MB-4DUPC

PCI BUS GREEN MOTHERBOARD WITH ENHANCED MULTI-I/O FUNCTION

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USER'S MANUAL

VER: 1.0

Written, edited, and printed in the Republic of China in Taiwan.

Table of Contents

Chapter 1 : Introduction

Features

The MB-4DUPC system board is an IBM PC/AT compatible and includes the following features:

- Based on UM8886AF, UM8663AF, UM8667F Chipsets
- Supports

  Intel 486SX/SX2/DX/DX2, DX4(3.45V), P24D, P24T

  Cyrix S/DX/DX2(DX2-V50/V66 use 3.6V)/M1-sc(M9)(3.6V)

  AMD DX/DX2(5V)/DX2(3.45V)/DX4(3.45V)

  UMC U5S
- Flexible cache size: 128K/256K/512K Bytes
- Supports 8 banks main memory on-board up to 256 MB memory
- Built in write back direct-map cache controller
- Uses 1M/2M/4M/8M/16M 36 bit 72pin SIMM module
- Shadow RAM supported to provide higher performance operation
- 256KB memory relocation
- BIOS/Video ROM shadowable and cacheable
- Supports four 16 bit ISA slots, three 32 bit master PCI slots
- Supports IDE LBA mode
- 260mmx220mm 4 Layers PCB
- Supports up to two 360K, 720K, 1.2M, 1.44M floppy disk drivers
- Software configuration
- Address decoding and strobe generator for game port

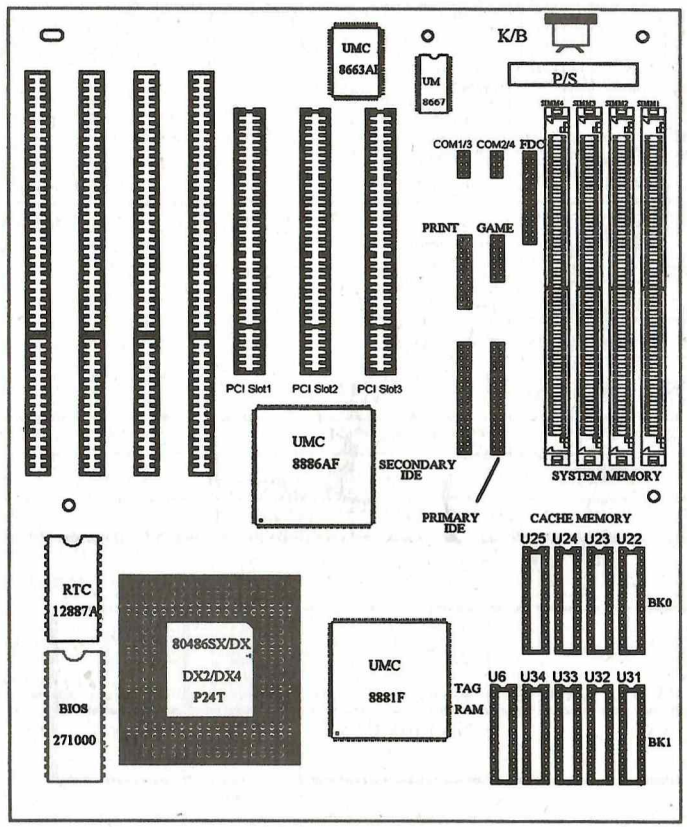
- Supports two 16550 compatible serial port functions
- Supports one multi-mode high performance parallel port function (SPP/EPP/ECP)
- Supports up to 4 PCI IDE drives (32 bit data transfer)
- Supports enhanced CD-ROM device

Green PC Functions

- Meet E.P.A Energy Star requirement
- Meet VESA D.P.M.S proposal
- Stand 486 CPU is slowed down to 8 MHz in idle mode
- Power off the monitor when Green timer is timeout
- No hard disk drive spindle activity in idle mode
- Auto wake-up when COM1, COM2, BUS mouse, FDD, HDD, KBD, VGA, LPT are accessed

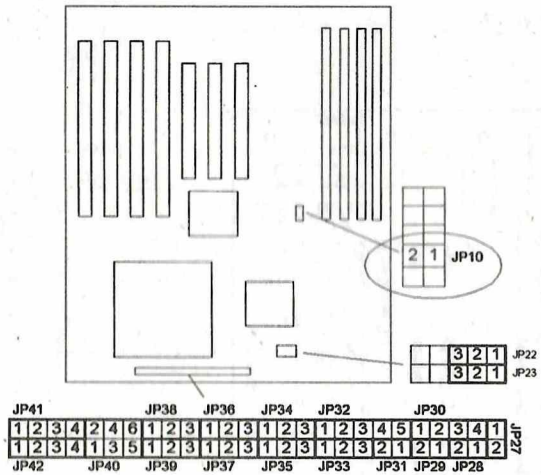
Chapter 2 : Installation

Mainboard Layout Drawing



Jumper & Connector Setting

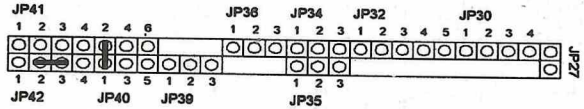
CPU Type Selection

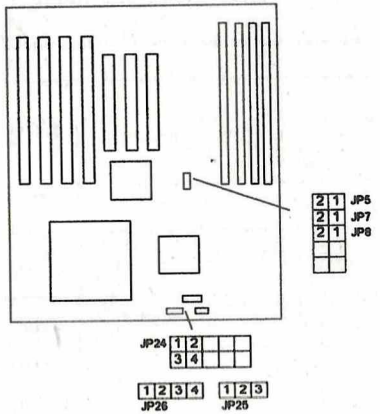


	Intel CPU	Cyrix CPU	AMD, UMC CPU
JP22/JP23			

JP38: Intel P24D CPU Cache Line	1			
	Write-Through	Write-Back		
AMD 3.45V CPU Clock Multiplier	2X	No Function	3X	Other CPU

JP33 Intel DX4 Clock Multiplier	1			
	2X	2.5X	3X	Other CPU

Intel CPU		
486SX Normal CPU		JP10
486SX-S Green CPU		
486DX/DX2 Normal CPU		
486DX-S/DX2-S /DX4 Green CPU		
P24T Green CPU		
P24D Green CPU		
Cyrix CPU		
486S Green CPU		
486DX/DX2 Green CPU		
M1-sc (M9) Green CPU		
AMD CPU		
486DX/DX2/DX4 Normal CPU		
UMC CPU		
U5S Green CPU		

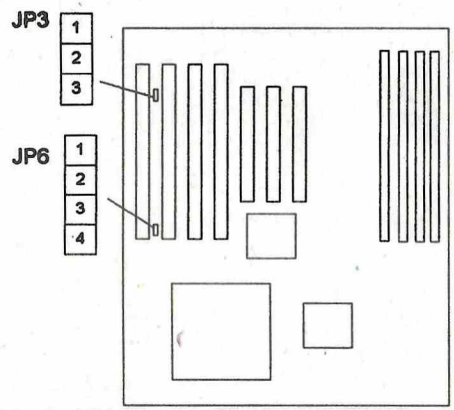


Cache Size Selection

Size	DATA RAM	TAG RAM	JP24	JP25	JP26	RANGE
128K	32K8x4 U22-U25	8K8 U6	1	1	1	32M
256K Single Bank	64K8x4 U22-U25	32K8 U6				64M
256K Double Bank	32K8x8 U22-U25 U31-U34	32K8 U6				64M
512K	128Kx4 U22-U25	32K8 U6				128M

Clock Speed Selection

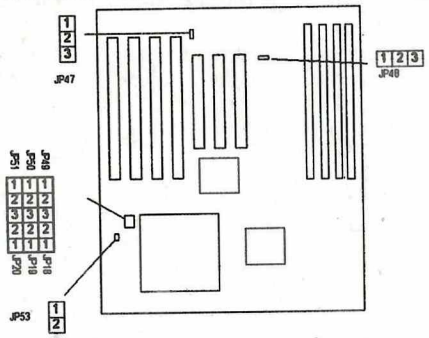
	20MHz	25MHz	33MHz	40MHz	50MHz
JP5/7/8					



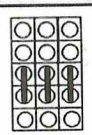
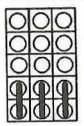
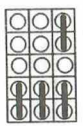
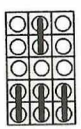
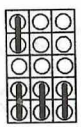
JP6 RTC Clear Setting	1	
	Normal	CMOS Clear

JP3 Flash ROM Voltage Setting	1	
	12V	5V

. Please correctly set the voltage if you want to update the BIOS version



CPU Voltage Jumper Setting

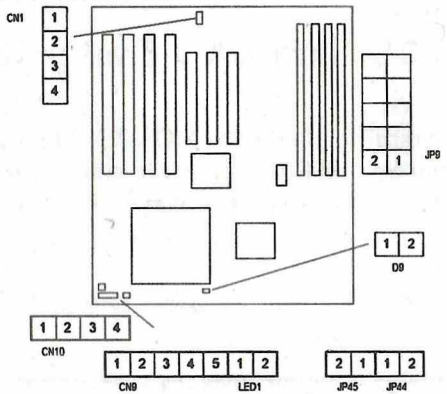
	5V	3.3V	3.45V	3.6V	4V
JP18/19/20 /49/50/51					
JP53					

Warning: Please correctly set the CPU voltage, an improper setting will damage your CPU.

I/O Jumper Setting

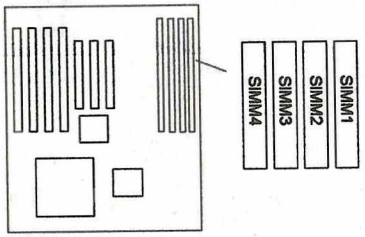
JP47	DACK1	DACK3
		
JP48	DRQ1	DRQ3
		

Note: If JP47 is set to DACK1, then JP48 has to be set to DRQ1; while if JP47 is set to DACK3, then JP48 has to be set to DRQ3.



Other Connectors:

Connector	Pin Out	Assignment
CN9: Keylock	1	VCC
	2	Ground
	3	Ground
	4	Keylock
	5	Ground
CN10: Speaker	1	Data Out
	2	Not Used
	3	Ground
	4	VCC
LED1: Turbo LED	1	Turbo Signal
	2	VCC
JP44: Turbo SW	1	Ground
	2	Turbo Signal
JP45: Reset	1	Ground
	2	Reset
CN1: External Battery Connector	1	+ External Battery
	4	- External Battery
D9: IDE LED	1	VCC
	2	Signal
JP9: Green Power Supply Connector	1	Signal
	2	Green



Memory Configuration

Group B		Group A		
SIMM1	SIMM2	SIMM3	SIMM4	Total
2M (S)				2M
2M (S)	2M (S)			4M
4M (S, D)				4M
2M (S)	2M (S)	2M (S)	2M (S)	8M
4M (S, D)	4M (S, D)			8M
8M (D)				8M
4M (S, D)	4M (S, D)	4M (S, D)	4M (S, D)	16M
8M (D)	8M (D)			16M
16M (S)				16M
8M (D)	8M (D)	8M (D)	8M (D)	32M
16M (S)	16M (S)			32M
32M (D)				32M
16M (S)	16M (S)	16M (S)	16M (S)	64M
32M (D)	32M (D)			64M
32M (D)	32M (D)	32M (D)	32M (D)	128M

Group B SIMM1: Bank0, Bank1
SIMM2: Bank2, Bank3

Group A SIMM3: Bank4, Bank5
SIMM4: Bank6, Bank7

DRAM Size Group A > Group B

Note: If you install two SIMMs in a group, both modules in that group must be of the same size.

Chapter 3 : Award BIOS Setup

Award BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This type information is stored in battery-backed RAM so that it retains the Setup information when the power is turned off.

Entering Setup

Power on the computer and press<Del> immediately will allow you to enter Setup. The other way to enter Setup is to power on the computer , when the below message appears briefly at the bottom of the screen during the POST (Power On Self Test), press <Del> key or simultaneously press <Ctrl>, <Alt>, and <Esc> keys.

TO ENTER SETUP BEFORE BOOT PRESS CTRL-ALT-ESC OR DEL KEY

If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning if OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously press <Ctrl>, <Alt> and <Del> 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, CTRL-ALT-ESC OR DEL TO ENTER SETUP

Control Keys

Up Arrow	Move to previous item
Down Arrow	Move to next item
Left Arrow	Move to the item in the left hand
Right Arrow	Move to the item in the right hand
Esc Key	Main Menu -- Quit and not to save changes to CMOS Status Page setup menu and Option Page Setup Menu -- Exit current page and return to Main Menu
PgUp Key	Increase the numeric value or make changes
PgDn Key	Decrease the numeric value or make changes

F1 Key	General help, only for Status Page Setup Menu and Option Setup Menu
F2 Key	Change color from total 16 colors
F3 Key	Calendar, only for Status Page Setup Menu
F4 Key	Reserved
F5 Key	Restore the previous CMOS value from BIOS, only for Option Page Setup Menu
F6 Key	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
F7 Key	Load the default
F8 Key	Reserved
F9 Key	Reserved
F10 Key	Save all the CMOS changes, only for Main Menu

Getting Help

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu/Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for highlighted item. To exit the Help Window press <Esc>.

The Main Menu

Once you enter Award BIOS CMOS Setup Utility, the Main Menu will appear on the Screen. Use arrow keys to select among the items and press to accept or enter the sub-menu.

ROM PCI/ISA BIOS (2A4X5A34)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP BIOS FEATURE SETUP CHIPSET FEATURES SETUP POWER MANAGEMENT SETUP PCI/GREEN FUNCTION SETUP LOAD BIOS DEFAULTS LOAD SETUP DEFAULTS	PASSWORD SETTING IDE HDD AUTO DETECTION SAVE & EXIT SETUP EXIT WITHOUT SAVING
Esc : Quit F10 : Save & Exit Setup	↑↓→← : Select Item (Shift) F2 : Change Color
AT Clock, DRAM timings.....	

Standard CMOS Setup

This setup page includes all the items in a standard compatible BIOS

BIOS Features Setup

This setup page includes all the items of Award special enhanced features.

Chipset Features Setup

This setup page includes all the items of chipset special features.

Power Management Setup

This menu provides with green functions by allowing users to set the timeout value for monitor and HDD

PCI/Green Function Setup

This menu allows users to set the system board's PCI slot configuration and some green functions.

Load BIOS Defaults

BIOS defaults indicates the most appropriate value of the system parameter which the system would be in minimum performance.

Load Setup Defaults

Chipset defaults indicates the values required by the system for the maximum performance.

Password Setting

Change, set, or disable password. It allows you to limit access to the system and Setup, or just to setup.

IDE HDD Auto Detection

Automatically configure hard disk parameters.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

Standard CMOS Setup

The item in Standard CMOS Setup Menu are divided into several 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.

ROM PCI/ISA BIOS (2A4X5A34)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

Date (mm:dd:yy) : Wed, Dec 28 1994
Time (hh:mm:ss) : 10 : 31 : 55

HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master	None	0	0	0	0	0	0	-----
Primary Slave	None	0	0	0	0	0	0	-----
Secondary Master	None	0	0	0	0	0	0	-----
Secondary Slave	None	0	0	0	0	0	0	-----

Drive A : 1.44M, 3.5 in.
Drive B : None

Video : EGA/VGA
Halt On : All Errors

Base Memory :	640K
Extended Memory :	7168K
Other Memory :	384K
Total Memory :	8192K

ESC : Quit
F1 : Help
↑↓→← : Select Item
PU/PD/+/- : Modify
(Shift) F2 : Change Color

BIOS Features Setup

ROM PCI/ ISA BIOS (2A4X5A34) BIOS FEATURE SETUP AWARD SOFTWARE, INC			
Virus Warning	: Disabled	Video BIOS Shadow	: Enabled
CPU Internal Cache	: Enabled	C8000-CBFFF Shadow	: Disabled
External Cache	: Enabled	CC000-CFFFF Shadow	: Disabled
Quick Power On Self Test	: Enabled	D0000-D3FFF Shadow	: Disabled
Boot Sequence	: A, C	D4000-D7FFF Shadow	: Disabled
Swap Floppy Drive	: Disabled	D8000-DBFFF Shadow	: Disabled
Boot Up Floppy Seek	: Enabled	DC000-DFFFF Shadow	: Disabled
Boot Up NumLock Status	: On	E0000-EFFFF Shadow	: Disabled
Boot Up System Speed	: High		
IDE HDD Block Mode	: Disabled		
Typematic Rate Setting	: Disabled		
Typematic Rate (Chars/Sec)	: 6		
Typematic Delay (Msec)	: 250		
Security Option	: Setup		
IDE Second Channel Control	: Enabled		
		Esc : Quit	↑↓→ ←: Selection Item
		F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift) F2 : Color
		F6 : Load BIOS Default	
		F7 : Load Setup Default	

Virus Warning

This category flashes on the screen. During and after system boots up, any attempt to write to the boot sector or partition table of the hard disk drive will halt the system and the following error message will appear, in the mean time , you can run anti-virus program to locate the problem.

!WARNING!
Disk boot sector is to be modified
Type "Y" to accept write or "N" to abort write
Award Software, Inc.

Enabled : Activate automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector or hard disk partition table.

Disabled : No warning message to appear when anything attempt to access the boot sector or hard disk partition table.

CPU Internal/External Cache

These two categories speed up memory access. However it depends on CPU/chipset design.

Enabled : Enabled cache

Disabled : Disabled cache

Quick Power On Self Test

This category speeds up Power On Self Test (POST) after you power on 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

Boot Sequence

This category determines which drive computer searches first for the hard disk operation system (i.e., DOS). Default value is A, C.

C, A : System will first search for hard disk drive then floppy disk drive

A, C : System will first search for floppy disk drive then hard disk drive

Swap Floppy Drive

Enabled: Enable Swap Floppy Drive function

Disabled: Disable Swap Floppy Drive function

Boot Up Floppy Seek

During POST, BIOS will determine if the Floppy disk drive installed is 40 or 80 tracks. 360 K type is 40 tracks while 720K, 1.2M and 1.44M drive type as they are all 80 tracks.

Enabled : BIOS searches for floppy disk drive to determine if it is 40 or 80 tracks. Note that BIOS can not tell from 720K, 1.2M or 1.44M drive type as they are all 80 tracks.

Disabled : BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360K.

Boot Up NumLock Status

The default value is On.

On : Keypad is number keys

Off : Keypad is arrow keys

Boot Up System Speed

It selects the default system speed - the speed that the system will run at immediately after power up.

High : Set the speed to high

Low : Set the speed to low

IDE HDD Block Mode

Enabled : Enable IDE HDD Block Mode
Disabled : Disable IDE HDD Mode

Typematic Rate Setting

This determines the typematic rate.
Enabled : Enable typematic rate
Disabled : Disable typematic rate

Typematic Rate (Chars/Sec)

6 : 6 characters per second
8 : 8 characters per second
10 : 10 characters per second
12 : 12 characters per second
15 : 15 characters per second
20 : 20 characters per second
24 : 24 characters per second
30 : 30 characters per second

Typematic Delay (Msec)
When hold a key, the time between the first and second character displayed.

250 : 250 msec
500 : 500 msec
750 : 750 msec
1000 : 1000 msec

Security Option

This category allows you to limit access to the system and Setup, or just to Setup.

System : The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt.

Setup : The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt.

Note: *To disable security, select PASSWORD SETTING at Main Menu and then you will be asked to enter password. Do not type anything and just press* **<Enter>**, *it will disable security. Once the security is disabled, the system will boot and you can enter Setup freely.*

IDE Second Channel Contorl

This item allows users to disable or enable on board second channel PCI IDE device.

Video BIOS Shadow

It determines whether video BIOS will be copied to RAM, however, it is optional from chipset design. Video shadow will increase the video speed.

Enabled : Video shadow is enabled

Disabled : Video shadow is disabled

C8000-CBFFF Shadow/E0000-EFFFF Shadow

These categories determine whether optional ROM will be copied to RAM.

Enabled : Optional shadow is enabled

Disabled : Optional shadow is disabled

Chipset Features Setup

ROM PCI/ISA BIOS (2A4X5A34) CHIPSET FEATURES SETUP AWARD SOFTWARE, INC		
L1 Cache Update Scheme	: Wr-Through	
L2 Cache Update Scheme	: Wr-Back	
System BIOS Cacheable	: Disabled	
Video BIOS Cacheable	: Disabled	
I/O Recovery Time	: 2 BCLK	
HOST-to-PCI Post Write	: 1WS	
HOST-to-PCI Burst Write	: Disabled	
PCI Posted Memory Write	: Disabled	
Burst Copy-Back Option	: Disabled	
Onboard FDD Controller	: Enabled	
Onboard Parallel Mode	: SPP Mode	
Onboard Parallel Port	: 378H	
Onboard Serial Port 1	: COM1	
Onboard Serial Port 2	: COM2	
Onboard Game Port	: Enabled	
		Esc : Quit ↑↓→← : Selection Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift) F2 : Color F6 : Load BIOS Default F7 : Load Setup Default

L1/L2 Update Scheme

The choice for these two item are "Wr-Back" or "Wr-Through", set them to "Write Back" to improve system performance. However, if your system did not work well, please set them to "Wr-Through"

System (Video) BIOS Cacheable
This setting determines whether the area of RAM used by the system (video) BIOS can be cached.

I/O Recovery Time

This item determine the programmable recovery time into back to back I/O Cycles.

Note: Please modify the setting if you have any compatible problem of Add-on card for ISA Bus.

Host-to-PCI Post Write

Enable this item if you want to use seondary HDD connector on board, otherwise, disable this item.

HOST-to-PCI Burst Write

The options of this item are "1 WS" or "0 WS", choose "0 WS " can improve system's performance, while if your system runs unstable, please set it to "1 WS"

PCI Posted Memory Write

If you install PCI VGA card on your system board, enable this item can improve VGA card's performance.

Burst Copy-Back Option

Enable this item to improve PCI card's performance.

Onboard FDD Controller

The settings of this item are " Enabled" or "Disabled"

Onboard Parallel Mode

The settings of this item are "ECP Mode", "EPP Mode", "SPP Mode" or "Disabled"

Onboard Parallel Port

The settings of this item are " 378H" , "278H" or "None"(means disabled)

Onboard Serial Port1

The settings of this item are " COM1" , "COM3" or "None" (means disabled)

Onboard Serial Port2

The settings of this item are "COM2", "COM4" or "None" (means disabled)

Onboard Game Port

The settings of this item are "Enabled" or "Disabled"

Power Management Setup

ROM PCI/ISA BIOS (2A4X5A34)
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC

Power Management	: Disabled		
PM Control By APM	: Enabled		
Video off Method	: Blank Screen		
HDD Standby timer	: Disabled		
Doze Timer Select	: 512 Min		
Standby Timer Select	: 512 Min		
Inactive Timer Select	: 512 Min		
Inactive Wake-Up Time	: 0 : 0 : 0		
Control Item	: CPU Speed	Display	
Doze Mode Control	: 1/4 CLKI	Turn On	
Standby Mode Control	: 1/8 CLKI	Turn Off	
Inactive Mode Control	: Stop CLK		

*Monitor Even In Full On Mode	
PCI Master3 Check	: Disabled
PCI Master2 Check	: Disabled
PCI Master1 Check	: Disabled
LPT Access Check	: Enabled
COM Access Check	: Enabled
ISA Master & DMA Check	: Enabled
IDE Access Check	: Enabled
Floppy Access Check	: Enabled
VGA Access Check	: Disabled

Esc : Quit ↑↓→← : Selection Item
F1 : Help PU/PD/+/- : Modify
F5 : Old Values (Shift) F2 : Color
F6 : Load BIOS Default
F7 : Load Setup Default

Power Management

This item controls the Power Saving Mode, to use an operating system's power management features, this features must be enabled.

PM Control By APM

Enable this item to prevent system clock stopped in power saving mode if your CPU supports Green function.

Note: 1. To make the APM function work, users have to install power.exe (supported by MS-DOS 5.0 or higher) in Config.exe.
2. To make the Windows 3.1 work regularly, in " Windows Setup", users have to set the" Computer" item to " MS-DOS System with APM"

Host-to-PCI Post Write

Enable this item if you want to use seondary HDD connector on board, otherwise, disable this item.

HOST-to-PCI Burst Write

The options of this item are "1 WS" or "0 WS", choose "0 WS " can improve system's performance, while if your system runs unstable, please set it to "1 WS"

PCI Posted Memory Write

If you install PCI VGA card on your system board, enable this item can improve VGA card's performance.

Burst Copy-Back Option

Enable this item to improve PCI card's performance.

Onboard FDD Controller

The settings of this item are " Enabled" or "Disabled"

Onboard Parallel Mode

The settings of this item are "ECP Mode", "EPP Mode", "SPP Mode" or "Disabled"

Onboard Parallel Port

The settings of this item are " 378H" , "278H" or "None"(means disabled)

Onboard Serial Port1

The settings of this item are " COM1" , "COM3" or "None" (means disabled)

Onboard Serial Port2

The settings of this item are "COM2", "COM4" or "None" (means disabled)

Onboard Game Port

The settings of this item are "Enabled" or "Disabled"

Power Management Setup

ROM PCI/ISA BIOS (2A4X5A34)
POWER MANAGEMENT SETUP
AWARD SOFTWARE, INC

Power Management	: Disabled		*Monitor Even In Full On Mode	
PM Control By APM	: Enabled		PCI Master3 Check	: Disabled
Video off Method	: Blank Screen		PCI Master2 Check	: Disabled
HDD Standby timer	: Disabled		PCI Master1 Check	: Disabled
Doze Timer Select	: 512 Min		LPT Access Check	: Enabled
Standby Timer Select	: 512 Min		COM Access Check	: Enabled
Inactive Timer Select	: 512 Min		ISA Master & DMA Check	: Enabled
Inactive Wake-Up Time	: 0 : 0 : 0		IDE Access Check	: Enabled
Control Item	: CPU Speed	Display	Floppy Access Check	: Enabled
Doze Mode Control	: 1/4 CLKI	Turn On	VGA Access Check	: Disabled
Standby Mode Control	: 1/8 CLKI	Turn Off		
Inactive Mode Control	: Stop CLK			

Esc : Quit ↑↓→← : Selection Item
F1 : Help PU/PD/+/- : Modify
F5 : Old Values (Shift) F2 : Color
F6 : Load BIOS Default
F7 : Load Setup Default

Power Management

This item controls the Power Saving Mode, to use an operating system's power management features, this features must be enabled.

PM Control By APM

Enable this item to prevent system clock stopped in power saving mode if your CPU supports Green function.

Note: 1. To make the APM function work, users have to install power.exe (supported by MS-DOS 5.0 or higher) in Config.exe.
2. To make the Windows 3.1 work regularly, in " Windows Setup", users have to set the" Computer" item to " MS-DOS System with APM"

Video Off Method

Set this item to "V/H SYNC + Blank" if monitor supports Green Function, otherwise, set it to "Blank Screen" If your VGA card supports DPMS mode, please set this item to "DPMS Support"

HDD Standby Timer

This item causes an IDE hard disk to "spin down" if it is not access within a specified period. The disk returns to full speed the next time it is accessed.

Doze Timer Select
Standby Timer Select
Inactive Timer Select

The three settings controls the "System Power Management" scheme. Beginning with "**Doze Timer**", the scheme progresses to "**Standby Timer**" and then to "**Inactive Timer**". If one setting is disabled, the system progress to the next setting.

The **Mode Control** lets users decide which speed they want CPU to run in power saving mode

Monitor Even In Full On Mode

Users use these options to determine through which devices they want the system awoke in Power Saving Mode.

PCI/Green Function Setup

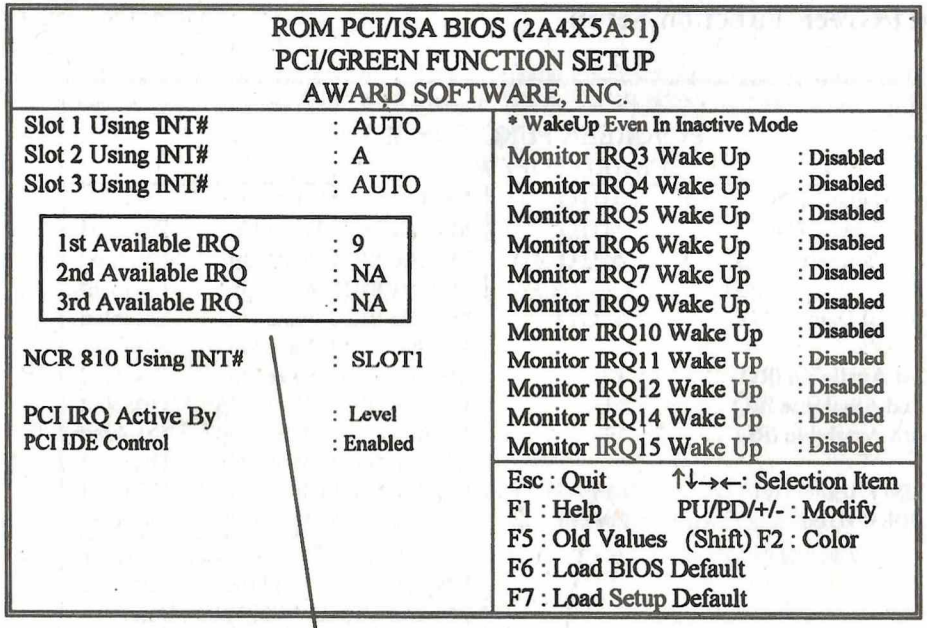
ROM PCI/ISA BIOS (2A4X5A31)
PCI/GREEN FUNCTION SETUP
AWARD SOFTWARE, INC.

Slot 1 Using INT#	: AUTO	* WakeUp Even In Inactive Mode	
Slot 2 Using INT#	: AUTO	Monitor IRQ3 Wake Up	: Disabled
Slot 3 Using INT#	: AUTO	Monitor IRQ4 Wake Up	: Disabled
		Monitor IRQ5 Wake Up	: Disabled
NCR 810 Using INT#	: SLOT1	Monitor IRQ6 Wake Up	: Disabled
		Monitor IRQ7 Wake Up	: Disabled
1st Available IRQ	: 10	Monitor IRQ9 Wake Up	: Disabled
2nd Available IRQ	: 11	Monitor IRQ10 Wake Up	: Disabled
3rd Available IRQ	: 12	Monitor IRQ11 Wake Up	: Disabled
		Monitor IRQ12 Wake Up	: Disabled
PCI IRQ Active By	: Level	Monitor IRQ14 Wake Up	: Disabled
PCI IDE Control	: Enabled	Monitor IRQ15 Wake Up	: Disabled
		Esc : Quit ↑↓→←: Selection Item	
		F1 : Help PU/PD/+/- : Modify	
		F5 : Old Values (Shift) F2 : Color	
		F6 : Load BIOS Default	
		F7 : Load Setup Default	

If your PCI device support Level (Share) function, set it to "Level" (Share), otherwise, set it to "Edge"(Single) The default setting is "Level"(Share)

This Setup menu is used to set the system board's PCI slot Interrupt configuration. Each PCI slot has four INT# signal (INTA, B, C, D). If your PCI card support INT# , the PCI INT# has to be connected correctly to ISA IRQ9, 11, 12, 14 or 15 so that it will operate regularly.

You can set the first 3 items to "AUTO" so that the BIOS will automatically choose the appropriate setting for you, or you can set them by yourself. For instance, if you install your PCI card on slot 2, and your PCI card uses PCI INTA and ISA IRQ9 (refer to your PCI card's manual) , set the option as follows:



Note: if you just install one PCI card on any slot, select the IRQ on "1st Available IRQ"; if you install 2 PCI cards on slot2 and slot3, select the IRQ for slot2 on "1st Available IRQ" and select the IRQ for slot3 on "2nd Available IRQ", so as for other examples.

WakeUp Even In Inactive Mode

These options allow users to choose through which IRQ line they want the Monitor to wake up in Inactive Mode.

NCR/810 (AD17)

IF you install PCI NCR adapter on slot1(2, 3), set this item to "SLOT1(2, 3)", also be sure correctly set the INT#(refer to the user's manual of NCR adapter).

PCI IDE Control

The settings for this item are "Enabled" or "Disabled" for primary IDE device.

Load BIOS Default

When you access "Load BIOS Default", the following message appears:

Load BIOS Default (Y/N) ?N

The BIOS Default values are the "worst case" default, and are the most stable values for the system. Use them if the system is performing erratically due to hardware problems. To load the BIOS Default values, press <Y> then <Enter>.

Load Setup Default

When you access "Load Setup Default", you are shown the following message:

Load Setup Default (Y/N) ?N

The Setup Default values represent the "best case" default, and should provided optimum system performance. To load the Setup Default values, press <Y> then <Enter>.

Password Setting

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

ENTER PASSWORD

Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc>. You may also press <Esc> to abort the selection and not enter a password.

To disable password, just press <Enter> when you are prompted to enter password. A message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter the Setup freely.

PASSWORD DISABLED

If you select System at Security Option of BIOS Features Setup Menu, you will be prompted for the password everytime the system is rebooted or anytime you try to enter Setup. If you select Setup at Security Option of BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

IDE HDD Auto Detection

This feature allows you to check all the informations on your hard disk formation. When you access "IDE HDD Auto Detection", the system executes auto detection.

At the prompt, it represents all the informations on your HDD, and you are asked:

Do you accept this drive C: (Y/N) ?

1 If you accept the test result, press [Y] then [Enter] and the result is saved, then the system continues to detect another HDD.

2 If not, press [N] then [enter] and the system continues to detect another HDD.

Exiting the Setup Program

To exit the Setup program, do the following:

If you want to save your change:

a. At the Main menu, select "Save & Exit Setup", then press [Enter]
b. Press [Y] then [Enter] to confirm. The system will boot with your new BIOS setting in effect .

If you want to abandon your changes:

a. At the Main Menu, select "Exit Without Saving", then press [Enter].

b. Press [Y] then [Enter] to confirm. The system will reboot with the original BIOS setting in effect.

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Chapter 4 : Utility Installation

Introduction

The following IDE DEVICE DRIVERS are offered in the diskette. Please refer to README file to get the detail install information.

1. README
2. INSTALL4.EXE
3. UM8673.SYS
4. UM8673.386
5. INT13.386
6. UMC1S506.ADD
7. UMC310.DSK
8. UMC311.DSK
9. UMC401.DSK
10. V2008673.PTL

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