

AR-B1841

**Pentium M inside,PCI GH Half Size ,On Board VGA,LVDS
with Two DDR SO-DIMM, built in LAN,CF Type-II**

Edition: 0.1

Book Number: AR-B1841-05.11.22

@Copyright 2005

All Rights Reserved.

Manual first edition Nov 22, 2005

The information in this document is subject to change without prior notice in order to improve reliability, design and function and does not represent a commitment on the part of the manufacturer.

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

Trademarks

AR-B1841 is registered trademarks X-Fire Acrosser, IBM PC is a registered trademark of International Business Machines Corporation. Pentium is a registered trademark of Intel Technologies, Inc. Award is registered trademarks of Award Software International, Inc. Other product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective companies.

Contents

Contents	3
Introduction	5
1.1 Specifications:	5
1.2 What You Have	7
Installation	8
2.1 AR-B1841's Layout	8
2.2 Power Button Setting	10
2.3 CMOS Reset	11
2.4 Jumper description.....	11
Connection.....	14
3.1 Ultra ATA33/66/100 IDE Disk Drive Connector(IDE1,2)....	14
3.2 Serial Ports(COM1~4).....	15
3.3 Keyboard / Mouse Connector(MS_KB1,2)	16
3.4 USB Port Connector(USB1~4)	17
3.5 Fan Connector (FAN1)	17
3.6 LAN RJ45 Connector (J4).....	18
3.7 Compact Flash Storage Card Socket(CF1)	18
3.8 VGA Connector(VGA1)	19

3.9	AUDIO Connector(AUDIO1)	20
3.10	DDR SODIMM Socket (CON1,2).....	20
3.11	8-BIT GPIO Connector(GPIO1).....	20
3.12	FDD(FDD1).....	21
3.13	Parallel port(LPT1).....	21
3.14	LVDS Connector(LCD1)	22

Award BIOS Setup..... 23

4.1	Introduction	23
4.2	Starting Setup	23
4.3	Using Setup.....	24
4.4	Main Menu	25
4.5	Advanced BIOS Features	28
4.6	PnP/PCI Configuration Setup	30
4.7	Peripheral.....	31
4.8	PC Health.....	33
4.9	Boot	34
4.10	Exit Selecting	35

1

Introduction

1.1 Specifications:

CPU : Supports Intel Pentium M, Celeron M CPU.

Chipset : GMCH 852GM and ICH4 82801DB

RAM memory : Two DDR SDRAM SO-DIMM Socket support to 2 GB/266MHz.

Display Controller: Intel 852GM Supports non-interlaced CRT monitors Supports LVDS Encoders.

Ultra DMA 133 IDE Interface : Two PCI Enhance IDE channel.

CompactFlash™ interface : Supports CompactFlash™ Type II socket for Compact Flash Disk or IBM Micro Drive.

Series ports : Four high-speed 16C550 compatible UARTs ports.COM4 can also support RS-422/485.

FDD Interface: Supports up to two floppy disk drives, 5.25"(360KB and 1.2MB) and/or 3.5"(720KB, 1.44MB, and 2.88MB).

Parallel Port: IEEE-1284 compliant. Supports SPP/EPP/ECP mode.

USB port : Support Six USB 2.0 compatible ports.

Audio Connector: supports Line-in, Line-out, MIC-in.

Digital IO: Supports eight digital-in, and eight digital-out TTL-level I/O ports.

IrDA: Supports Serial Infrared(SIR) or Amplitude Shift Keyed IR(ASKIR)interface.

PS/2 Mouse/Keyboard Connector

Watchdog timer : Time setting form 1 to 255 second / minute System Reset generate when CPU did not periodically trigger the timer.

Intel LAN Controller: 1 ports IEEE 802.3u Auto-Negotiation support for Intel 82551QM 10/100BASE-TX or 82541PI 1000BASE-TX(Optional). Connected to your LAN through RJ45 connector.

Power Consumption : 12V / 2.5A ,5V / 3.7A (3DMark2001)

Operating Temperature : -10° ~ 60° C (CPU needs Cooler)

Dimension: 122mm(W) X 185mm(L)

1.2 What You Have

In addition to this *User's Manual*, the AR-B1841 package includes the following items:

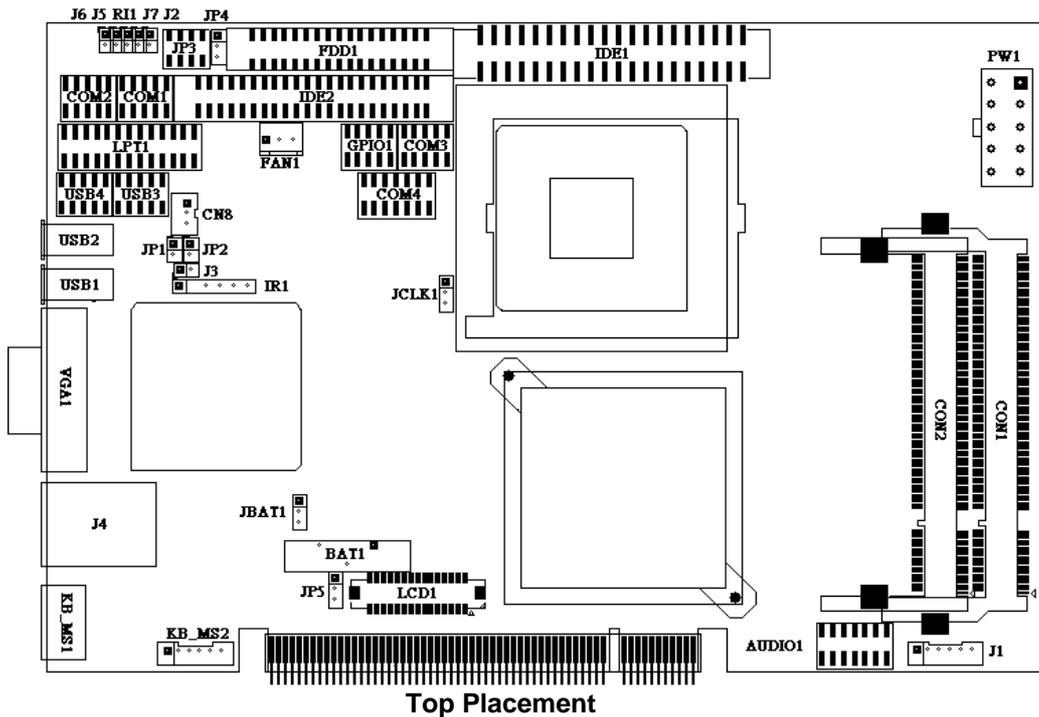
- AR-B1841 board
- IDE Cable
- USB Cable with breacket
- Keyboard / Mouse Adapter Y Cable
- RS-232 serial ports Cable with bracket
- Audio Cable
- Power Cable
- Print Port Cable
- Drive CD

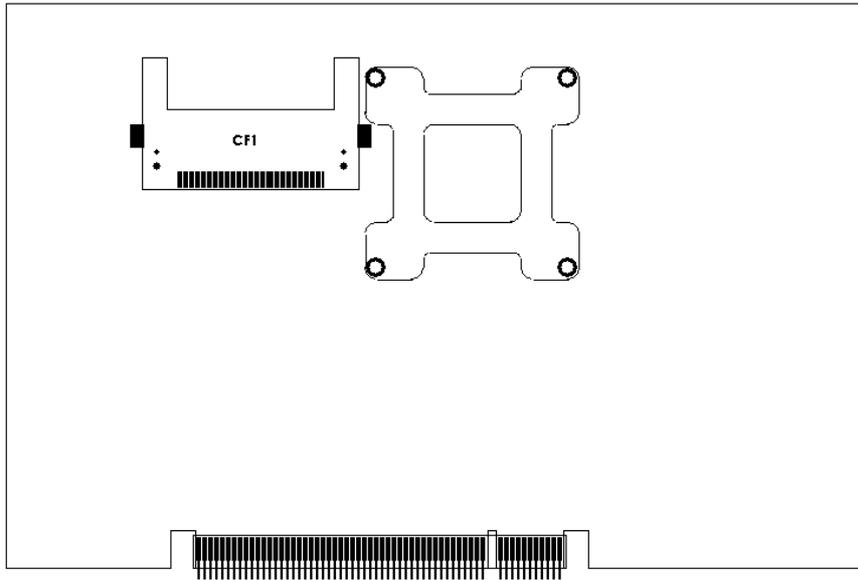
2

Installation

This chapter describes how to install the AR-B1841. At first, the layout of AR-B1841 is shown, and the unpacking information that you should be careful is described. The jumpers and switches setting for the AR-B1841's configuration

2.1 AR-B1841's Layout



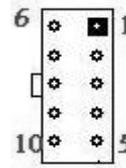


Bottom Placement

2.2 Power Button Setting

- **PW1 : Power Connector**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	+5V	6	5VSP
2	+5V	7	+5V
3	GND	8	GND
4	GND	9	PS_ON
5	+12V	10	VCC12J



- **J5 : Power Button Connector**

Pin	DESCRIPTION
Open	Showdown
Short	Power ON



- **J6 : Power LED Connector**

Pin	DESCRIPTION
1	+5V
2	GND



- **J7 : Reset Button Connector**

Pin	DESCRIPTION
Open	Normal
Short	Reset System



- **CN8 : Power ON Pin Header**

Pin	DESCRIPTION
1	GND
2	PS_ON
3	5VSB



2.3 CMOS Reset

- JBAT1 : CMOS pin header

JBAT1	DESCRIPTION
1-2	Normal Operation
2-3	Reset CMOS



2.4 Jumper description

- JP1 : Select CF Master or Slave mode

JP1	Description
Short	Master
Open	Slave



- JP2 : Keyboard Lock

JP2	Description
Open	Unlock
Short	Lock



- JP3 : COM1/2 Select RI is 12V or signal

PIN	DESCRIPTION	PIN	DESCRIPTION
1	NR1A	2	NR1A_12V
3	+12V	4	NR1A_12V
5	NR1B	6	NR1B_12V
7	+12V	8	NR1B_12V



- JP4 : Select COM4 is RS232 or RS422/485

JP4	Description
1-2	RS232
2-3	RS422/485



- J2 : HDD LED

PIN	Description
1	+5V
2	Signal



• **J3 : Case Open**

J3	Description
Open	Normal
Short	Power off



• **JCLK1 : Select CPU External Frequency**

JCLK1	Description
1-2	133MHz
2-3	100MHz



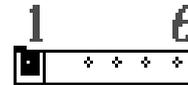
• **RI1 : RI Jumper for test Wake Up System Only**

PIN	Description
Open	Normal
Short	System Wake Up



• **IR1 : Infrared Pin Header**

PIN	Description
1	+5V
2	NC
3	RX
4	GND
5	TX
6	VCC2



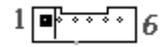
• **JP5 : Select LCD Voltage**

JP5	Description
1-2	+3.3V
2-3	+5V



• J1 : Inverter Power Connector

PIN NO.	DESCRIPTION
1	+12V
2	+12V
3	GND
4	BKLTEN
5	GND
6	BKLTCTL



3

Connection

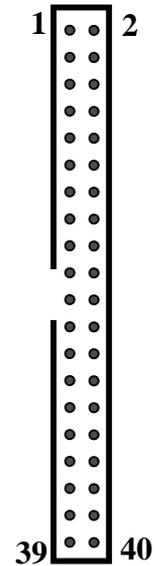
This chapter describes how to connect peripherals, switches and indicators to the AR-B1841 board.

3.1 Ultra ATA33/66/100 IDE Disk Drive Connector(IDE1,2)

You can attach two IDE(Integrated Device Electronics) hard disk drives to the AR-B1841 IDE controller.

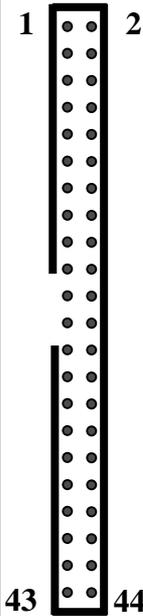
IDE 1 : Primary IDE Connector (40 Pins)

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	RESET#	2	GROUND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GROUND	20	N/C
21	N/C	22	GROUND
23	IOW#	24	GROUND
25	IOR#	26	GROUND
27	N/C	28	BALE - DEFAULT
29	N/C	30	GROUND - DEFAULT
31	INTERRUPT	32	IOCS16#-DEFAULT
33	SA1	34	N/C
35	SA0	36	SA2
37	HDC CS0#	38	HDC CS1#
39	HDD ACTIVE#	40	GROUND



IDE 2 : Secondary IDE Connector (44 Pins)

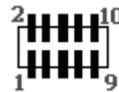
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	RESET#	2	GROUND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GROUND	20	N/C
21	N/C	22	GROUND
23	IOW#	24	GROUND
25	IOR#	26	GROUND
27	N/C	28	BALE - DEFAULT
29	N/C	30	GROUND - DEFAULT
31	INTERRUPT	32	IOCS16#-DEFAULT
33	SA1	34	N/C
35	SA0	36	SA2
37	HDC CS0#	38	HDC CS1#
39	HDD ACTIVE#	40	GROUND
41	+5V LOGIC	42	+5V MOTOR
43	GROUND	44	TYPE


3.2 Serial Ports(COM1~4)

The AR-B1841 offers two high speeds NS16C550 compatible UARTs with Read/Receive 16 byte FIFO serial ports.

- **COM1/2/3 : RS-232 Serial port (Pin Header)**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	NDCD	2	NDSR
3	NSIN	4	NRTS
5	NRIB	6	NCTS
7	NSOUT	8	NRI
9	GND	10	NC



• **COM4 : RS-232 with RS-422/485 Serial port(Pin Header)**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	NDCD	2	NDSR
3	NSIN	4	NRTS
5	NRIB	6	NCTS
7	NSOUT	8	NRI
9	GND	10	GND
11	TX+	12	TX-
13	RX+	14	RX-



3.3 Keyboard / Mouse Connector(MS_KB1,2)

A PS/2 type connector(MS_KB1)is for easy connection to a keyboard and PS/2 mouse. The board comes with a Y split PS/2 cable for keyboard and mouse connection.

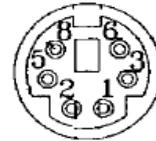
• **MS_KB2 : 6-pin Mini-DIN Keyboard/Mouse Connector**

PIN NO.	DESCRIPTION
1	MOUSE DATA
2	KEYBOARD DATA
3	GROUND
4	+5V
5	MOUSE CLOCK
6	KEYBOARD CLOCK



• **MS_KB1 : Keyboard Mouse PS2 Port**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	KB_DAT	2	MS_DAT
3	GND	4	+5V
5	KB_CLK	6	MS_CLK
7	GND	8	GND

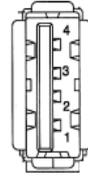


3.4 USB Port Connector(USB1~4)

The AR-B1841 provides six USB port, four pin header, two connectors .

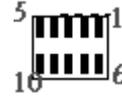
- **USB1/2 : USB Connector**

PIN	Description
1	VCC
2	USB-
3	USB+
4	GND



- **USB3/4 : USB Connector(Pin header)**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	VCC	2	VCC
3	USB3/4_0-	4	USB3/4_1-
5	USB3/4_0+	6	USB3/4_1+
7	GND	8	GND
9	USB_GND	10	USB_GND



3.5 Fan Connector (FAN1)

The AR-B1841 provides one connectors for CPU cooling fan they can be controlled by Super I/O Chip.

- **FAN1: Fan Connector for CPU**

PIN NO.	DESCRIPTION
1	GND
2	+12V
3	PWM Signal

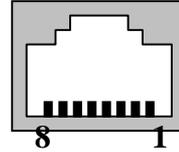


3.6 LAN RJ45 Connector (J4)

AR-B1841 is equipped with built-in 10/100Mbps or 1000Mbps(Optional) Ethernet Controller. You can connect it to your LAN through RJ45 LAN connector. The pin assignments are as following:

- **J4 : LAN RJ45 Connector**

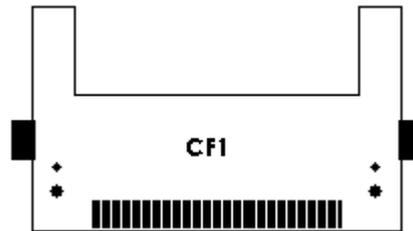
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	TX+	5.	N/C
2	TX-	6.	RX-
3.	RX+	7.	N/C
4.	N/C	8.	N/C



3.7 Compact Flash Storage Card Socket(CF1)

The AR-B1841 configures Compact Flash Storage Card in IDE Mode. This type II Socket is compatible with IBM Micro Drive.

- **CF1 : Compact Flash Storage Card Socket pin assignment**



PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	GROUND	26	CARD DETECT1
2	D3	27	D11
3	D4	28	D12
4	D5	29	D13
5	D6	30	D14
6	D7	31	D15
7	CS1#	32	CS3#
8	N/C	33	N/C
9	GROUND	34	IOR#
10	N/C	35	IOW#
11	N/C	36	PULL HIGH

12	N/C	37	IRQ15
13	VCC	38	VCC
14	N/C	39	MASTER/SLAVE
15	N/C	40	N/C
16	N/C	41	RESET#
17	N/C	42	IORDY
18	A2	43	N/C
19	A1	44	PULL HIGH
20	A0	45	ACTIVE#
21	D0	46	PDIAG#
22	D1	47	D8
23	D2	48	D9
24	N/C	49	D10
25	CARD DETECT2	50	GROUND

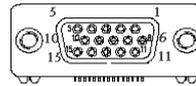
Note: If IDE2 & CFD1 both in used, CFD1 must be as "Master" & IDE2 is as "Slave".

3.8 VGA Connector(VGA1)

The AR-B1841 has a built-in 15-pin VGA connector accepting the CRT monitor

- **VGA1 : 15-pin D-Sub Connector**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	L_RED	2	L_GREEN
3	L_BLUE	4	MON2PU
5	GND	6	GND
7	GND	8	GND
9	+5V	10	GND
11	MONOPU	12	5VDDCDA
13	HSYNC	14	VSYNC
15	5VDDCCL		



3.9 AUDIO Connector(AUDIO1)

- AUDIO1 : Audio Pin Header

PIN	DESCRIPTION	PIN	DESCRIPTION
1	NC	2	LINE_IN_L
3	NC	4	LINE_IN_R
5	+12V	6	+5V
7	LINE_OUT_L	8	MIC_IN
9	LINE_OUT_R	10	PCBEEP
11	GND	12	GND
13	GND	14	GND



3.10 DDR SODIMM Socket (CON1,2)

There are two 200-pin DDR SDRAM DIMM slots to accept 2.5V non_buffered DDR SDRAM. The max Memory size is 2GB.

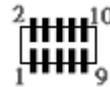
- CON1/2



3.11 8-BIT GPIO Connector(GPIO1)

- GPIO1: 8 BIT GPIO Connector

PIN	DESCRIPTION	PIN	DESCRIPTION
1	GP10	2	GP11
3	GP12	4	GP13
5	GP14	6	GP15
7	GP16	8	GP17
9	GND	10	VCC



3.12 FDD(FDD1)

AR-B1841 board is equipped with a 34-pin daisy-chain driver connecting cable.

- **FDD1: FDC Connector**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	DENSEL#
3	GND	4	X
5	KEY	6	DRATE
7	GND	8	INDEX#
9	GND	10	MOTEA#
11	GND	12	DRVB#
13	GND	14	DRVA#
15	GND	16	MOTEB#
17	GND	18	DIR#
19	GND	20	STEP#
21	GND	22	WDATA#
23	GND	24	WGATE#
25	GND	26	TK00#
27	GND	28	WPT#
29	X	30	RDATA#
31	GND	32	STDE1#
33	X	34	DSKCHG#

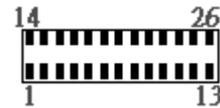


3.13 Parallel port(LPT1)

This port is usually connected to a printer. The AR-B1841 includes an on-board parallel port.

- **LPT1: Parallel Port Connector**

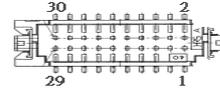
PIN	DESCRIPTION	PIN	DESCRIPTION
1	STB-	14	AFD-
2	PD0	15	ERR-
3	PD1	16	INIT-
4	PD2	17	SLIN-
5	PD3	18	GND
6	PD4	19	GND
7	PD5	20	GND
8	PD6	21	GND
9	PD7	22	GND
10	ACK-	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SLCT	26	X



3.14 LVDS Connector(LCD1)

- LCD1 : LVDS Interface Connector

PIN	DESCRIPTION	PIN	DESCRIPTION
1	LVDS_PWR	2	GND
3	LVDS_CLKBM	4	LVDS_CLKBP
5	GND	6	LVDS_YBM2
7	LVDS_YBP2	8	GND
9	LVDS_YBM1	10	LVDS_YBP1
11	LVDS_YBP3	12	LVDS_YBM3
13	LVDS_YBP0	14	LVDS_YBM0
15	GND	16	LVDS_CLKAP
17	LVDS_CLKAM	18	GND
19	LVDS_YAP2	20	LVDS_YAM2
21	DDCPCLK_X	22	LVDS_YAP1
23	LVDS_YAM1	24	DDCPDATA_X
25	LVDS_YAP0	26	LVDS_YAM0
27	LVDS_YAP3	28	LVDS_YAM3
29	LVDS_PWR	30	LVDS_PWR



4

Award BIOS Setup

4.1 Introduction

This chapter discusses the Setup program built into the BIOS. The Setup program allows users to configure the system. This configuration is then stored in battery-backed CMOS RAM so that it retains the Setup information while the power is off.

4.2 Starting Setup

The BIOS is immediately active when you turn on the computer. While the BIOS is in control, the Setup program can be activated in one of two ways:

1. By pressing immediately after switching the system on, or
2. By pressing the key when the following message appears briefly at the bottom of the screen during the POST (Power On Self-Test).

Press DEL to enter SETUP.

If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to...

PRESS F1 TO CONTINUE, DEL TO ENTER SETUP

4.3 Using Setup

In general, you can use the arrow keys to highlight items, press <Enter> to select, use the PageUp and PageDown keys to change entries, press <F1> for help and press <Esc> to quit. The following table provides more details about how to navigate in the Setup program using the keyboard.

Key	Function
Up Arrow	Move to the previous item
Down Arrow	Move to the next item
Left Arrow	Move to the item on the left (menu bar)
Right Arrow	Move to the item on the right (menu bar)
Esc	Main Menu: Quit without saving changes Submenus: Exit Current page to the next higher level menu
Move Enter	Move to the item you desired
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
+ key	Increase the numeric value or make changes
- key	Decrease the numeric value or make changes
Esc key	Exit Menu -- Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu -- Exit current page and return to Main Menu
F1 key	General help on Setup navigation keys
F5 key	Load previous values from CMOS
F6 key	Load the fail-safe defaults from BIOS default table
F7 key	Load the optimized defaults
F10 key	Save all the CMOS changes and exit

4.4 Main Menu

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

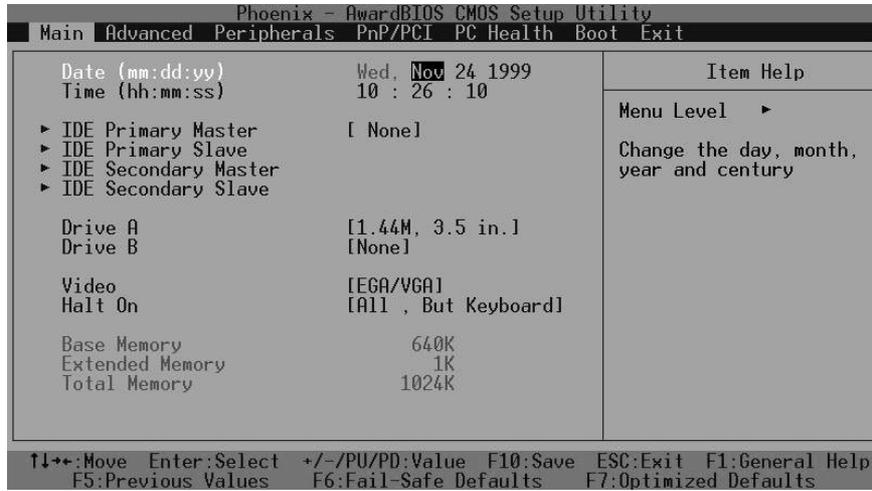


Figure 1: The Main Menu

Main Menu Selections

Item	Options	Description
Date	MM DD YYYY	Set the system date.
Time	HH : MM : SS	Set the system time
IDE Primary Master	Options are in its sub menu (described in Table 3)	Press <Enter> to enter the sub menu of detailed options
IDE Primary Slave	Options are in its sub menu (described in Table 3)	Press <Enter> to enter the sub menu of detailed options
IDE Secondary Master	Options are in its sub menu (described in Table 3)	Press <Enter> to enter the sub menu of detailed options
IDE	Options are in its sub	Press <Enter> to enter

Secondary Slave	menu (described in Table 3)	the sub menu of detailed options
Drive A & Drive B	None 360K, 5.25 in 1.2M, 5.25 in 1.720K, 3.5 in 1.44K, 3.5 in 2.88K, 3.5 in	Select what kind of floppy type you install
Video	EGA / VGA CGA 40 CGA 80 Mono	Select what type of Display you use
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/Key	Select the situation in which you want the BIOS to stop the POST process and notify you
Base Memory	N/A	Displays the amount of conventional memory detected during boot up
Extended Memory	N/A	Displays the amount of extended memory detected during boot up
Total Memory	N/A	Displays the total memory available in the system

Table 1 Main Menu Selections

IDE Adapters

The IDE adapters control the hard disk drive. Use a separate sub menu to configure each hard disk drive.

Figure 2 shows the IDE primary master sub menu.

IDE HDD Auto-Detection[Press Enter]

IDE Primary Master[Auto]

Access Mode [Auto]

Capacity0MB

Cylinder0
 Head0
 Precomp0
 Landing Zone0
 Sector0

Figure 2 IDE Primary Master sub menu

Use the legend keys to navigate through this menu and exit to the main menu. Use Table 2 to configure the hard disk.

Item	Options	Description
IDE HDD Auto-detection	Press Enter	Press Enter to auto-detect the HDD on this channel. If detection is successful, it fills the remaining fields on this menu.
IDE Primary Master	None Auto Manual	Selecting 'manual' lets you set the remaining fields on this screen. Selects the type of fixed disk. "User Type" will let you select the number of cylinders, heads, etc. Note: PRECOMP=65535 means NONE !
Capacity	Auto Display your disk drive size	Disk drive capacity (Approximated). Note that this size is usually slightly greater than the size of a formatted disk given by a disk checking program.
Access Mode	CHS LBA Large Auto	Choose the access mode for this hard disk

Table 2 Hard disk selections

4.5 Advanced BIOS Features

This section allows you to configure your system for basic operation.

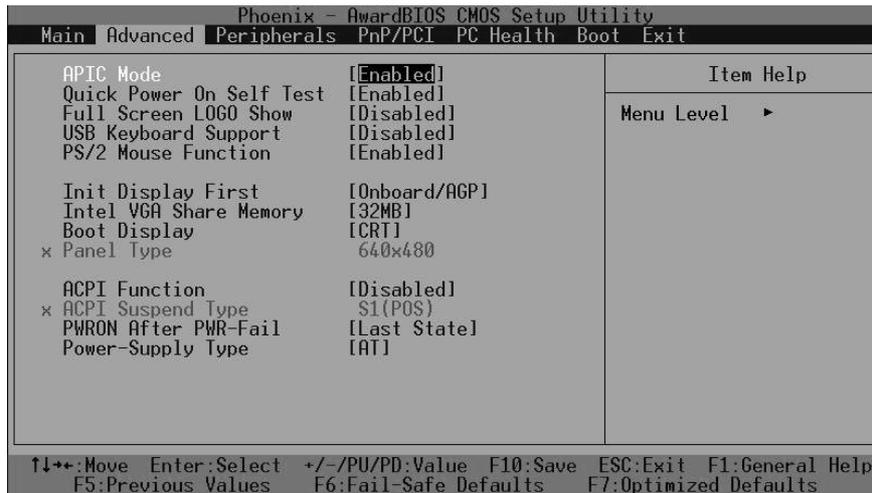


Figure 3 Advanced menu

APIC Mode

This item allows use Advanced Programmable Interrupt Controller feature. The Choice: Enabled, Disabled.

Quick Power On Self Test

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

Enabled	Enable quick POST
Disabled	Normal POST

Full Screen LOGO Show

This item allows you to enable or disable show full screen LOGO. The Choice: Enabled, Disabled.

USB Keyboard Support

This item allows you to enable or disable USB keyboard support. The Choice: Enabled, Disabled.

PS/2 Mouse Function

Disabled-prevents any installed PS/2 mouse from functioning but frees up IRQ12.Enabled-allows the operating system to determine whether to enable or disable the mouse. Choice: Enabled, Disabled.

Init Display First

This item allows you to choose which Display to be first detected.
The Choice: PCI Slot, On Board / AGP.

Intel VGA Share Memory

This item allows you to Choose the Frame Buffer size for Display.
The Choice: 1MB, 4MB, 8MB, 16MB, 32MB.

Boot Display

This item allows you to choose display interface.
The Choice: Vbios default, CRT, EFP, TV, CRT + EFP, CRT + TV.

Panel Type

This item allows you to choose display panel type and resolution.
The Choice: 640x480,800x600,1024x768.

ACPI Function

This item allows you to enable or disable Advanced Configuration and Power Management (ACPI) function.
The Choice: Enabled, Disabled.

ACPI Suspend Type

This item allows you to Choose Suspend Type for ACPI function.
The Choice: S1(Pos), S3(STR), S1 & S3.

Power Supply Type

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

PWRON After Power-Fail

This item allows you to choose the Option of Power Status after Power Fail by ATX Power Supply.
The Choice: Former-STS, On, Off.

4.6 PnP/PCI Configuration Setup

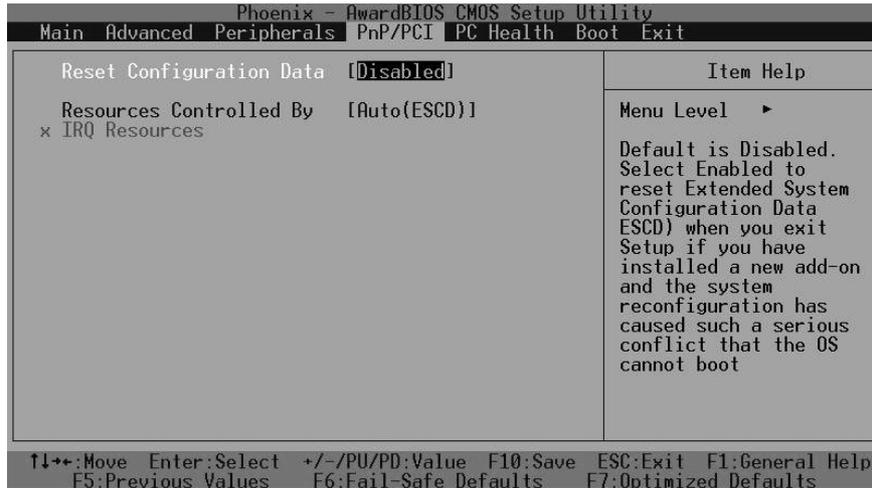


Figure 4 PnP/PCI menu

Resource controlled by

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

IRQ Resources

When resources are controlled manually, assign each system interrupt a type, depending on the type of device using the interrupt.

IRQ3/4/5/7/9/10/11/12/14/15 assigned to

This item allows you to determine the IRQ assigned to the ISA bus and is not available to any PCI slot. Legacy ISA for devices compliant with the original PC AT bus specification, PCI/ISA PnP for devices compliant with the Plug and Play standard whether designed for PCI or ISA bus architecture.

The Choice: PCI Device, Reserved.

4.7 Peripheral

Phoenix - AwardBIOS CMOS Setup Utility						
Main	Advanced	Peripherals	PnP/PCI	PC Health	Boot	Exit
Onboard Serial Port 1	[3F8/IRQ4]					Item Help
Onboard Serial Port 2	[2F8/IRQ3]					Menu Level ▶
UART Mode Select	[Normal]					
RxD , TxD Active	[Hi,Lo]					
IR Transmission Delay	[Enabled]					
UR2 Duplex Mode	[Half]					
Use IR Pins	[IR-Rx2Tx2]					
Onboard Serial Port 3	[3E8/IRQ11]					
Onboard Serial Port 4	[2E8/IRQ10]					
Onboard Parallel Port	[378/IRQ7]					
Parallel Port Mode	[SPP]					
EPP Mode Select	[EPP1.7]					
ECP Mode Use DMA	[3]					
Onboard FDC Controller	[Enabled]					
USB Controller	[Enabled]					
USB 2.0 Controller	[Enabled]					
AC97 Audio	[Auto]					
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help						
F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults						

Figure 5 Peripheral menu

Onboard Serial Port 1/Port 2

Select an address and corresponding interrupt for the first and second serial ports.

The choice: 3F8/IRQ4, 2E8/IRQ3, 3E8/IRQ4, 2F8/IRQ3, Disabled, Auto

UART Mode Select

Select the Function Mode for UART.

The choice: IrDA, ASKIR, Normal

Onboard Serial Port 3/Port 4

Select an address and corresponding interrupt for the first and second serial ports.

The COM3 choice: 3F8/IRQ11, 2E8/IRQ11, 3E8/IRQ11, 2F8/IRQ11, Disabled

The COM4 choice: 3F8/IRQ10, 2E8/IRQ10, 3E8/IRQ10, 2F8/IRQ10, Disabled

Onboard Parallel Port

Select 3BC/IRQ7 to enable On Board Parallel Port as first Parallel Interface.

The choice: Disable, 378/IRQ7, 278/IRQ5, 3BC/IRQ7.

USB Controller

Select *Enabled* if your system contains a Universal Serial Bus (USB) controller and you have USB peripherals.

The Choice: Enabled, Disabled.

USB 2.0 Controller

This Entry is for disable / enable EHCI controller only. The Bios itself may / may not have high speed USB support. If the Bios has high speed USB support built in, the support will be automatically turn on when high speed device were attached.

The Choice: Enabled, Disabled.

AC97 AUDIO

The Choice: Auto, Disabled.

4.8 PC Health

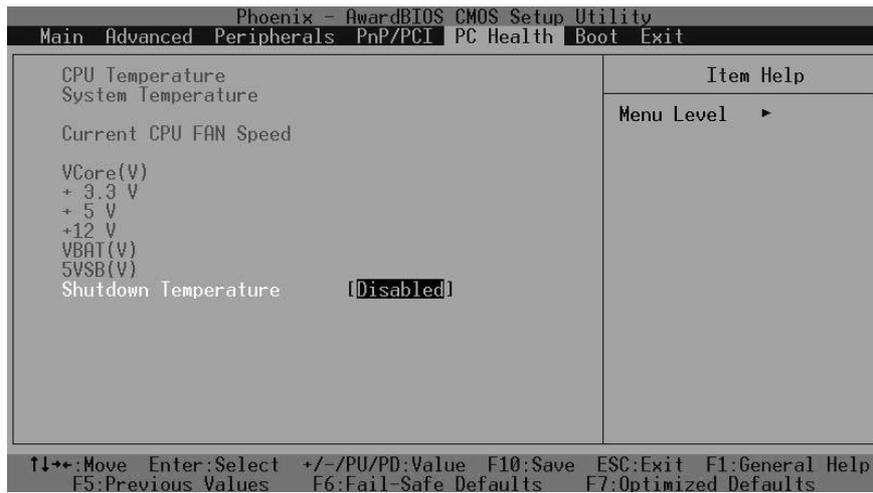


Figure 5 H/W Monitor menu

Shutdown Temperature

This item allows the system to reset when temperature reach the trigger level.

The Choice: Disabled, 60°C/140°F, 65°C/149°F, 70°C/158°F, 75°C/167°F

4.9 Boot

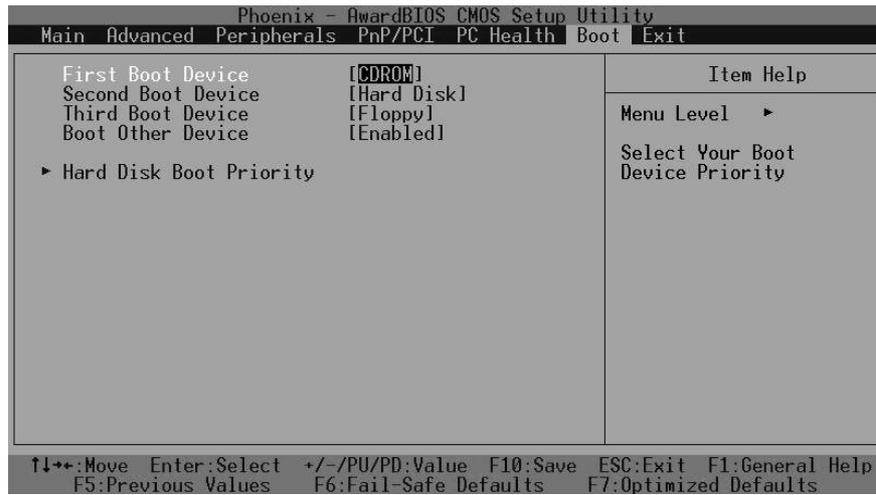


Figure 6 Boot menu

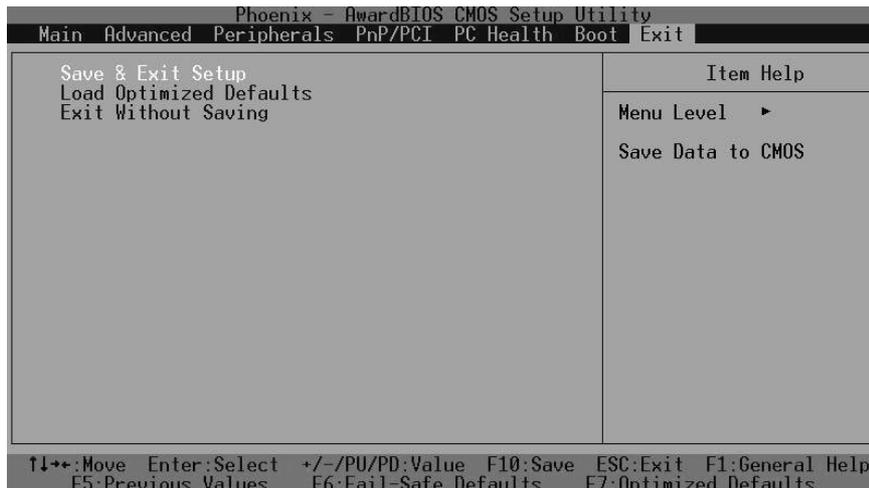
First/Second/Third/Other Boot Device

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

The Choice:

- Floppy.....[]
- LS120.....[]
- Hard Disk[]
- CDROM.....[]
- ZIP100[]
- USB-FDD[]
- USB-ZIP[]
- USB-CDROM ..[.]
- On Board LAN...[]
- Disabled.....[]

4.10 Exit Selecting



- Save & Exit Setup
- Load Optimized Defaults
- Exit Without Saving
- Load Fail-Save Default

Figure 8 Exit menu

Save & Exit Setup

Pressing <Enter> on this item asks for confirmation:

Save to CMOS and EXIT (Y/N)? Y

Pressing “Y” stores the selections made in the menus in CMOS – a special section of memory that stays on after you turn your system off. The next time you boot your computer, the BIOS configures your system according to the Setup selections stored in CMOS. After saving the values the system is restarted again.

Load Optimized Defaults

Use this menu to load the BIOS default values that are factory settings for optimal performance system operations. While Award has designed the custom BIOS to maximize performance, the factory has the right to change these defaults to meet their needs.

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

Load Optimized Defaults (Y/N) ? **N**

Pressing 'Y' loads the default values that are factory settings for optimal performance system operations.

Exit Without Saving

Pressing <Enter> on this item asks for confirmation:

Quit without saving (Y/N)? Y

This allows you to exit Setup without storing in CMOS any change. The previous selections remain in effect. This exits the Setup utility and restarts your computer.

Load Fail-Safe Defaults

Use this menu to load the BIOS default values that are factory settings for safety system operations.

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

Load Fail-Safe Defaults (Y/N) ? **N**

Pressing 'Y' loads the default values that are factory settings for Fail-Safe system operations.