system and set the system clock and error handling. If the motherboard is already installed in a working system, you will not need to select this option. You will need to run this Setup option, however, if you change your system hardware configuration, the onboard battery fails, or the configuration stored in the COMS memory was lost or damaged.



Setup Main Menu

About the button of the menu are the control keys for use on this menu. If you need any help in each item field, you can press the ＜F1＞ key, It will display the relevant information to help you. The memory display at the automatically according to the memory changed. The following describes each item of this menu.

Date Setup

The date format is：

DAY：SUN to SAT

Month：1 to 12

Date：1 to 31

Year：1999 to 2099

To set the date, highlight the “Date” field and use the 【PageUp】/【PageDown】or 【+】/【-】keys to set the current time.

Time Setup

The time format is：

Hour：0 to 24

Minute：00 to 59

Second：00 to 59

To set the time, highlight the “Time” field and use the 【PageUp】/【PageDown】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 devices. Each channel can support up to two hard disks; the first is the “Master” and the second is “Slave”.

Press＜Enter＞ to configure the hard disk. The selections include Auto, Manual, and None. Select “Manual” to define the device information manually. You will be asked to enter the following items.

CYLS：Number of cylinders.

HEAD：Number of read/write heads.

PRECOMP：Write precompensation.

LANDING SONE：Landing zone.

SECTOR：Number of sectors.

The Access Mode selections are as follows：

CHS：（HD<528MB）

LBA：（HD>528MB and support Logical Block Addressing）

Large：（for MS-DOS only）

Auto

Halt On

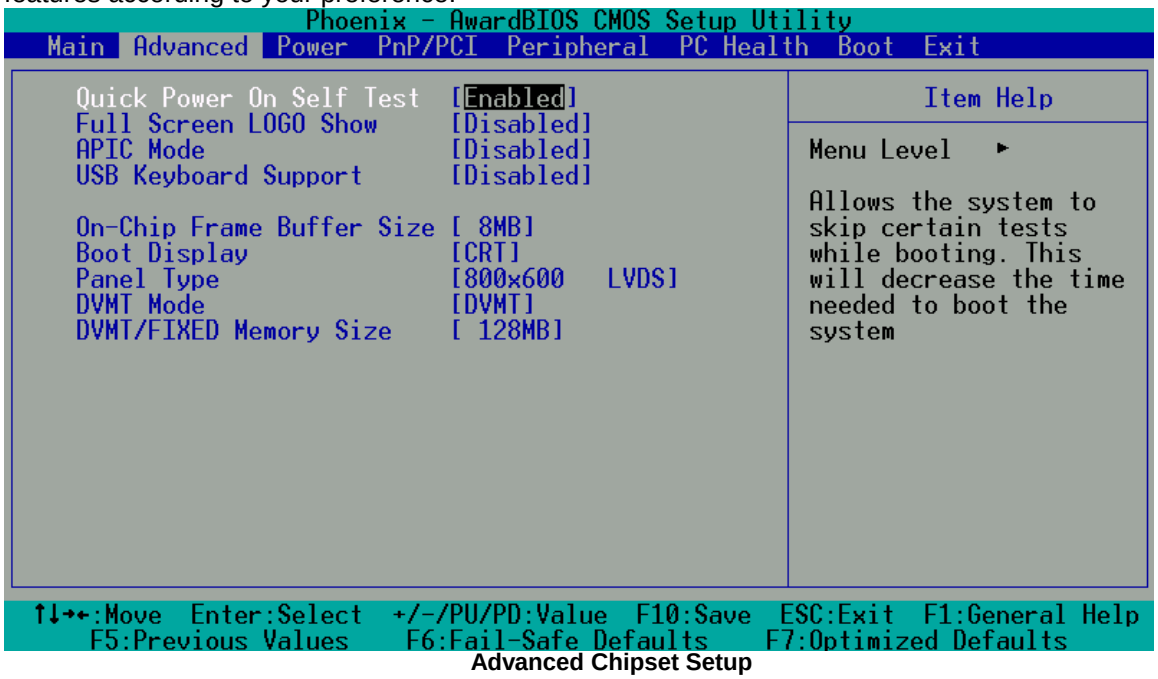
The field determines whether or not the system will halt if an error is detected during the power up.

No errors : The system boot will not be halted for any error that may de detected.

All errors : Whenever the BIOS detects a non-fatal error, the system will stop and you will be prompted.

5.2 ADVANCED CHIPSET SETUP

This section allows you to configure and improve your system and follows you to set up some system features according to your preference.



Advanced Chipset Setup

Quick Power On Self Test

When enabled, this field speeds up the Power On Self Test (POST) after the system is turned on. If it is set to *Enable*, BIOS will skip some items.

Full Screen LOGO Show

The options for this field are “Enabled” and “disabled”. By default, the field is set to “*Disabled*”

ACPI Mode

APIC stands for Advanced Programmable Interrupt Controller. The default setting is *Disabled.*

USB Keyboard Support

The options for this field are “Enabled” and “Disabled”. By default, the field is set to “*Disabled”*.

On-Chip Frame Buffer Size

This Item is for setting the Frame Buffer (Share system memory as display memory).

Boot Display

This Item is to set display device

Panel Type

This Item can Set the LVDS panel resolution that you want

DVMT mode

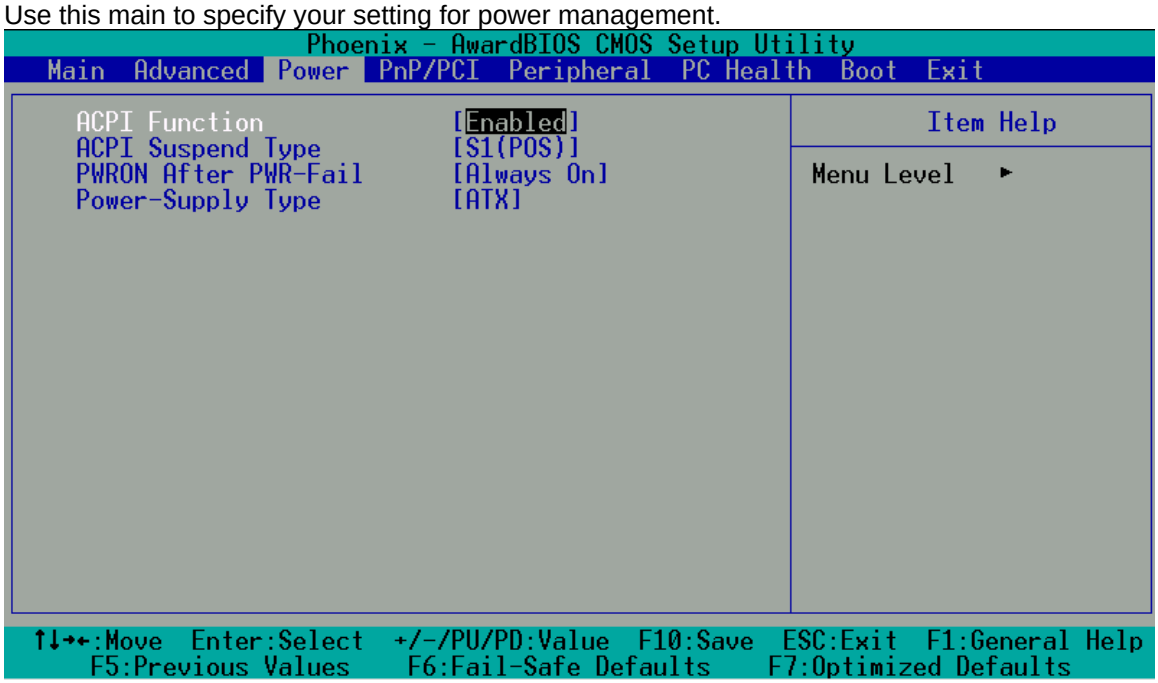
This item sets the mode for dynamic video memory technology (DVMT)

DVMT/FIXED Memory Size

This item sets the DVMT size

5.3 POWER SETUP

Use this main to specify your setting for power management.



Power Setup

ACPI Function

Enable this function to support ACPI (Advance Configuration and Power Interface)

ACPI Suspend Type

The field is set to *S1 (POS)*

PWRON After PWR-Fail

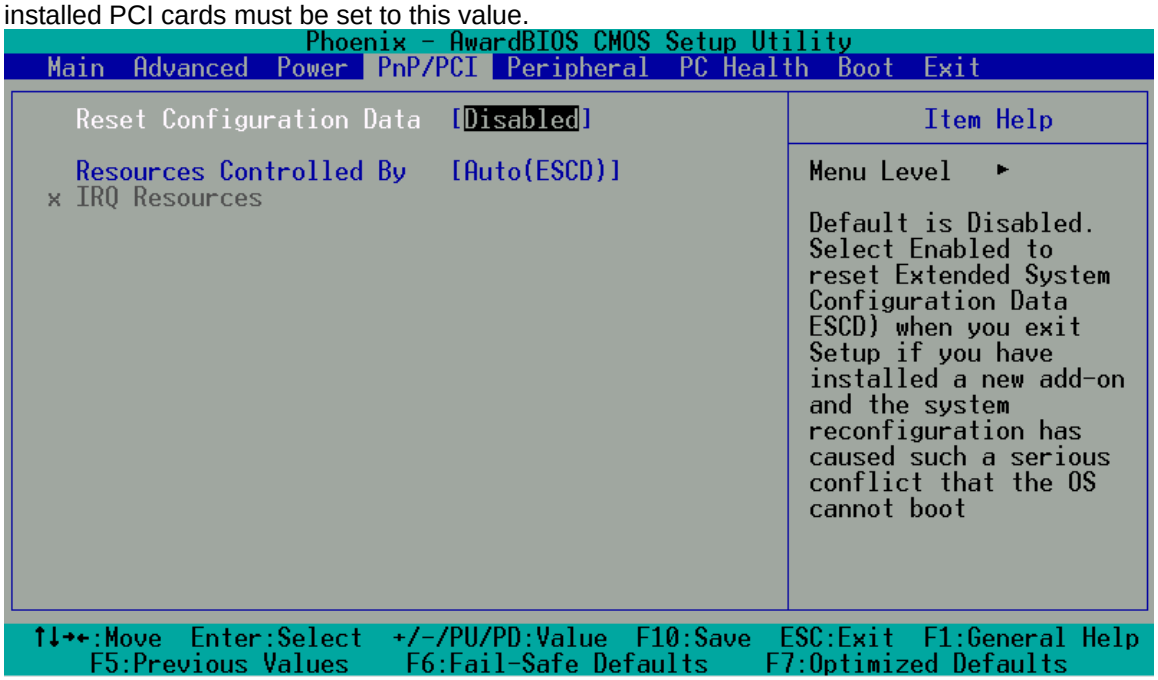
The field sets the system power status whether on or off when power returns from a power failure.

Power –Supply Type

This item allows you to choose the Type of Power Supply in use.The Choice: AT, ATX.

5.4 PNP/PCI SETUP

The option configures the PCI bus system. All PCI bus system on the system use INT#, thus all installed PCI cards must be set to this value.



PnP / PCI Setup

Reset Configuration Data

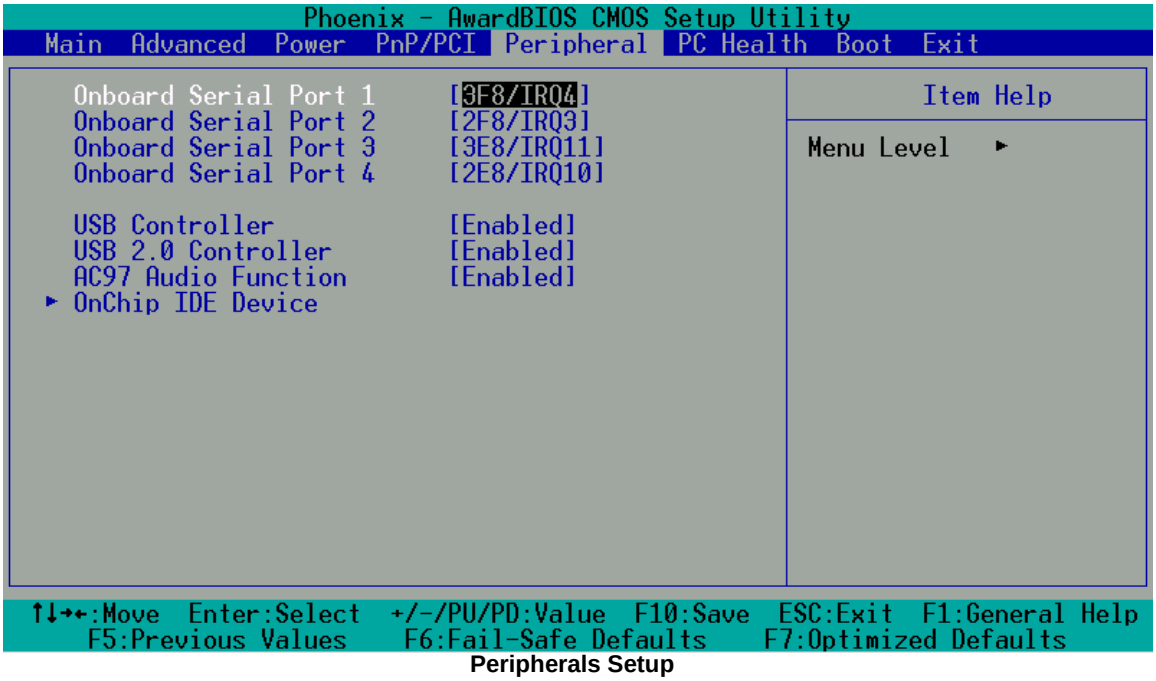
Thus field allows you to determine whether to reset the configuration data or not. The default value is *"Disabled"*.

Resources Controlled By

This PnP BIOS can configure all of the boot and compatible devices automatically with the use of a use a PnP operating system such as Windows 95.

5.5 PERIPHERALS SETUP

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



Peripherals Setup

Onboard Serial Port 1

Onboard Serial Port 2

Onboard Serial Port 3

Onboard Serial Port 4

These fields allow you to select the on board serial ports and their addresses. The default values for these ports are：

Serial Port 1：3F8 / IRQ4

Serial Port 2：2F8 / IRQ3

Serial Port 3：3E8 / IRQ11

Serial Port 4：2E8 / IRQ10

USB Controller

The options for this field are *Enabled* and *Disabled*. By default, the field is set to *Enabled*.

USB 2.0 Controller

The options for this field are *Enabled* and *Disabled*. By default, the field is set to *Enabled*. In order to use USB 2.0, necessary OS drivers must be installed first. ***Please update your system to Windows 2000 SP4 or Windows XP SP1***.

AC97 Audio Function

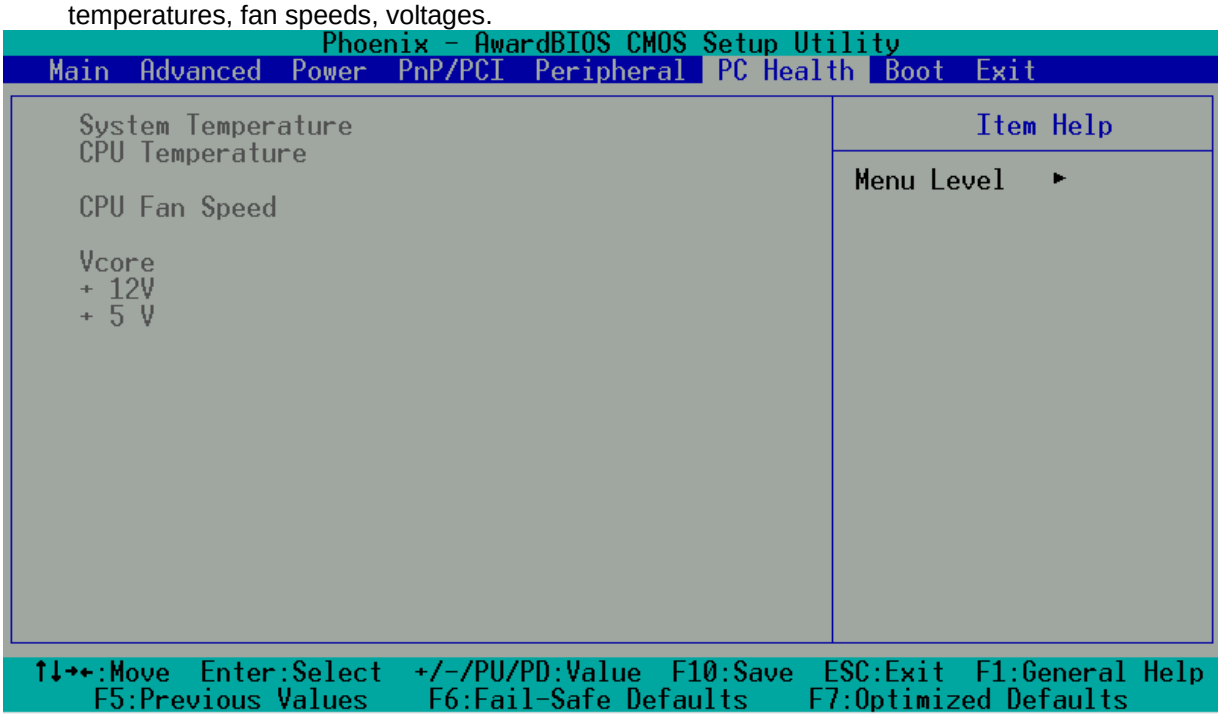
The default setting of the AC97 Audio is *Auto*.

Onchip IDE DEVICE

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

5.6 PC HEALTH SETUP

This section shows the parameters in determining the PC Health Status. These parameters include temperatures, fan speeds, voltages.



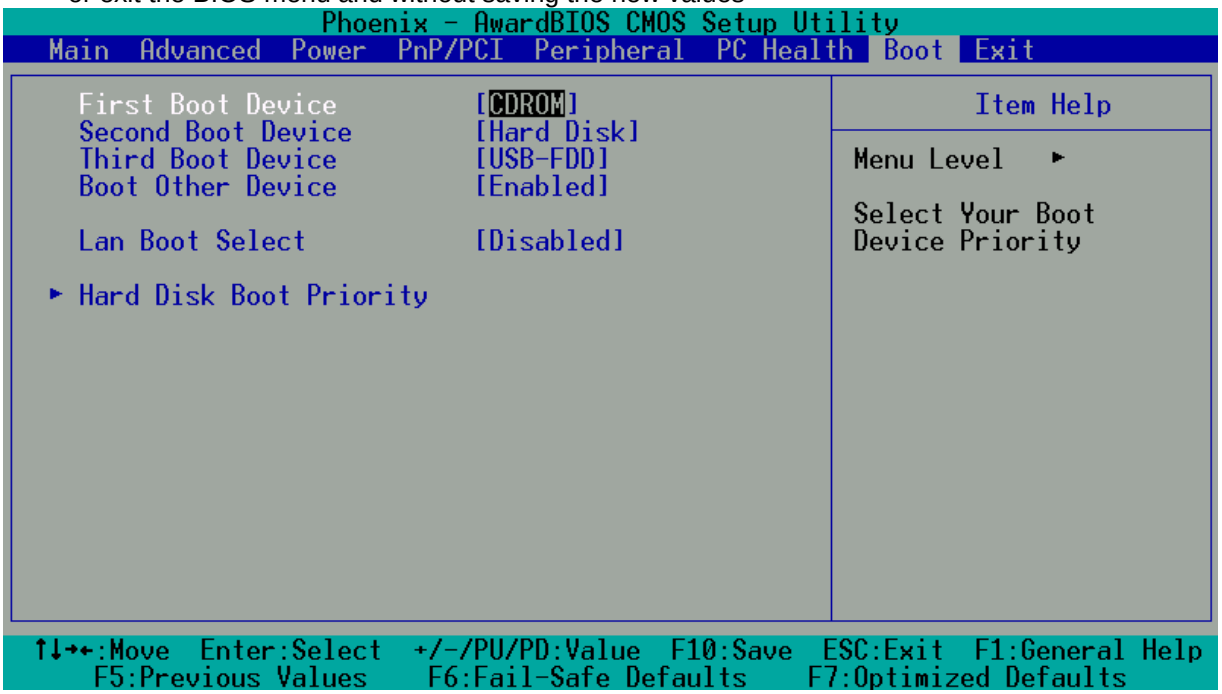
PC Health Status

Temperature / Voltage

These fields are parameters of the hardware monitoring function feature of the motherboard. The values are read-only values as monitored by the system and show the PC health status.

5.7 BOOT SETUP

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 the new values



PCI / Plug And Play

First / Second / Third Boot Device

These fields determine the device that the system searches first for an operating system. The option available include Hard Disk, CDROM, USB-FDD, USB-CDROM and Disable.

Boot Other Device

These fields allow the system to search for an OS from other devices other than the ones selected in the First / Second / Third Boot Device.

LAN Boot Select

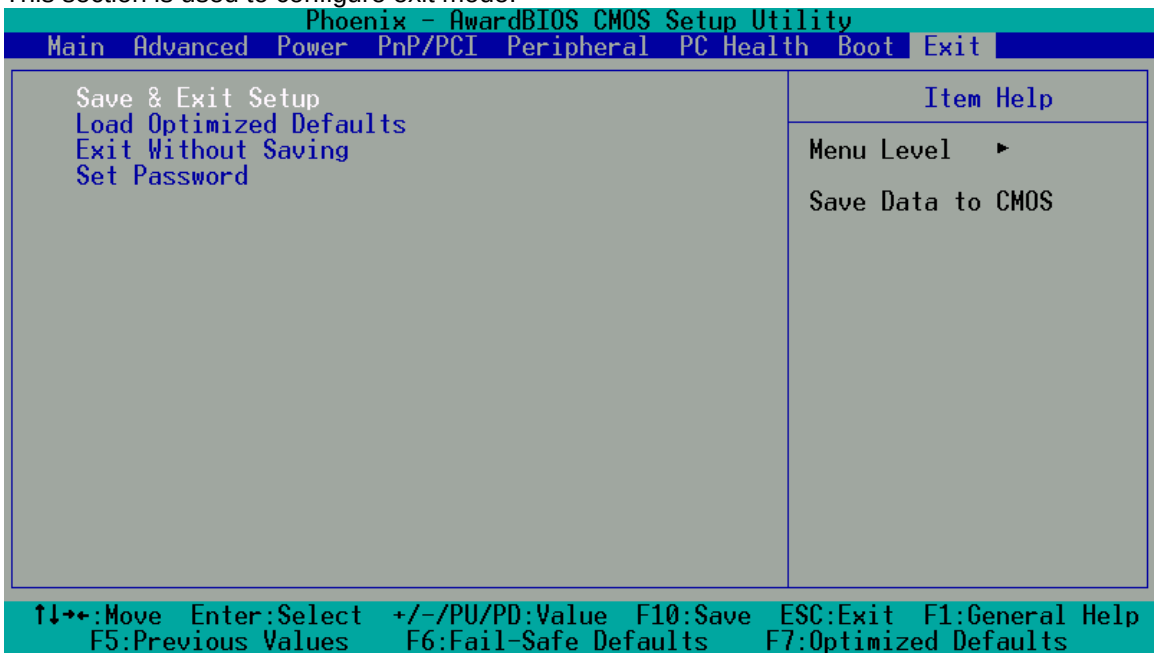
These fields allow the system to search for an OS from LAN.

Hard Disk Boot Priority

These fields set the Boot Priority for each Hard Disk.

5.8 EXIT SETUP

This section is used to configure exit mode.



Exit Setup

Save & Exit Setup

This option allow you determine whether or not to accept the modifications. If you type “Y”, You will quit the setup utility and save all changes into the CMOS memory. If you type “N”, you will return to setup utility.

Load Optimized Defaults

This option allow you to load the default values to your system configuration. These default settings are optimal and enable all high performance features.

Exit Without Saving

Select this option to exit the Setup utility without saving the changes you have made in this session. Typing “Y” will quit the Setup utility without saving the modifications. Typing “N” will return to setup utility.

Set Password

When a password has been enabled, you will be prompted to enter your password every time you try to enter Setup. This prevents unauthorized persons from changing any part of your system configuration. Type the password, up to eight characters in length, and press <Enter>. The password typed now will clear any previous password from the CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.To disable a password, just press <Enter> when you are prompted to enter the password. A message will confirm that the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

5.9 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 upgrade your BIOS firmware without removing and installing chips.
The AR-B5250 provides the FLASH BIOS update function for you to easily to update to a newer BIOS version. Please follow these operating steps to update to new BIOS：

Step 1: Turn on your system and don't detect the CONFIG.SYS and AUTOEXEC.BAT files.

Step 2: You will get **AWDFLASH.EXE** and **XXXXXX.BIN ,** please copy them to the boot disk .

Step 3: In the MS-DOS mode, you can type the AWDFLASH and press [ENTER] .

A:\> AWDFLASH

Step 4: A window will appear and ask you to type the complete BIOS file (**xxxxxx.BIN**) and press [ENTER] .

Step 5: Then it will ask whether you save the old BIOS file , you can choose the YES or NO .

Step 6: Then it will ask you whether want to program it , please choose YES .

Step 7: The BIOS will start to upgrade

Step 8: When you have successfully flashed the BIOS then press the[F1] to reboot the Computer and hit [DEL] to enter the BIOS CMOS SETTING . Select " LOAD S-STUP DEFAULTS " set as YES . Then save and exit the setting

Note：

1. In order to prevent your system from hanging up during flashing BIOS , please check the new BIOS match your model name and current BIOS version .
2. In order to protect your motherboard , please don't turn off your computer during the flashing or it will damage your BIOS ROM .