IAC-F695 Series

PICMG Full-size CPU Card for AMD Socket A Processor

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CHAPTER 1.

INTRODUCTION

The IAC-F695 Series is a AMD SocketA PICMG Single Board Computer (SBC) CPU card specifically designed for Socket A processors. With VIA VT8363A/686B chipsets, IAC-F695 Series supports Ultra DMA-33/66/100 for faster hard drive transmission speeds and contains health monitoring hardware. The health monitoring IC keeps an eye on the CPU and releases an audio alarm when detecting abnormal operating voltage & temperature or malfunction of the cooling fans. For boosting operation, this motivated card also supports sockets for a Flash Disk and three DIMMs support up to 1.5GB SDRAM.

Other on-board features include two serial ports (RS-232 and RS-232/422/485), one multi-mode parallel (ECP/EPP/SPP) port, a floppy drive controller, a keyboard interface and a PS/2 mouse interface. The built-in high speed PCI IDE controller supports both PIO and bus master modes. Supporting up to two floppy disks, this board also can connect up to two IDE devices. Its 6-layer printed circuit board combined with noise-tolerant and low power consumption CMOS technology allow the IAC-F695 Series to withstand many harsh industrial environments.

IAC-F695 Series is a high power & full engine Single Board Computer CPU card , carefully designed to be a feature-rich SBC CPU card at a reasonable price, this board elegantly meets industry needs and saves time and money by waiving the hassle of going through the extra effort and cost of additional I/O cards. Being standards-compliant, it is proved to be a quality product with high performance and stability in a long run.

1.1 SPECIFICATIONS

<u> </u>	Processor	:	Socket 462 for AMD Duron/Athlon Processor support up
			to 1.2G/1.3G CPU FSB up to 133MHZ
<u> </u>	Chipset	:	VIA VT8363A/686B
<u> </u>	System Memory/RAM	:	Three 168-pin DIMM sockets, support up to 1.5 \ensuremath{GB}
			SDRAM
<u> </u>	BIOS	:	Award s licensed BIOS (2M bit Flash ROM)
<u> </u>	Flash Memory Disk	:	Reserved socket for DiskOnChip from M-System,
			support up to 288 MB flash memory disk
<u> </u>	IDE Drive Interface	:	Two PCI IDE port support up to four IDE devices/Ultra
			DMA-33/66/100
<u> </u>	Floppy Drive Interface	:	One FDD port, support up to two floppy devices
<u>~</u>	Serial Port	:	Two COM ports, one RS-232 and one RS-232/422/485
<u>~</u>	Parallel Port	:	One multi-mode parallel port (SPP / EPP / ECP)
<u>~</u>	Bus Interface	:	PCI/ISA bus (PICMG 2.0)
<u>~</u>	RTC Battery	:	Internal RTC with Li battery
<u>~</u>	Keyboard/Mouse Connecto	r:	6-pin mini-Din PS/2 keyboard/mouse connector and 5-pin
			keyboard header
<u>~</u>	Watchdog Timer	:	16-level time-out intervals
<u>~</u>	Digital I/O	:	4-bit digital I/O header
<u>~</u>	Universal Serial Bus	:	Support USB connectors (Version 1.1)
<u> </u>	IR Interface	:	Support IrDA header
<u>~</u>	Health Monitoring	:	On-board hardware Monitoring function
<u>~</u>	Operating Temperature	:	0 mmC~60 mmC
<u>~</u>	Storage Temperature	:	-20 mmC~70 mmC
<u>~</u>	Humidity	:	5 ₮~95₮ RH, non-condensing
<u> </u>	Dimensions	:	338.5 x 122 mm (13 1/4" x 4 5/6" inches) 🞙 0.5 mm
<u>~</u>	Support ATX Power Function	on	
<u> </u>	EMI/EMS	:	EN 50081-1/1994>EN 55022/1997>
			EN 61000-3-2/1995>EN 61000-3-3/1995,
			EN 50082-1/1994>IEC 1000-4-2/1995,
			IEC 1000-4-3/1995, IEC 1000-4-4/1995

1.2 PACKING CHECK LIST

Inspect the product package for the following items before installation. If there is anything missing, please contact our authorized reseller.

Item	Qty	Remark
IAC-F695	1 pc	IAC-F695 PICMG Full-Size SBC
FDD cable	1 pc	34-pin to 34-pin standard header flat ribbon cable
LPT cable	1 pc	26-pin standard header to 25-pin female D-Sub
ATX feature cable	1 pc	4-pin to 4-pin
IDE Cable	1 pc	IDE cable
User' s manual	1 pc	IAC-F695 user' s manual
CPU Card to Backplane connector cable	1 pc	1x5-pin to 5pin connect cable

JUMPER SETTING AND CONNECTORS

The figure below shows the jumpers and connectors location on the IAC-F695 Series.

2.1 Board Outline of IAC-F695 Series



2.2 INSTALLING AND UPGRADING THE CPU

To upgrade to a higher power CPU, simply remove the old CPU and install a new one. Make sure to set the jumpers for the new CPU type and speed.

WARNING!

Disconnect the power cord from your system when you intend to work on it or when you plan to open the chassis of your industrial computer. Do not make connections when the power is turned on because the sensitive electronic components could be damaged by the sudden rush of power. Please only allow experienced electronic technicians to do this job.

STATIC ELECTRICITY PRECAUTION!

Caution! Computer components are very sensitive to damage from static electric discharge. Always ground yourself to remove static charge build-up before touching the boards in the computer. Use a grounding wrist strap at all times. Place all electronic components on anti-static pad for static-dissipation or in static-shielded bag when they are not in the chassis.

CAUTION!

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the battery manufacturer's instructions or accepted environmental regulatory standards.

2.3 INSTALLING THE DIMM MODULE:

A DIMM module simply snaps into a socket on the system board. Pin1 of the DIMM module must correspond with Pin1 of the socket.



- 1. Pull the "tabs" which are at the ends of the socket to the side.
- 2. Position the DIMM above the socket with the "notches" in the module aligned with the "keys" on the socket.
- 3. Seat the module vertically into the socket. Make sure it is completely seated. The tabs will hold the DIMM in place.

2.4 JUMPER SETTING OVERVIEW

In order to select the operation modes of your system, configure and set the jumpers on your SBC to match the needs of your applications. To set a jumper, a plastic cap containing metal contacts is placed over the jumper pins as designated by the required configuration as listed in this section. A jumper is said to be " on " or " 1-2" when the cap has been placed on two of its pins, as show in the figure below:



A pair of needle-nose pliers is recommended when working with jumpers. If you have any doubts about the best hardware configuration for your application, contact our local sales representative before you make any changes. In general, you simply need a standard cable to make most connections



2.5 JUMPER LOCATIONS FOR IAC-F695 SERIES

2.6 JUMPER SETTINGS SUMMARY FOR IAC-F695 SERIES

JUMPER	FUNCTION	
RATE+SLCK1	Select CPU External Bus Clock	
JP2/JP3	Select ISP GAL Function (Manufacture Define)	
CMOS1	Clear CMOS	
SC2T1	Select COM2 Type	
SC2T2	Select Serial Ports, RS232/422/485	
SDOC1	Select DiskOnChip (Flash Disk) Address	

2.7 JUMPER SETTINGS FOR IAC-F695 SERIES

* RATE1+SLCK1: Select CPU External Bus Clock

CPU External Bus Clock		SLCK1
100Mhz (Default)		7-8
133Mhz		OFF
RATE1	SLO 2	CK1 8
1 2		
	1	7
	Bus Clock Default) hz RATE1 1 2	Bus ClockRATE1Default)ONhzOFFRATE1SL012121211

+ JP2, JP3 : Select ISP GAL Function (Manufacture Define)

CPU External Bus Clock		JP2	JP3
Program ISP 0	GAL	2-3	2-3
Use Watch-Dog (Default)		1-2	1-2
Default	JP2 3 2 1		3 3 2 1

+ CMOS1 : Clear CMOS

CMOS1	Description		
1-2	Normal (Default)		
2-3	Clear CMOS		
CMOS1		СМО	9S1
1 2 3 □		1	
Normal (Defa	ault)	2 3	

+ SC2T1: Select COM2 Type

СОМ2 Туре	SC2T1
RS-232 (Default)	1-2
RS-422	3-4
RS-485	5-6



+ SC2T2: Select Serial Port2 , RS232/422/485

Serial Port2 , RS232/422/485	SC2T2
RS-232 (Default)	1-5, 2-6, 3-7, 4-8
RS-422	5-9, 6-10, 7-11, 8-12
RS-485	5-9, 6-10, 7-11, 8-12



 Flash Disk Address
 SDOC1

 D000~D1FFH
 3-4,7-8

 D400~D5FFH
 3-4,9-10

 D800~D9FFH
 5-6,7-8

 DC00~DDFFH
 5-6,9-10

 CC00~CDFFH
 1-2,9-10

 Default (2-4,8-10)
 D4000~D5F

+ SDOC1: Select DiskOnChip (Flash Disk) Address





2.8 I/O CONNECTOR LOCATIONS FOR IAC-F695 SERIES



2.9 I/O CONNECTOR SUMMARY FOR IAC-F695 SERIES

CONNECTOR	FUNCTION
ISP1	ISP GAL Connector (Factory only))
DIO1	Digital Input / Output Ports (Header)
IRDA1	Alternate IRDA
PLRS1	Power LED, Reset, Speaker Connector
FAN1, FAN2	Fan Connector
PKB1	KB Connector (Mini Din)
PMS1	Mouse Connector (Mini Din)
KCN1	KB Connector (5 Pin Wafer)
USBC1	USB Port Connector
COM1	RS-232 Serial Port #1 Connector (D-Sub)
COM2	Serial Port #2 Connector (D-Sub)
FDC1	Floppy Interface Connector (Header)
IDE1 / IDE2	EIDE Interface Connector (Header)
LPT1	Parallel Port Connector (Header)
JP1	Power Switch

2.10 /O CONNECTORS DESCRIPTION

Pin No.	Description	
1	VCC	
2	SDO	
3	SDI	
4	ISP	
5	NC	
6	MODE	
7	Ground	
8	SCLK	





+ DIO1: Digital Input/Output Ports (Header)

Pin No.	Description
1	INO
2	OUT0
3	IN1
4	OUT1
5	IN2
6	OUT2
7	IN3
8	OUT3
9	Ground
10	Ground



+ IRDA1: Alternate IRDA

Pin No.	Description		
1	VCC		
2	NC		
3	IRRX		
4	Ground		
5	IRTX		



5

Pin No.	Description		
1	Power LED +		
2	GND		
3	HDD LED +		
4	HDD LED -		
5	RESET SW +		
6	RESET SW – (GND)		
7	External Speaker -		
8	Internal Buzzer -		
9	NC		
10	External Speaker +		

PLRS1 : Power LED, Reset, Speaker Connector 1



Default :7-8 (ON)

FAN1/FAN2: Fan Connector +

Pin No.	Description		
1	Ground		
2	+12V		
3	FAN Status		

+ PKB1 : KB Connector (Mini Din)

Pin No.	Description			
1	KB Data			
2	NC			
3	Gnd			
4	VCC			
5	KB CLK			
6	NC			

+ PMS1 : Mouse Connector (Mini Din)

Pin No.	Description		
1	MS Data		
2	NC		
3	Gnd		
4	VCC		
5	MSCLK		
6	NC		







6



PMS1



PIN NO.	DESCRIPTION		
1	Keyboard Clock		
2	Keyboard Data		
3	NC		
4	Gnd		
5	VCC		

+	KCN1	: KB	Connector	(5	Pin	Wafer)
1				. –			



+ USBC1 : USB Port #1

Pin	Description		
1	USB Port #0 Vcc		
2	USB Port #1 Vcc		
3	USB D0-		
4	USB D1-		
5	USB D0+		
6	USB D1+		
7	Ground		
8	Ground		
9	USB Port #0 Ground		
10	USB Port #1 Ground		



+ ATXC1: External ATX Power Connector

Pin	Description			
1	GND			
2	STB 5V			
3	GND			
4	PSON			

ATXC1

Note: To have ATX features of ATX switch and Wake-On-LAN, you need to wire pins of J1 via ATX power connector through backplane by using ATX feature cable. (ATX momentary switch connected to JP1, push the button once will switch the system between ON and SOFT OFF controls the system power. If your OS is Windows 200 environment, please set ACPI function under BIOS setting for power supply implement.

Pin No.	Description		
1	Data Carrier Detect (DCDA #)		
2	Receive Data (RXDA)		
3	Transmit Data (TXDA)		
4	Data Terminal Ready (DTRA #)		
5	Ground (GND)		
6	Data Set Ready (DSRA #)		
7	Request to Send (RTSA #)		
8	Clear to Send (CTSA #)		
9	Ring Indicator (RIA #)		

+ COM1: RS-232 Serial Port #1 Connector (D-Sub)





+ COM2: Serial Port #2 Connector (D-Sub)

Din No.	Description				
PIN NO.	RS-232 RS-422		RS-485		
1	Data Carrier Detect (DCDB #)	Transmit Data- (TXD-)	DATA-		
2	Receive Data (RXDB#)	Transmit Data+ (TXD+)	DATA+		
3	Transmit Data (TXDB)	Receive Data+ (RXD+)	NC		
4	Data Terminal Ready (DTRB)	Receive Data- (RXD-)	NC		
5	Ground (GND)	NC	NC		
6	Data Set Ready (DSRB#)	NC	NC		
7	Request To Send (RTSB#)	NC	NC		
8	Clear To Send (CTSB#)	NC	NC		
9	Ring Indicator (RIB#)	NC	NC		

Pin No.	Description	Pin No.	Description
1	Strobe #	14	Auto Form Feed
2	Data0	15	Error #
3	Data1	16	Initialize #
4	Data2	17	Printer Select IN #
5	Data3	18	Ground
6	Data4	19	Ground
7	Data5	20	Ground
8	Data6	21	Ground
9	Data7	22	Ground
10	Acknowledge #	23	Ground
11	Busy	24	Ground
12	Paper Empty	25	Ground
13	Printer Select	26	Ground

+ LPT1 : Parallel cable Connector (Header)



Pin No.	Description	Pin No.	Description
1	Ground	2	Density Select
3	Ground	4	NC
5	Ground	6	DS1
7	Ground	8	Index #
9	Ground	10	Motor Enable A #
11	Ground	12	Drive Select B #
13	Ground	14	Drive Select A #
15	Ground	16	Motor Enable B #
17	Ground	18	Direction #
19	Ground	20	Step #
21	Ground	22	Write Data #
23	Ground	24	Write Gate #
25	Ground	26	Track 0 #
27	Ground	28	Write Protect #
29	NC	30	Read Data #
31 Ground		32	Head Side Select #
33	NC	34	Disk Change #

FDC1: Floppy Interface Connector (Hea



Pin No.	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	NC
21	DMA REQ	22	Ground
23	IOW #	24	Ground
25	IOR #	26	Ground
27	IOCHRDY	28	Ground
29	DMA ACK #	30	Ground
31	Interrupt	32	NC
33	SA1	34	PD80P / SD80P
35	SA0	36	SA2
37	HDC CS0 #	38 HDC CS1 #	
39	HDD Active LED #	40	Ground

+ IDE1/IDE2: EIDE Connector (Header)



IDE1/IDE2

CHAPTER 3.

AWARD BIOS SETUP

Award's ROM BIOS provides a built-in Setup program that allows users to modify the basic system configuration and settings. The modified data will be stored in a battery-backed CMOS RAM so that this data will be retained even when the power is turned off. In general, the information saved in the CMOS RAM remains unchanged unless there is a configuration change in the system, such as hard drive replacement or new equipment installment

3.1 RUNNING AWARD BIOS

The Setup Utility is stored in the BIOS ROM. When the power of the computer system is turned on, a screen message will appear to give you an opportunity to call up the Setup Utility while the BIOS will enter the Power On Self Test (POST) routines. The POST routines perform various diagnostic checks while initializing the board hardware. If the routines encounter an error during the tests, the error will be reported in one of two ways, a series of short beeps or an error message on the screen. There are two kinds of errors, fatal and non-fatal. The system can usually continue the boot up sequence with non-fatal errors. Non-fatal error messages usually appear on the screen along with the following instructions:

" Press <F1> to RESUME "

Write down the message and press the F1 key to continue the boot up sequence. After the POST routines are completed, the following message appears:

" Press DEL to enter SETUP "

Entering Setup

Turn on the power of the computer system and press immediately. If you don't have the chance to respond, reset the system by simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys, or by pushing the 'Reset' button on the system cabinet. You can also restart by turning the system OFF then ON.

3.2 CMOS SETUP UTILITY

To access the AWARD BIOS SETUP program, press the key. The screen display will appears as shown below:

Main Program Screen

	CMOS Setup Ut	lity – Copyright ©1984-2001 Award Software
	Standard CMOS Features	Frequency/Voltage Control
	Advanced BIOS Features	Load Fail-Safe Defaults
	Advanced Chipset Features	Load Optimized Defaults
	Integrated Peripherals	Set Supervisor Password
	Power Management Setup	Set User Password
	PnP/PCI Configurations	Save & Exit Setup
	PC Health Status	Exit Without Saving
Esc	: Quit	
F10	: Save & Exit Setup	🛔 🛛 🛁 : Select Item
		(C)
F6	: SAVE CMOS TO BIOS	F7 : LOAD CMOS FROM BIOS
		Time, Date, Hard Disk Type

This screen provides access to the utility's various functions.

Listed below are explanation of the keys displayed at the bottom of the screen:

<esc></esc>	: Exit the utility.	
< 🕽 📹 🤅 🌫 >	: Use arrow keys 🜡 📹 🔍 🌫 to move cursor to your desired selection.	
<f6></f6>	: Fail-Safe Defaults	
<f7></f7>	: Optimized Defaults	
<f10></f10>	: Saves all changes made to Setup and exits program.	

Standard CMOS Features Use this menu for basic system configurations.

Advanced BIOS Features: Use this menu to set the Advanced Features available on your system.

Advanced Chipset Features: Use this menu to change the values in the chipset registers and optimize your system's performance.

Integrated Peripherals: Use this menu to specify your settings for integrated peripherals.

Power Management Setup: Use this menu to control your CPU card's green features.

PnP/PCI Configuration: This entry appears if your system supports PnP/PCI.

PC Health Status: This entry shows your PC health status. If Hardware Monitor Chipset is installed.

Frequency / Voltage Control: Use this menu to specify your settings for frequency / voltage control.

Load Fail-Safe Defaults: Use this menu to load the BIOS default values for the minimal/settings for optimal performance system operations.

Load Optimized Defaults: Use this menu to load the BIOS default values that are factory settings for optimal performance system operations.

Set Supervisor Password: Use this menu to set Supervisor Passwords.

Set User Password: Use this menu to set User Passwords.

Save & Exit Setup: Save CMOS value changes to CMOS and exit setup.

Exit Without Saving: Abandon all CMOS value changes and exit setup.

3.3 STANDARD CMOS SETUP

When you select the "STANDARD CMOS SETUP" on the main program, the screen display will appears as :

Standard CMOS Setup Screen

CMOS Setup Utility - Copyright ©1984-2000 Award Software

Standard CMOS Setup

				1
Date (mm:dd:yy)		Fri, May 4 2001	Item Help	
Time (hh:mm:ss)		9:58:0	Menu Level	
IDE Primary Mast	er	None	Change the day, mo	onth,
IDE Primary Slave	e	None	year and century	
IDE Secondary M	aster	None		
IDE Secondary SI	lave	None		
Drive A		1.44M, 3.5 in.		
Drive B		None		
Video		EGA/VGA		
Halt On		All, But Keyboard		
Base Memory		640K		
Extended Memory	1	523564K		
Total Memory		524288K		

Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help
 F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

The Standard CMOS Setup utility is used to configure the following components such as date, time, hard disk drive, floppy drive, display and memory. Once a field is highlighted, on-line help information is displayed in the left bottom of the Menu screen.

Set Date : The date format is <day><month><date><year>.

Day	Day of the week, from Sun to Sat, determined by BIOS.	
	Read-only.	
Month	The month from Jan. through Dec.	
Date	The date from 1 to 31 can be keyed by numeric function	
	keys.	
Year	The year, depends on the year of the BIOS.	

Set Time : Hour, Minute and Second. Use 24-hour clock format (for p.m. time, add 12 to the hour number, e.g. you would enter 4:30 p.m. as 16:30). When you select the "STANDARD CMOS SETUP" on the main program, the screen display will appears as:

Primary Master / Primary Slave/ Secondary Master / Secondary Slave: Press PgUp / <+> or PgDn / <-> to select Manual, None, Auto type. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use Manual to define your own drive type manufally.

If you select Manual, related information is asked to be entered to the following items. Enter the information directly from the keyboard. This information should be provided in the documentation from your hard disk vendor or the system manufacturer.

If the controller of HDD interface is SCSI, the selection shall be **"None"** If the controller of HDD interface is CD-ROM, the selection shall be **"None"**

Here is a brief explanation of drive specifications:

- + Access Mode: The settings are Auto, Normal, Large, LBA.
- + Cylinder: Number of cylinders
- + **Head:** Number of heads
- + **Precomp:** Write precom
- + Landing Zone: Landing Zone
- + Sector: Number of sectors

3.4 BIOS Features Setup

When you select the "BIOS FEATURES SETUP" on the main program, the screen display will appear as:

BIOS Features Setup Screen

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Advanced BIOS Features

	Virus Warning	Disabled	Item Help
	CPU Internal Cache	Enabled	Menu Level
	External Cache	Enabled	Allows you to choose
	Quick Power On Self Test	Enabled	the VIRUS warning
	First Boot Device	Floppy	feature for IDE Hard
	Second Boot Device	HDD-0	
	Third Boot Device	LS120	Disk boot sector
	Swap Eloppy Drive	Enabled	protection. If this
	Boot Up Floppy Seek	Disabled	function is enabled and
	Boot Up NumLock Status	On	someone attempt to
	Gate A20 Option	Fast	write data into this area,
Y	Typematic Rate Setting	Disabled	BIOS will show a
X	Typematic Delay (Msec)	250	warning message on
	Security Option	Setup	
	OS Select For DRAM >64MB	Non-OS2	screen and alarm beep.
	Report No FDD for WIN95	No 🖬	
	C8000 – CREEF Shadow	Enabled	
	CC000 – CFFFF Shadow	Disabled	
	D0000 – D3FFF Shadow	Disabled	
	D4000 – D7FFF Shadow	Disabled	
	D8000 – DBFFF Shadow	Disabled	
	Small Logo (EPA) Show	Disabled	
		Biodolog	

The following explains the options for each of the features as listed in the above menu:

Virus Warning: The default setting of Virus Warning is "Disabled". When it is enabled, any attempt to write the boot sector and partition table will halt the system and cause a warning message to appear. If this happens, you can use an anti-virus utility on a virus free, bootable floppy diskette to reboot, to clean and to investigate your system.

CPU Internal Cache : The default setting is "Enabled". This setting enables the CPU internal cache.

External Cache : The default setting is "Enabled". This setting enables the external cache.

CPU L2 Cache ECC Checking : The default setting is "Enabled". When you select Enabled, memory checking is enabled when the external cache contains ECC SRAMs.

Quick Power On Self Test : The default setting is "Enabled". This speeds up the Power On Self Test (POST) by skipping some items that are normally checked during the full POST. If your system is functioning normally, you can choose this feature to speed up the booting process.

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 settings are Floppy, LS/ZIP, HDD-0/HDD-1/HDD-2/HDD-3, SCSI, CDROM, LAN, and Disabled

Swap Floppy Drive : The default setting is "Disabled". This setting gives you an option to swap A and B floppy disks. Normally, the floppy drive A is the one at the end of the cable and drive B is at the other end. If you set this option to "Enabled", the Drive A will function as Drive B, and vice-versa under the DOS.

Boot Up Floppy Seek : The defaults setting is "Disabled". When enabled, the BIOS will check whether there is a floppy disk drive installed.

Boot Up Numlock Status : The default setting is "On". If set "Off", the cursor controls will function on the numeric keypad.

Gate A20 Option : The default setting is "Fast". This is the optimal setting for the CPU card. The other option is "Normal".

Typematic Rate Setting : The default setting is "Disabled". If enabled, you can set the typematic rate and typematic delay.

Typematic Rate (Chars/Sec) : This setting controls the speed at which the system registers the repeated keystrokes. The choices range from 6 to 30 Chars/Sec. The default setting is "6" Chars/Sec.

Typematic Delay (M/Sec) : This setting controls the time between the display of the first and second characters. There are four delay choices: 250ms, 500ms, 750ms and 1000ms. The default setting is "250" ms.

Security Option : This setting controls the password in the main screen. The options are "Setup" and "System". Select "Setup" and it will protect the Setup Utility settings from being tampered with. Select "System" if you want to use password feature every time the system boots up. The default setting is "Setup". You can create your password by using the "SUPERVISOR/USER PASSWORD" utility on the main program screen.

OS Select For DRAM > 64MB : The default setting is "Non-OS2". Set to "OS2" if the system memory size is greater than 64MB and the operating system is OS/2.

Report No FDD for WIN95: Select Yes to release IRQ6 when the system contains no floppy drive, for compatibility with Windows 95 logo certification. In the integrated Peripherals screen, select Disabled for the Onboard FDC Controller field.

Video BIOS Shadow : The default setting is "Enabled" which will copy the VGA display card BIOS into system DRAM to improve performance.

C8000-CBFFF Shadow to DC000-DFFFF Shadow : The default setting for the shadow feature is "Disabled". When enabled, the ROM with the specific address is copied into system DRAM. It will also reduce the size of memory available to the system. After you have made your selection in the BIOS FEATURES SETUP, press the <ESC> key to go back to the main program screen.

Small Logo (EPA) Show: The default setting is "Enabled" which will display EPA logo (small) on the screen during POST process.

3.5 CHIPSET FEATURES SETUP

When you select the "CHIPSET FEATURES SETUP" on the main program, the screen display will appears as:

Chipset Features Setup Screen

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Advanced Chipset Features

	DRAM Timing By SPD	Enabled		Item Help
Х	DRAM Clock	133MHz		
Х	SDRAM Cycle Length	3		Ivienu Levei
Х	Bank Interleave	Disabled		
	Memory Hole	Disabled		
	PCI Master Pipeline Req	Enabled		
	P2C/C2P Concurrency	Enabled		
	Fast R-W Turn Around	Disabled		
	System BIOS Cacheable	Disabled		
	Video RAM Cacheable	Disabled		
	Power-Supply Type	AT		
	OnChip USB	Enabled		
	USB Keyboard Support	Enabled		
	CPU to PCI Write Buffer	Enabled		
	PCI Dynamic Bursting	Enabled		
	PCI Master 0 WS Write	Enabled		
	PCI Delay Transaction	Enabled		
	PCI#2 Access #1 Retry	Enabled		
	🛚 🗃 🔍 Move Enter: Select	+/-/PU/PD: Value	F10: Save Esc: F	xit E1: General Help

F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Default

DRAM Timing By SPD: This sets the optimal timings of SDRAM by reading the contents in the SPD device. The EEPROM on the memory module stores critical parameter information about the module, such as memory type, size, speed, voltage interface, and module banks.

DRAM Clock : The chipset support synchronous and asynchronous mode between the host clock and DIMM clock.

Host CLK (default)	DIMM clock equal to host clock
100MHz	DIMM clock equal to 100MHz
133MHz	DIMM clock equal to 133MHz

SDRAM Cycle Length : This item allows you to select the SDRAM cycle length. The settings are 2 or 3.

Bank Interleave: If you set this item to Enable, BIOS will set the bank interleave in 2 way or 4 way based on the configuration of SPD EPROM

Memory Hole : In order to improve performance, certain space in memory can be reserved for ISA cards. This memory must be mapped into the memory space below 16MB.

Enabled	Memory hole supported
Disabled (default)	Memory hole not supported

PCI Master Pipeline Req: Enable this item to enhance PCI bus for better performance.

P2C / C2P Concurrency : This item allows you to Enable or Disable the PCI to CPU, CPU to PCI concurrency. The default setting is "Enabled".

Fast R-W Turn Around: This item controls the DRAM timing. It allows the user to Enable or Disable the fast read, write turn around. The settings are Enabled or Disabled. The default setting is Disabled.

System BIOS Cacheable : Selecting "Enabled" allows caching of the system BIOS ROM at F0000h – FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result. The settings are "Enabled" and "Disabled".

Video RAM Cacheable : Select "Enabled" allows caching of the video BIOS, resulting in better system performance. However, if any program writes to this memory area, a system error may result. The settings are: "Enabled" and "Disabled".

Power-Supply Type: Select the power supply type. The default setting is "AT".

OnChip USB : Set this option to "Enabled" or "Disabled" the onchip USB controller. The default setting is "Disabled".

USB Keyboard Support : Set this option to "Enabled" or "Disabled" the USB keyboard/ mouse support. The default setting is "Disabled".

CPU to PCI Write Buffer : When this field is "Enabled", writes from the CPU to the PCI bus are buffered, to compensate for the differences between the CPU and the PCI bus. When Disabled, the writes are not buffered and the CPU must wait until the write is complete before starting another cycle. The default setting is "Enabled".

PCI Dynamic Bursting : This item allows you to enable or disable the PCI dynamic bursting function. The settings are "Enabled" or "Disabled".

PCI Master 0 WS Write : When enabled, writes to the PCI bus and are executed with zero wait states. The settings are "Enabled" or Disabled".

PCI Delay Transaction : The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select "Enabled" to support compliance with PCI specification version 2.1. The settings are "Enabled" or "Disabled".

PCI#2 Access #1 Retry : When disabled, PCI#2 will not be disconnected until access finishes. When enabled, PCI#2 will be disconnected if max retries are attempted without success. The default setting is "Enabled".

3.6 INTEGRATED PERIPHERALS

When you select the "INTEGRATED PERIPHERIALS" on the main program, the screen display will appears as:

Integrated Peripherals Setup Screen

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		Integrated Periphe	erals
	OnChip IDE Channel 0	Enabled	Item Help
	OnChip IDE Channel 1	Enabled	
	IDE Prefetch Mode	Enabled	Menu Level
	Primary Master PIO	Auto	
	Primary Slave PIO	Auto	
	Secondary Master PIO	Auto	
	Secondary Slave PIO	Auto	
	Primary Master UDMA	Auto	
	Primary Slave UDMA	Auto	
	Secondary Master UDMA	Auto	
	Secondary Slave UDMA	Auto	
	Init Display First	PCI Slot	
	IDE HDD Block Mode	Enabled	
	Onboard FDD Controller	Enabled	
	Onboard Serial Port 1	3F8/IRQ4	
	Onboard Serial Port 2	2F8/IRQ3	
	UART 2 Mode	Standard	
Х	IR Function Duplex	Half	
Х	TX, RX inverting enable	No, Yes	
	Onboard Parallel Port	378 / IRQ7	
	Onboard Parallel Mode	Normal	
Х	ECP Mode Use DMA	3	
Х	Parallel Port EPP Type	EPP1.9	•••

Move Enter: Select +/-/PU/PD: Value F10: SaveEsc: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

OnChip IDE Channel10 : The chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the primary IDE interface. Select Disabled to deactivate this interface. The settings are "Enabled" and "Disabled".

OnChip IDE Channel11 : The chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the secondary IDE interface. Select Disabled to deactivate this interface. The settings are "Enabled" and "Disabled".

IDE Prefetch Mode : The onboard IDE drive interfaces supports IDE prefetching for faster drive accesses. If you install a primary and/or secondary add-in IDE interface, set this field to *Disabled* if the interface does not support prefetching. The settings are "Enabled" and "Disabled".

Primary / Secondary Master / Slave PIO : The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device. The settings are "Auto", "Mode 0", "Mode 1", "Mode 2", "Mode 3", "Mode 4".

Primary / Secondary Master / Slave UMDA : Ultra DMA/66 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 98 OSR2 or a third-party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/66, select Auto to enable BIOS support. The settings are "Auto" and "Disabled".

Init Display First : This item allows you to decide to active whether PCI Slot of VGA card or AGP first. The settings are "PCI Slot" and "AGP Slot".

IDE HDD Block Mode : Block mode is also called block transfer, multiple commands, or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support. The settings are "Enabled" and "Disabled".

Onboard FDD Controller : Select Enabled if your system has a floppy disk controller (FDC) installed on the system board and you want to use it. If you install add-in FDC or the system has no floppy drive, select Disabled in this field. The settings are "Enabled" and "Disabled".

Onboard Serial Port 1 / Port 2 : Select an address and corresponding interrupt for the first and second serial ports. The settings are "3F8/IRQ4", "2E8/IRQ3", "3E8/IRQ4", "2F8/IRQ3", "Disabled", "Auto".

UART 2 Mode : This item allows you to select which mode for the Onboard Serial Port 2. The settings are "Standard", "HPSIR", "ASKIR".

IR Function Duplex : This item allows you to select the IR half/full duplex function.

TX, RX inverting enable : This item allow you to enable the TX, RX inverting which depends on different H/W requirement. This field is not recommended to change its default setting for avoiding any error in your system.

Onboard Parallel Port : This item allows you to determine onboard parallel port controller I/O address setting. The settings are "378H/IRQ7", "278H/IRQ5", "3BC/IRQ7", "Disabled".

Onboard Parallel Mode : Select an operating mode for the onboard parallel (printer) port. Select "Normal", "Compatible", or "SPP" unless you are certain your hardware and software both support one of the other available modes.

ECP Mode Use DMA : Select a DMA channel for the parallel port for use during ECP mode. The settings are "3" and "1".

Parallel Port EPP Type : Select EPP port type 1.7 or 1.9.

3.7 POWER MANAGEMENT SETUP

The "Power Management Setup" controls the CPU card's "Green" features. When you select the "POWER MANAGEMENT SETUP" on the main program, the screen display will appears as:

Power Management Setup Screen

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Power Management S	etup
--------------------	------

A	ACPI function	Disabled	Item Help
F	Power Management	Press Enter	Menu Level
ŀ	ACPI Suspend Type	SI (POS)	
F	PM Control by APM	Yes	
١	Video Off Option	Suspend -> Off	
١	Video Off Method	V/H SYNC + Blank	
5	Soft-Off by PWRBTN	Instant – off	
N	Wake Up Events	Press Enter	

Move Enter: Select +/-/PU/PD: Value F10: SaveEsc: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

ACPI Function : This item allows you to enable or disable the Advanced Configuration and Power Management (ACPI). The settings are "Enabled" and "Disabled".

Power Management :

Power Management	User Define	Item Help
HDD Power Down	Disable	Menu Level
Doze Mode	Disable	
Suspend Mode	Disable	

Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

- 1. HDD Power Down
- 2. Doze Mode
- 3. Suspend Mode

There are four selections for Power Management, three of which have fixed mode setting.

Disable (Default)	No power management. Disables all four modes.		
Min. Power Saving	Minimum power management. Doze Mode=1hr. Standby Mode		
	=1hr., Suspend Mode=1hr., and HDD Power Down=15min.		
Max. Power Saving	Maximum power managementOnly available for SL CPU's.		
	Doze Mode=1min., Standby Mode=1min., Suspend Mode=1min.,		
	and HDD Power Down=1min.		
User Defined	Allows you to set each mode individually. When not disabled,		
	each of the ranges are from 1 min. to 1 hr. except for HDD Power		
	Down which ranges from 1 min. to 15 min. and disabled.		

ACPI Suspend Type : This item will set which ACPI suspend type will be used.

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

PM Control by APM : The default setting is "Yes".

No	System BIOS will ignore APM when power managing the system.
Yes	System BIOS will wait for APM's prompt before it enter any PM
	mode.

Note: Enable this for O.S. with APM like Windows®98, Windows®NT, etc.

Video Off Option : This option is for choosing the setting in which the monitor will turn off. The default setting is "Suspend".

Always On	Monitor remains on during power-saving modes.	
Suspend–Off	Monitor blanked when system enters Suspend mode.	
All Modes–Off	Monitor blanked when system enters any power saving mode.	

Video Off Method : This determines the manner in which the monitor is blanked. The default setting is "V/H SYNC+Blank".

V/H SYNC+Blank	This selection will cause the system to turn off the vertical and	
	horizontal synchronization ports and write blank to the video	
	buffer.	
Blank Screen	This option only writes blanks to the video buffer.	
DPMS Support	Initial display power management signaling.	

AWARD BIOS SETUP

Soft-Off by PWRBTN : Pressing the power button for more than 4 seconds forces the system to enter the Soft-Off state. The settings are: "Delay 4 Sec.", "Instant-Off".

Wake Up Events :

	VGA	OFF	Item Help
	LPT & COM	LPT / COM	Manuelaural
	HDD & FDD	ON	Menu Level
	PCI Master	OFF	
	Modem Ring Resume	Disabled	
	RTC Alarm Resume	Disabled	
Х	Date (of month)	0	
Х	Resume Time (hh:mm:ss)	0 0 0	
	Primary INTR	ON	
	IRQs Activity Monitoring	Press Enter	
		ļ	

Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

VGA : When enabled, you can set the VGA to awaken the system.

LPT & COM : When LPT & COM is "On", any activity from one of the listed system peripheral devices or IRQs wakes up the system.

HDD & FDD : When HDD & FDD is "On", any activity from one of the listed system peripheral devices or IRQs wakes up the system.

PCI Master : When PCI Master is "On", any activity from one of the listed system peripheral devices or IRQs wakes up the system.

Modem Ring Resume : An input signal on the serial Ring Indicator (RI) line (in other words, an incoming call on the modem) awakens the system from a soft off state.

RTC Alarm Resume : This function is for setting date and time for your computer to boot up. During "Disabled", you cannot use this function. During "Enabled", choose the Date and Time Alarm:

Date Alarm	You can choose which month the system will boot up. Set to 0, to		
	boot every day.		
Time Alarm	You can choose what hour, minute and second the system will		
	boot up.		

Note: If you have change the setting, you must let the system boot up until it goes to the operating system, before this function will work.

Primary INTR : When this is set to "On", any event occurring will awaken a system which has been powered down.

IRQ3	(COM 2)	Enabled	Item Help
IRQ4	(COM 1)	Enabled	Manual
IRQ5	(LPT 2)	Enabled	Ivienu Levei
IRQ6	(Floppy Disk)	Enabled	
IRQ7	(LPT 1)	Enabled	
IRQ8	(RTC Alarm)	Disabled	
IRQ9	(IRQ2 Redir)	Disabled	
IRQ10	(Reserved)	Disabled	
IRQ11	(Reserved)	Disabled	
IRQ12	(PS/2 Mouse)	Enabled	
IRQ13	(Coprocessor)	Enabled	
IRQ14	(Hard Disk)	Enabled	
IRQ15	(Reserved)	Disabled	
	. ,		

IRQs Activity Monitoring :

Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

The following is a list of IRQ's Interrupt ReQuests, which can be exempted much as the COM ports and LPT ports above can. When an I/O device wants to gain the attention of the operating system, it signals this by causing an IRQ to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service.

When set "Enabled", activity will neither prevent the system from going into a power management mode nor awaken it.

- + IRQ3 (COM 2)
- + IRQ4 (COM 1)
- + IRQ5 (LPT 2)
- + IRQ6 (Floppy Disk)
- + IRQ7 (LPT 1)
- + IRQ8 (RTC Alarm)
- + IRQ9 (IRQ2 Redir)
- + IRQ10 (Reserved)
- + IRQ11 (Reserved)
- + IRQ12 (PS/2 Mouse)
- + IRQ13 (Coprocessor)
- + IRQ14 (Hard Disk)
- + IRQ15 (Reserved)

3.8 PnP/PCI Configuration

Both the ISA and PCI buses on the CPU card use system IRQs & DMAs. You must set up the IRQ and DMA assignments correctly through the PnP/PCI Configuration Setup utility, otherwise the motherboard will not work properly.

PnP/PCI Configuration Setup Screen

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	PnP/PCI Configurations	
PnP OS Installed	No	Item Help
Reset Configuration Data	Disabled	Menu Level
		Select Yes if you are
Resources Controlled By	Manual	using a Plug and Play
IRQ Resources	Press Enter	capable operating
DMA Resources	Press Enter	system. Select No if you
		need the BIOS to
PCI/VGA Palette Snoop	Disabled	configure non-boot
Assign IRQ For VGA	Enabled	devices.
Assign IRQ For USB	Enabled	
1 t (Mayo Enter Calact		East Evit E4: Osnaral I Isla

Move Enter: Select +/-/PU/PD: Value F10: Save Esc: Exit F1: General Help
 F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

PnP OS Installed : When set to "Yes", BIOS will only initialize the PnP cards used for booting (VGA, IDE, SCSI). The rest of the cards will be initialized by the PnP operating system like Windows®95 or 98. When set to "No", BIOS will initialize all the PnP cards. So, for non-PnP operating system (DOS, Netware®, this option must set to "Yes".

Reset Configuration Data : Normally, you leave this field "Disabled", Select "Enabled" to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system cannot boot.

The settings are : "Enabled and Disabled".

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 **4**98. 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 proceded by a " "). The settings are "Auto(ESCD)", "Manual".

IRQ Resources : When resources are controlled manually, assign each system interrupt as one of the following types, depending on the type of device using the interrupt.

	oppigned to		Item Help
IKQ-3	assigned to	[Legacy ISA]	
IRQ-4	assigned to	[Legacy ISA]	Menu Level
IRQ-5	assigned to	[PCI /ISA PNP]	Legacy ISA for devices
IRQ-7	assigned to	[Legacy ISA]	compliant with the original PC
IRQ-9	assigned to	[PCI /ISA PNP]	AT bus specification, PCI/ISA
IRQ-10	assigned to	[PCI /ISA PNP]	PnP for devices compliant with the Plug and Play standard
IRQ-11	assigned to	[PCI /ISA PNP]	whether designed for PCI or
IRQ-12	assigned to	[PCI /ISA PNP]	ISA bus architecture.
IRQ-14	assigned to	[PCI /ISA PNP]	
IRQ-15	assigned to	[PCI /ISA PNP]	

DMA Resources : The sub menu can let you control the DMA resource.

DMA-0	assigned to	[PCI /ISA PnP]	Item Help
DMA-1	assigned to	[PCI /ISA PnP]	Menu Level
DMA-3	assigned to	[PCI/ISA PnP]	Legacy ISA for devices
DMA-5	assigned to	[PCI /ISA PnP]	compliant with the original PC
DMA-6	assigned to	[PCI /ISA PnP]	AT bus specification, PCI/ISA
DMA-7	assigned to	[PCI /ISA PnP]	the Plug and Play standard whether designed for PCI or ISA bus architecture.

PCI/VGA Palette Snoop : Leave this field at "Disabled". The settings are "Enabled", "Disabled".

Assign IRQ for VGA : Enable/Disable to assign IRQ for VGA. The settings are "Enabled", "Disabled".

Assign IRQ for USB : Enable/Disable to assign IRQ for VGA. The settings are "Enabled", "Disabled".

3.9 PC HEALTH STATUS (OPTIONAL)

This section helps you to get more information about your system including CPU temperature, FAN speed and voltages. It is recommended that you contact your motherboard supplier to get proper value about your setting of the CPU temperature.

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PC Health Status				
Current CPU Temp.	37 / 98	Item Help		
Current System Temp.	0 / 32	Menu Level		
Current CPUFAN1 Speed	0 RPM			
Current CPUFAN2 Speed	4818 RPM			
VCORE	1.65V			
2.5V	2.52V			
3.3V	3.38V			
5V	5.70V			
12V	12.24V			

Move Enter: Select +/-/PU/PD: Value F10: SaveEsc: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

Current CPU Temp. : This item shows the current CPU1 temperature.

Current System Temp. : This item shows the current System temperature.

Current CPUFAN1 Speed: This item shows the current CPUFAN1 speed.

Current CPUFAN2 Speed: This item shows the current System FAN2 speed.

VCORE: This item shows the current system voltage.

3.10 FREQUENCY / VOLTAGE CONTROL

This section is for setting CPU Frequency / Voltage Control.

Frequency/Voltage Control

Auto Detect DIMM/PCI Clk	Enabled	Item Help
Spread Spectrum	Disabled	Menu Level
CPU Host Clock (CPU/PCI)	Default	

Auto Dect DIMM/PCI CIk : This item allows you to enable / disable auto detect DIMM / PCI Clock. The settings are "Enabled" and "Disabled".

Spread Spectrum Modulated : When the system clock generator pulses, the extreme values of the pulse generate excess EMI. Enabling pulse spectrum spread modulation changes the extreme values from spikes to flat curves, thus reducing EMI. This benefit may in some cases be outweighted by problems with timing-critical devices, such as a clock-sensitive SCSI device.

CPU Host Clock : This item allows you to select the CPU Host / PCI Clock.

3.11 LOAD FAIL-SAFE DEFAULTS

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 BIOS default values for the most stable, minimal-performance system operations.

3.12 LOAD OPTIMIZED DEFAULTS

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.

3.13 SET SUPERVISOR / USER PASSWORD

The "SUPERVISOR/USER PASSWORD" utility sets the password. The SBC is shipped with the password disabled. If you want to change the password, you must first enter the current password, then at the prompt -- enter your new password. The password is case sensitive, and can be up to 8 alphanumeric characters. Press <Enter> after you have finished typing in the password. At the next prompt, confirm the new password by re-typing it and pressing <Enter> again. When you are done, the screen automatically reverts to the main screen. Remember that when you use this feature, the "Security Option" line in BIOS FEATURES SETUP will determine when enterin3

g the password will be required.

To disable the password, press the <Enter> key instead of entering a new password when the "Enter Password" in the dialog box appears. A message will appear confirming that the password is disabled.

If you have set both supervisor and user password, only the supervisor password allows you to enter the BIOS SETUP PROGRAM.

Note : If you forget your pas.sword, the only way to solve this problem is to discharge the

AWARD BIOS SETUP

CMOS memory.

3.14 SAVE & EXIT SETUP

Select this option and press the <Enter> key to save the new setting information in the CMOS memory and continue with the booting process.

3.15 EXIT WITHOUT SAVING

Select this option and press the <Enter > key to exit the Setup Utility without recording any new values or changing old ones.

Date:1997.10.20

Warranty Policy

- 1. All products are warranted against defects in materials and workmanship for a period of two years from the date of purchase by the customer.
- 2. The buyer will bear the return freight charges for goods that are returned for repair within the warranty period whereas manufacturer will bear the return to user freight charges after repair.
- 3. The buyer will pay for repair (for the replaced materials plus service time) and transportation charges (both ways) for items after the expiration of the warranty period.
- 4. If the RMA Service Request Form does not meet the stated requirement as listed on "RMA Service", RMA goods will be returned at the customer expense.
- 5. The following conditions are excluded from this warranty :
 - A. Improper or inadequate maintenance by the customer.
 - B. Unauthorized modification or misuse.
 - C. Operation outside of the environmental specifications for the product.

RMA Service

1. Request a RMA#:

Complete and fax to Supplier the "RMA Request Form" to obtain a RMA number.

- 2. Shipping:
 - A. The customer is requested to fill up the problem code as listed . If none of the code is selected, please write the symptom description on the remark.
 - B. Ship the defective units with freight prepaid.
 - C. Mark the RMA # clearly on the box.
 - D. Shipping damage as a result of inadequate packing is the customer's responsibility.
 - E. Use the original packing materials whenever possible .

3. All RMA# are valid for 30 days only:

When RMA goods are received after valid RMA# period, the goods will be rejected.

When requesting RMA service, please fill out this "RMA Service Request Form". Without this form your RMA will be REJECTED !!!

RMA No:		Reasons to Return: Repair(Please include failure details)		e details) Testing Purpose	
Com	pany:		Conta	act Person:	
Phor	ne No.		Purch	nased Date:	
Fax	No.:		Appli	ed Date:	
Retu	rn Shipping Addre	ess.		-	
Ship	ping by: Air Fre	eight s	Sea Express	: Otl	ners:
p					
Item	Model Name		Serial Number	Configuration	
Item	Problem Code	Failure S	Status		
*Prob	em Code:			40,000	
01:D.O.A. 07: BIOS 02: Second Time R.M.A. 08: Kevb		oard Controller Fail	13: SCSI 14: LPT Port	19: DIO 20: Buzzer	

03: CMOS Data Lost 04: FDC Fail 05: HDC Fail 06: Bad Slot

09: Cache RMA Problem

10: Memory Socket Bad

11: Hang Up Software

12: Out Look Damage

Request Party

15: PS2 16: LAN 17: COM Port 18: Watchdog Timer **Confirmed By Supplier**

21: Shut Down 22: Panel Fail 23: CRT Fail 24: Others (Pls specify)

Authorized Signatures / Date

Authorized Signatures / Date