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CHAPTER 1 INTRODUCTION

This manual introduces how to configure the ATC-1020 mainboard for different environment. It's an overview of the layout and features of the mainboard, and also provides information for you to change the configuration or system environment.

This manual is divided into two sections :
PART ONE includes page A and two chapters as following:
Page A contains layout diagram of the mainboard. Please refer it when you configure the system.

Chapter 1 is an overview of the mainboard features and packing contents.

Chapter 2 describes how to upgrade and to change hardware configurations such as memory size, CPU type, and lists of jumper settings and connectors.

PART TWO includes chapter 3 which contains Award BIOS description.

Chapter 3 is the user's guide of AWARD BIOS setup utility, Flash ROM BIOS update procedure. The menu showed in this chapter are default settings.

Your system dealer will set up the mainboard according to your demand of computer. It means that the current settings of your mainboard may not be the same as the defaults shown in this user's manual. If you need to change your configuration, please ask your dealer firstly, be sure this will not against your system warranty. Or ask for your dealer to do it for you.

REMARK

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1-1 SYSTEM FEATURES

- Pentium level CPU operating at 75 MHz to 200MHz with 321-pin ZIF socket 7 and scalability to accept processor in the future.
- INTEL 82430VX PCIset.
- Using four 72-pin SIM sockets, provides two banks of 64-bit wide path up to 128MB addressing page mode DRAMs.
- Supporting two types of DRAM including EDO (Extended Data Out), or FPM (Fast Page Mode).
- Supporting four PCI bus master revision 2.1, 5V interface compliant and three 16-bit ISA slots.
- Dual Master IDE connectors support up to four devices in two channels for connection of high capacity hard disk drive, CD-ROM, tape backup etc..
- AT style keyboard connector and PS/2 mouse connector.
- Winbond 83877 high-speed Multi-I/O chipset:
- Supporting Infrared transfer (IrDA TX/RX) connection.
- One FDC port supports two devices up to 2.88MB
- Two 16550A fast UARTs compatiable serial ports
- One EPP/ECP mode parallel port
- Hardware Dimension is 220mm x 280mm (8.66" x 11.02") with four layers designed.

1-2 CHECK LIST OF THE PACKING

The mainboard comes securely packed in a durable box and shipping carton. If any of the above items are missing or damaged, please contact your supplier.

Each mainboard containing:

Q'TY	Description	
1	Mainboard	: ATC-1020.
1	Diskette	: Enhanced IDE driver (3.5").
1	Cable	: Enhanced IDE connector.
1	Cable	: F.D.D. connector.
1	Cable	: Serial port.
1	Cable	: Serial/Parallel.
1	Manual	: User`s manual.

NOTE : Leave the mainboard in its original packing until you are ready to install it.

CHAPTER 2 INSTALLATION

2-1 INSTALLATION PROCEDURE

Before installing the computer, please prepare all components such as CPU, DRAM; peripherals such as hard disk devices, keyboard, CD-ROM drive; and accessories such as cables. Then, install the system as following :

1. Plug CPU, heat sink, cooling fan, and DRAM modules in the mainboard.
2. Set jumpers based on your configuration.
3. Plug add-on cards in PCI/ISA slots.
4. Connect cables to peripherals, power supply..
5. Make sure all components and devices are well connected, turn on the power and setup System BIOS based on your configuration.
6. Install peripheral, add-on card drivers and test them.
7. If all of above procedures are success, turn-off the power then plug all of them into your computer case.

2-2 CPU INSTALLATION

ATC-1020 supports Pentium level CPU up to 200MHz. For installation, please notice CPU pin 1 must align with the ZIF socket 7 Pin 1 location. Before you install or upgrade your CPU, please read CPU guide from CPU manufacturer to make sure the CPU voltage specification. Then choose the right installation in the 2-2-1 based on your CPU type/brand and follow the description to setup jumpers. If your CPU is not in the list of 2-2-1, please refer to 2-2-2 and 2-2-3 for installation.

2-2-1 CPU TYPE SELECTION

A. INTEL PENTIUM CPU (P54C)

JP11	1-2

CPU Core Voltage	VRE	STD
JP14	1-2**	3-4*

INTERNAL CPU CLOCK	JP5	JP6	JP9	JP10	Ext.x Frq.
75MHz	open	open	1-2	1-2	50x1.5
90MHz	open	close	1-2	1-2	60x1.5
100MHz	close	open	1-2	1-2	66x1.5
120MHz	open	close	1-2	2-3	60x2.0
133MHz	close	open	1-2	2-3	66x2.0
150MHz	open	close	2-3	2-3	60x2.5
166MHz	close	open	2-3	2-3	66x2.5
180MHz	open	close	2-3	1-2	60x3.0
200MHz	close	open	2-3	1-2	66x3.0

B. INTEL PENTIUM CPU (P55C)

Besides CPU clock setting, for P55C (MMX) CPU you have to set JP11,JP14 based on its CPU I/O voltage and core voltage.

JP11	2-3

Set 2-3 for dual voltage mode.

CPU Core Voltage	3.5V	3.3V	2.9V	2.8V	2.7V
JP14	1-2	3-4	5-6	7-8	9-10

Currently, Intel P55C is released 2.8V core voltage only.
Please confirm this with your system supplier before you
 install P55C CPU.

INTERNAL CPU CLOCK	JP5	JP6	JP9	JP10	Ext.x Frq.
166MHz	close	open	2-3	2-3	66x2.5
180MHz	open	close	2-3	1-2	60x3.0
200MHz	close	open	2-3	1-2	66x3.0

The location of JP11 and JP14

C. Cyrix 6x86/6x86L CPU

Cyrix 6x86 (028) CPU

CPU	JP11	JP14
Cyrix 6x86 (028)	1-2	1-2

INTERNAL CPU CLOCK	JP5	JP6	JP9	JP10	Ext.x Frq.
PR120+ @ 100MHz	open	open	1-2	2-3	50x2.0
PR150+ @ 120MHz	open	close	1-2	2-3	60x2.0
PR166+ @ 133MHz	close	open	1-2	2-3	66x2.0

Cyrix 6x86L CPU (dual voltage)

CPU	JP11	JP14
Cyrix 6x86L	2-3	7-8

INTERNAL CPU CLOCK	JP5	JP6	JP9	JP10	Ext.x Frq.
PR120+ @ 100MHz	open	open	1-2	2-3	50x2.0
PR133+ @ 110MHz	close	close	1-2	2-3	55x2.0
PR150+ @ 120MHz	open	close	1-2	2-3	60x2.0
PR166+ @ 133MHz	close	open	1-2	2-3	66x2.0

D. AMD-K5 CPU

CPU	JP11	JP14
AMD K5	1-2	1-2

CPU CLOCK RATING	JP5	JP6	JP9	JP10	Ext.x Frq.
PR75ABR 75MHz	open	open	1-2	1-2	50x1.5
PR90ABQ 90MHz	open	close	1-2	1-2	60x1.5
PR100ABQ 100MHz	close	open	1-2	1-2	66x1.5
PR120ABQ 90MHz	open	close	1-2	1-2	60x1.5
PR133ABQ 100MHz	close	open	1-2	1-2	66x1.5
PR166ABQ	close	open	2-3	2-3	66x2.5

E. AMD-K6 CPU

AMD K6-PR166/PR200

JP11	JP14
2-3	5-6

INTERNAL CPU CLOCK	JP5	JP6	JP9	JP10	Ext.x Frq.
AMD K6-PR166	close	open	2-3	2-3	66x2.5
AMD K6-PR200	close	open	2-3	1-2	66x3.0

2-2-2 CPU VOLTAGE SETTING

JP11 is for setting single or dual CPU voltage mode. JP14 is used for various CPU voltage value types, please refer to CPU's marking on/under CPU and its user's manual.

CPU MODE	Single	Dual
JP11		
	1-2	2-3

CPU CORE VOLTAGE		**JP14**
INTEL	STD	3-4
(P54C)	VRE	1-2
P55C	2.8V	7-8
Cyrix	6x86(028)	1-2
Cyrix	6x86L	7-8
AMD	K5	1-2
AMD	K6(PR166/200)	5-6

2-2-3 CPU CLOCK SETTING

The following setting is for new release CPUs.

EXTERNAL CPU CLOCK	JP5	JP6
50(MHz)	open	open
55(MHz)	close	close
60(MHz)	open	close
66(MHz)	close	open

External
CPU Clock :

INTERNAL CPU CLOCK	JP9	JP10
INTEL EXTERNAL CLOCK X 1.5	1-2	1-2
INTEL EXTERNAL CLOCK X 2.0	1-2	2-3
INTEL EXTERNAL CLOCK X 2.5	2-3	2-3
INTEL EXTERNAL CLOCK X 3.0	2-3	1-2
INTEL EXTERNAL CLOCK X 3.5	1-2	1-2

Internal
CPU Clock :

2-3 SYSTEM MEMORY INSTALLATION

ATC-1020 provides four 72-pin SIM sockets for system memory expansion from 4MB to 128MB. These four SIMs are arranged to two banks, Bank0 (SIM 1, 2) and Bank1(SIM 3, 4), please refer to page A. Each bank provides 64-bit wide data path.

The mainboard accepts Fast Page Mode DRAM, and EDO Mode (Extended Data Out) DRAM, with a speed at least 70 nanosecond. You should plug DRAM modules into two sockets (same bank) or four sockets at one time. Each pair of modules must be the same size, type, and speed; no matter single-side or double-side module. Please plug in Bank 0 firstly if you only have 2 modules. The mainboard supports mixing of EDO and fast page mode DRAM among different banks, please plug EDO in Bank 0.

Also this mainboard provides one optional 168-pin DIMM socket for Synchronous DRAM expansion. It's not recommended to install the SDRAM and EDO or Fast Paged mode memory within a system. Changing EDO/FPM DRAM to SDRAM, you don't have to adjust jumper setting or BIOS value, nor change SDRAM to EDO/FPM DRAM. (Please make sure the SDRAM plugged-in fully, to prevent contact loss.)

System Memory Combinations Options

BANK0 SIM 1, 2	BANK1 SIM 3, 4	Total Memory SIM 1- 4
2MBx2	-	4MB
-	2MBx2	4MB
4MBx2	-	8MB
-	4MBx2	8MB
8MBx2	-	16MB
-	8MBx2	16MB
4MBx2	4MBx2	16MB

- continue -

BANK0 SIM 1, 2	BANK1 SIM 3, 4	Total Memory SIM 1- 4
4MBx2	8MBx2	24MB
8MBx2	4MBx2	24MB
16MBx2	-	32MB
-	16MBx2	32MB
8MBx2	8MBx2	32MB
4MBx2	16MBx2	40MB
16MBx2	4MBx2	40MB
8MBx2	16MBx2	48MB
16MBx2	8MBx2	48MB
32MBx2	-	64MB
-	32MBx2	64MB
16MBx2	16MBx2	64MB
4MBx2	32MBx2	72MB
32MBx2	4MBx2	72MB
8MBx2	32MBx2	80MB
32MBx2	8MBx2	80MB
16MBx2	32MBx2	96MB
32MBx2	16MBx2	96MB
32MBx2	32MBx2	128MB

2-4 SRAM INSTALLATION

ATC-1020 is built-in 256KB or 512KB Sync. Pipeline Burst SRAM on board and provides a COAST slot for further expansion.

Cache Memory Combinations Options

SRAM TYPE	SRAM SIZE	DATA SRAM	TAG SRAM
Synchronous on board	256KB	32K32 x 2pcs	16K8 or 32K8 x 1pc
	512KB	64K32 x 2pcs	
Synchronous module	256KB	32K32 x 2pcs	16K8 or 32K8 x 1pc

Upgrade Procedure :

For upgrading your Sync. SRAM from 256KB to 512KB by using COAST Module, you should plug-in the **KIT-256** module, then set JP17 to "open" (disable the original TAG on board). You must use **KIT-256** for upgrading your system to 512KB Sync. SRAM , please contact your system dealer about its information. It does not need any BIOS value adjustments for upgrading the SRAM size.

On Board TAG	JP17
Disable	open
Enable	close

(If your module is without TAG RAM, please set
  JP17 "close".)

2-5 OTHER JUMPERS AND CONNECTORS DESCRIPTION

The locations of following jumpers are indicated in page A.

Jumper	Function	Remark
JP8	CMOS	open: Normal close: Clear CMOS
JP7	ATBUS CLK	open: PCI CLK/3 for external CPU clock 50MHz close: PCI CLK/4 for external CPU clock 60, 66MHz

is default setting   **is factory default setting (fixed)

The locations of following connectors are indicated in page A. When you plug a cable into the following I/O connectors, you should have the pin 1 edge of the cable aligned with the pin 1 end of the connector.

CONN1 : speaker, keyboard lock, reset, SMI, turbo LED, and IDE LED connectors.

FAN1 : CPU cooling fan connector. Wire with +12V voltage (most likely red wire) must be plugged into pin2, and GROUND wires (must likely black wires) must be plugged into pin1 and/or pin3. Please confirm the wire color re-presentation with your supplier.

CAUTION: Plug wire into wrong connector will DAMAGE fan and mainboard.

IR1 : Infrared module connector.

USB1 : USB connector; Universal Serial Bus;this is used to connect USB devices through

an optional dual head cable with a iron plane.

CAUTION: Plug wire into wrong connector will DAMAGE USB devices and mainboard.

KB1 : 5-pin AT style compatible keyboard connector.

PS/2 : PS/2 mouse connector, which is used to connect an optional cable.
pin1 : data
pin2 : N/C
pin3 : GND
pin4 : VCC
pin5 : clock
pin6 : N/C

PW1 : +5 Voltage power supply connector.

COM1/COM2

COM1/COM2 : these two connectors are used

to connect serial port cables.

pin	signal name
1	DCD
2	Serial In
3	Serial Out
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI
10	N/C

FDC : this connector is used to connect floppy
disk drive through cable.

pin	signal	pin	signal
2	RWC-	20	STEP-
4	reserved	22	Write Data
6	FDEDIN	24	Write Gate
8	Index-	26	Track 00-
10	Motor EnableA-	28	Write Protect-
12	Drive Sele.B-	30	Read Data-
14	Drive Sele.A-	32	Side 1 Sele.-
16	Motor EnableB-	34	DisketteChange
18	DIR-		
All of odd pins are ground			

LPT

LPT : this connector is used to connect parallel

port cable.

pin	signal	pin	signal
1	STROBE-	10	ACK-
2	Data Bit 0	11	BUSY
3	Data Bit 1	12	PE
4	Data Bit 2	13	SLCT
5	Data Bit 3	14	Auto Feed-
6	Data Bit 4	15	ERROR-
7	Data Bit 5	16	INIT-
8	Data Bit 6	17	SLCT IN-
9	Data Bit 7	26	N/C
pin18 -- pin25 are ground			

IDE1/IDE2 : these two connectors are used to connect IDE devices through IDE cables, up to 4 devices.

pin	signal	pin	signal
1	Reset IDE	21	DDRQ0(1)
2	GND	22	GND
3	Host Data 7	23	I/O Write-
4	Host Data 8	24	GND
5	Host Data 6	25	I/O Read-
6	Host Data 9	26	GND
7	Host Data 5	27	IORDY
8	Host Data 10	28	N/C
9	Host Data 4	29	DDAK0-(1-)
10	Host Data 11	30	GND
11	Host Data 3	31	IRQ14*
12	Host Data 12	32	IOCS16-
13	Host Data 2	33	Addr 1
14	Host Data 13	34	N/C
15	Host Data 1	35	Addr 0
16	Host Data 14	36	Addr 2
17	Host Data 0	37	ChipSele. 1P-
18	Host Data 15	38	ChipSele 3P-
19	GND	39	Activity
20	Key	40	GND

2-6 IDE DRIVER INSTALLATION

The IDE driver installation procedure is printed on the label of diskette as following :

Setup for DOS/Windows :

1. Starting MS-Windows 3.1 (or 3.11)
2. Select Program Manager, File/RUN, then type "A:\setup.exe"
3. Exit MS-Windows, turn power off; then turn power on.

Setup for Windows 95 :

1. Starting Windows 95
2. Select "My Computer"; select "Control Panel"; select "System"; then select "Device Manager", "Hard Disk Controllers".
3. Double-click to Remove default driver, restart computer.
4. Follow the instructions on your screen to install new IDE driver
   we offer in the 3.5" diskette
5. Exit Windows 95, turn power off; then turn power on.

For more information, please refer to Windows 95 manual.

  Make sure your HDD should follow ATA standard, and your CD-ROM should follow ATAPI standard. When you plug-in the IDE devices, please plug your first and second devices into IDE 1 port (Master then Slave), then plug third and forth devices into IDE 2 port. If you have CD-ROM driver, please set it behind hard disk devices as the last device. For example, if you have 2 HDDs and 1 CD-ROM, you should set HDD1 and HDD2 in IDE1 Master and Slave, set CD-ROM in IDE 2 Master.

CHAPTER 3 AWARD BIOS SETUP

This chapter explains the system BIOS setup, and how to update new BIOS. All BIOS screens showed in the following pages are default values, your system dealer will set up these values according to your demand of computer.

ATC-1020 uses Flash ROM to make BIOS easier to be updated by the floppy disk-based program and to committe Microsoft Windows 95 plug & play feature.

If you would like to update CMOS date also, please set JP8.

open	NORMAL
close	CLEAR CMOS

is default setting

JP19 Setting is for Update System BIOS by using Intel Flash ROM only.

JP9 : Intel Flash ROM update

1-2	Enable
2-3	Disable

is default setting
When you want to update Intel Flash ROM
you should set JP19 to '1-2'.
After you finish updated, set to '2-3' again.
If the mainboard uses non-Intel Flash ROM, then JP19 will
be wired (2-3) in factory.

3-1 UPDATE BIOS PROCEDURES

   If the BIOS needs to be updated, it can be obtained on a
diskette from your system supplier. The BIOS diskette includes 3
files:
   "awdflash.exe" -- BIOS update utility program
   "awdflash.doc"
   "(update BIOS filename with version number).rom"

The update procedures are as following:

1. Boot the system to DOS mode in a normal manner.
2. Insert the updated diskette to drive A (or B).
3. Change working directory to floppy drive, A or B, which
   contains the update BIOS diskette. -- Type "a:\" or "b:\",
   "ENTER".
4. Run the BIOS update utility -- Type "awdflash", "ENTER".
5. Type "(update BIOS file name with version number).rom",
   ENTER.
6. Type "N" when the screen displays the message : " Do you
   want to save BIOS (Y/N) ?".
7. Type "Y" when the screen shows the message : " Are you sure
   to program (Y/N) ?".
8. Follow instructions displayed on the screen. DO NOT remove
   the update BIOS diskette from the floppy drive nor turn the
   system power off until the BIOS update is completed.
9. Exit the utility and turn the system power off, set JP8 to 'close'
   to clear the CMOS. After about 10 seconds, set JP8 to 'open'
   (remove the jumper cap), become the normal status.
10. Turn the system power on and test your system working
    properly or not.

3-2 AWARD SYSTEM BIOS CONFIGURATION SETUP

The following pages explain how to set up the system configuration (CMOS) under the AWARD BIOS. The SETUP program is stored in the Read-Only-Memory (ROM) on the mainboard. Enter the SETUP procedure, press the <Del> key when the system is booting up. The following main menu will appear. Please select " STANDARD CMOS SETUP" to enter the next screen.

```
                    ROM PCI/ISA BIOS (2A59GA29)
                        CMOS SETUP UTILITY
                      AWARD SOFTWARE, INC.
 ┌──────────────────────────────┬───────────────────────────────┐
 │ STANDARD CMOS SETUP          │ INTEGRATED PERIPHERALS         │
 │ BIOS FEATURES SETUP          │ SUPERVISOR PASSWORD            │
 │ CHIPSET FEATURES SETUP       │ USER PASSWORD                  │
 │ POWER MANAGEMENT SETUP       │ IDE HDD AUTO DETECTION         │
 │ PNP/PCI CONFIGURATION        │ SAVE & EXIT SETUP              │
 │ LOAD BIOS DEFAULTS           │ EXIT WITHOUT SAVING            │
 │ LOAD SETUP DEFAULTS          │                               │
 ├──────────────────────────────┴───────────────────────────────┤
 │ ESC: Quit                          ↑↓→←:Select Item           │
 │ F10: Save & Exit Setup          (Shift) F2 : Change Color     │
 ├───────────────────────────────────────────────────────────────┤
 │              Time, Date, Hard Disk Type .....                 │
 └───────────────────────────────────────────────────────────────┘
```

The section on the bottom of the main menu explains how to control this screen. The other one section displays the items highlighted in the list.

This screen records some basic hardware information, and set the system clock and error handling. These records can be lost or corrupted if the on-board battery is failed or weak.

```
            ROM PCI/ISA BIOS (2A59GA29)
                CMOS SETUP UTILITY
              AWARD SOFTWARE, INC.
┌─────────────────────────────────┬──────────────────────────────┐
│ STANDARD CMOS SETUP             │ INTEGRATED PERIPHERALS       │
│ BIOS FEATURES SETUP             │ SUPERVISOR PASSWORD          │
│ CHIPSET FEATURES SETUP          │ USER PASSWORD                │
│ POWER MANAGEMENT SETUP          │ IDE HDD AUTO DETECTION       │
│ PNP/PCI CONFIGURATION           │ SAVE & EXIT SETUP            │
│ LOAD BIOS DEFAULTS              │ EXIT WITHOUT SAVING          │
│ LOAD SETUP DEFAULTS             │                              │
├─────────────────────────────────┴──────────────────────────────┤
│ ESC: Quit                        ↑↓→←:Select Item               │
│ F10: Save & Exit Setup          (Shift) F2 : Change Color       │
├─────────────────────────────────────────────────────────────────┤
│             Time, Date, Hard Disk Type .....                    │
└─────────────────────────────────────────────────────────────────┘
```

```
            ROM PCI/ISA BIOS (2A59GA29)
               STANDARD CMOS SETUP
              AWARD SOFTWARE, INC.
┌─────────────────────────────────────────────────────────────────┐
│ Date (mm:dd:yy) : Fri, Jun  14 1996                             │
│ Time(hh:mm:ss)  : 13 : 7 : 14                                   │
│ HARD DISKS   TYPE  SIZE  CYLS  HEAD  PRECOMP LANDZ SECTOR MODE  │
├─────────────────────────────────────────────────────────────────┤
│ Primary Master : Auto   0     0    0     0      0    0    Auto  │
│ Primary Slave  : Auto   0     0    0     0      0    0    Auto  │
│ Secondary Master : Auto  0    0    0     0      0    0    Auto  │
│ Secondary Slave : Auto   0    0    0     0      0    0    Auto  │
│                                                                 │
│ Drive A : 1.44M,  3.5  in.        ┌──────────────────────────┐ │
│ Drive B : None                    │ Base Memory      :   640K │ │
│                                   │ Extended memory  : 64512K │ │
│                                   │ Other Memory     :   384K │ │
│ Video  : EGA/VGA                  │ ------------------------- │ │
│ Halt On: All Errors               │ Total Memory     : 65536K │ │
├─────────────────────────────────────────────────────────────────┤
│ ESC : Quit          ↑↓→←:Select Item      PU/PD/+/- : Modify   │
│ F1  : Help          (Shift) F2 : Change Color                  │
└─────────────────────────────────────────────────────────────────┘
```

Date   mm is month, dd is date, yy is year.

date	from 1 to 31
month	from Jan. to Dec.
year	from 1900 to 2099

Time   hh is hour, mm is minute, ss is second.

hh	from 0 to 23 (24-hour military - time)
mm	from 1 to 59
ss	from 1 to 59

Primary Master   The categories identify the types of 2 channels
Primary Slave   that have been installed in the computer.
There
Secondary Master   are 45 predefined types and 4 user
definable
Secondary Slave types are for Enhanced IDE BIOS. Type 1 to 45
are predefined. Type **'user'** is user-definable.
Press PgUp/PgDn to select a numbered hard
disk type or type the number and
press<Enter>.

If you select **'Auto'** BIOS will auto-detect the
HDD & CD-ROM Drive at the POST stage and
showing the IDE for HDD & CD-ROM Drive. If
you select **'user'**, you will need to know the
information listed below. Enter the information
directly from the keyboard and press <Enter>.
This information should be from your hard disk
vender or dealer. If the controller of HDD
interface is ESDI, the selection shall be '**Type
1'**; is SCSI, the selection shall be **'None'**.
If the device has not been installed select
'NONE' and press <Enter>.

Type	drive type
SIZE	automatically adjusts
CYLS	number of cylinders
HEAD	number of heads
PRECOMP	write precom

LANDZ	landing zone
SECTOR	number of sectors
MODE	mode type

Drive A
Drive B

The category identifies the types of floppy disk drive A or drive B that have been installed in the computer.

None	No floppy drive installed
360K, 5.25 in	5.25" PC-type 360KB capacity
1.2M, 5.25 in	5.25" AT-type 1.2MB capacity
720K, 3.5 in	3.5" double-side 720KB capacity
1.44M, 3.5 in	3.5" double-side 1.44MB capacity
2.88M, 3.5 in	3.5" double-side 2.88MB capacity

Video

The category selects the type of video adapter used for the primary system monitor. Although secondary monitors are supported, you do not have to select the type in Setup.

Halt On

The category determines whether the computer will stop if an error is detectd during power up.

No errors	When the BIOS detects a non-fatal error the system will be stopped and you will be prompted
All errors	The system boot will not be stopped for any error that may be detected
All, But Keyboard	The system boot will not stop for a keyboard error, it will stop for all other errors
All, But Diskette	The system boot will not stop for a disk error, it will stop for all other errors

All, But Disk/Key	The system boot will not stop for a disk or keyboard error, it will stop for all other errors

Memory
The category is display-only which is determined by POST (Power On Self Test) of the BIOS.
Base Memory The value of the base memory is typically 512K or 640K based on the

memory

installed on the mainboard.

Extended Memory How much extended memory is present during the POST. This is the amount of memory located above 1MB in the CPU's memory address map.
Other Memory This refers to the memory located in the 640K to 1024K address space. The BIOS is the most frequent user of this

RAM

area since this is where it shadows RAM.

This screen is a list of system configuration options. Some of them are defaults required by the mainboard's design, others depend on the features of your system.

```
              ROM PCI/ISA BIOS (2A59GA29)
                  CMOS SETUP UTILITY
                 AWARD SOFTWARE, INC.
┌────────────────────────────────────────────────────────────┐
│ STANDARD CMOS SETUP          │ INTEGRATED PERIPHERALS       │
│ BIOS FEATURES SETUP          │ SUPERVISOR PASSWORD          │
│ CHIPSET FEATURES SETUP       │ USER PASSWORD                │
│ POWER MANAGEMENT SETUP       │ IDE HDD AUTO DETECTION       │
│ PNP/PCI CONFIGURATION        │ SAVE & EXIT SETUP            │
│ LOAD BIOS DEFAULTS           │ EXIT WITHOUT SAVING          │
│ LOAD SETUP DEFAULTS          │                              │
├──────────────────────────────┴──────────────────────────────┤
│ ESC: Quit                        ↑↓→←:Select Item            │
│ F10: Save & Exit Setup           (Shift) F2 : Change Color   │
├──────────────────────────────────────────────────────────────┤
│              Virus, Protection, Boot Sequence                │
└──────────────────────────────────────────────────────────────┘
```

```
              ROM PCI/ISA BIOS (2A59GA29)
                  BIOS FEATURES 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 : Disabled │ D0000-D3FFF Shadow : Disabled   │
│ Boot Sequence          : A, C     │ D4000-D7FFF Shadow   : Disabled   │
```

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Swap Floppy Drive	: Disabled	D8000-DBFFF Shadow : Disabled
Boot Up Floppy Seek	: Enabled	DC000-DFFFF Shadow : Disabled
Boot Up NumLock Status	: On	
Boot Up System Speed	: High	
Gate A20 Option	: Fast	
Typematic Rate Setting	: Disabled	
Typematic Rate(Chars/Sec)	: 6	Esc : Quit ↑↓→←:Select Item
Typematic Delay(Msec)	: 250	F1 : Help PU/PD/+/- : Modify
Security Option	: Setup	F5 : Old Values (SHIFT)F2 : Color
PCI/VGA Palette Snoop	: Disabled	F6 : Load BIOS Defaults
OS/2 select for DRAM>64MB	: Non-OS2	F7 : Load Setup Defaults
Report No FDD for Win95	: No	

Virus Warning   When this item is enabled, the BIOS will monitor the boot sector and partition table of the hard disk drive for any attempt at modification. If an attempt is made, the BIOS will halt the system and the following error message will appear. Many disk diagnostic programs which attempt to access the boot sector table can cause the above warning message. If you will be running such a program, we recommend that you first disable Virus Protection beforehand.

! WARNING !

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

Enabled	Activates 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 will appear when anything attempts to access the boot sector or hard disk partition table.

CPU access.
Internal Cache
External Cache

These two categories speed up memory

However, it depends on CPU/chipset design. The default value is 'enabled'.

Quick Power On Self Test

check

This category speeds up Power On Self Test after you power up the computer. If you set Enabled, BIOS will shorten or skip some

items during POST.

Boot Sequence
search

This category determines which drive to

first for the disk operating system (i.e.,DOS).

C,A	System will first search for HDD then FDD
A,C	System will first search for FDD then HDD
CDROM,C,A	System will first search for CDROM then HDD, and next is FDD
C,CDROM,A	System will first search for HDD then CDROM, and next is FDD

Swap Floppy Drive

This item allows you to determine whether enable the swap floppy drive or not.

Boot Up Floppy Seek

During POST, BIOS will determine if the floppy disk drive installed is 40 tracks (360K) or 80 tracks (720K, 1.2M, 1.44M)

Enabled	BIOS searchs for floppy disk drive to determine if it is 40 or 80 tracks

Disabled	BIOS will not search for the type of floppy disk drive by track number

Boot Up of
NumLock Status
This allows you to determine the default state of the numeric keypad. By default, the system boots up with NumLock on.

Boot Up System Speed
Selects the default system speed - the normal operating speed at power up.

Gate A20 Option
This entry allows you to select how the gate A20 is handled. The gate A20 is a device used to address memory above 1 MB. Normal is keyboard; Fast is chipset.

Typematic Rate used.
Setting
instance.
This determines if the typematic rate is to be used. When disabled, continually holding down a key on your keyboard will generate only one instance.

Typematic Rate (Chars/Sec)
When the typematic rate is enabled, this section allows you select the rate at which the keys are accelerated.

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 the typematic rate is enabled, this section allows you select the delay between when the key was first depressed and when the acceleration begins.

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

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.

PCI/VGA
Palette Snoop   It determines whether the MPEG ISA/VESA VGA cards can work with PCI/VGA or not.

Enabled	When PCI/VGA working with MPEG ISA/VESA VGA Card
Disabled	When PCI/VGA not working with MPEG ISA/VESA VGA Card

OS Select for
DRAM > 64MB   This item allows you to access the memory that over 64MB in OS/2

Video BIOS   Determines whether video BIOS will be copied

to

Shadow	RAM. However it is optional depending on chipset design. Video Shadow will increase

the

video speed.

C8000 - CBFFF Shadow ***DC000 - DFFFF Shadow***	These categories determine whether option ROMs will be copied to RAM. An example of such option ROM would be support of onboard SCSI.

This screen controls the setting for the chipset on the mainboard.

ROM PCI/ISA BIOS (2A59GA29)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP

ROM PCI/ISA BIOS (2A59GA29)

CHIPSET FEATURES SETUP

AWARD SOFTWARE, INC.

Auto Configuration	: Enabled	Delay Transaction : Enabled
DRAM Timing	: 70ns	
DRAM RAS# Precharge Time	: 4	
DRAM R/W Leadoff Timing	: 6	
Fast RAS to CAS Delay	: 3	
DRAM Read Burst (EDO/FP)	: x333/X444	
DRAM Write Burst Timing	: x333	
Fast MA to RAS# Delay CLK	: 1	
Fast EDO Path Select	: Disabled	
Refresh RAS# Assertion	: 5 Clks	
ISA Bus Clock	: PCICLK/4	
System BIOS Cacheable	: Disabled	
Video BIOS Cacheable	: Disabled	
8-bit I/O Recovery Time	: 3	Esc: Quit :Select Item
16-bit I/O Recovery Time	: 2	F1 : Help PU/PD/+/-
		:Modify
Memory Hole At 15M-16M	: Disabled	F5 : Old Values (Shift)F2 :Color
Peer Concurrency	: Enabled	F6 :Load BIOS Defaults
Passive Release	: Enabled	F7 :Load Setup Defaults

Auto Configuration   Pre-defined values for DRAM, cache... timing according to CPU type & system clock. When this item is enabled, the pre-defined items will become SHOW-ONLY.

DRAM Timing   The DRAM speed is controlled by the DRAM timing Registers. The timings programmed into

this register are dependent on the system

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design.

DRAM RAS#	DRAM must continually be refreshed or it will

lose

Precharge Time	its data. Normally, DRAM is refreshed entirely as

the result of a single request. This option allows
you to determine the number of CPU clocks
allocated for the Row Address Strobe to
accumulate its charge before the DRAM is
refreshed. If insufficient time is allowed,

refresh

may be incomplete and data lost.

Fast RAS# to	When DRAM is refreshed, both rows and columns
CAS# Delay	are addressed separately. This setup item

allows

you to determine the timing of the transition

from

RAS to Column Address Strobe (CAS).

DRAM Read	This sets the timing for burst mode read (or

writes)

Burst (EDO/FP)	from DRAM. Burst read and write requests are
DRAM Write	generated by the CPU in four separate parts.
Burst Timing	The first part provides the location within the

DRAM where the read or write is to take place
while the remaining three parts provide the
actual data. The lower the timing numbers, the
faster the system will address memory.

ISA Bus Clock	This item allows you to select the PCI clock type.

Choices are PCI CLK/3; PCI CLK/4

System BIOS	When enabled, accesses to the system BIOS
Cacheable	ROM addressed at F0000H-FFFFFH are

cached,

provided that the cache controller is enabled.

Video BIOS	As with changing the system BIOS above,

Cacheable	enabling the Video BIOS cache will cause access to video BIOS addressed at C0000H to C7FFFH to be cached, if the cache controller is also enabled.
8-bit I/O measured ***Recovery Time*** allows	The recovery time is the length of time, in CPU clocks, which the system will delay after the completion of an I/O request. This item you to determine the recovery time allowed for 8-bit I/O. Choices are from NA, 1 to 8 CPU
clocks. ***16-bit I/O*** ***Recovery Time*** NA,	This item allows you to determine the recovery time allowed for 16-bit I/O. Choices are from 1 to 4 CPU clocks.
Memory Hole At ***15M-16M***	In order to improve performance, certain space in memory can be reserved for ISA cards. This memory must be mapped into the memory below 16MB.

This screen controls the 'green' features of this mainboard.

```
                    ROM PCI/ISA BIOS (2A59GA29)
                       CMOS SETUP UTILITY
                      AWARD SOFTWARE, INC.
┌─────────────────────────────────┬──────────────────────────────────┐
│ STANDARD CMOS SETUP             │ INTEGRATED PERIPHERALS           │
│ BIOS FEATURES SETUP             │ SUPERVISOR PASSWORD              │
│ CHIPSET FEATURES SETUP          │ USER PASSWORD                    │
│ POWER MANAGEMENT SETUP          │ IDE HDD AUTO DETECTION           │
│ PNP/PCI CONFIGURATION           │ SAVE & EXIT SETUP                │
│ LOAD BIOS DEFAULTS              │ EXIT WITHOUT SAVING              │
│ LOAD SETUP DEFAULTS             │                                  │
├─────────────────────────────────┼──────────────────────────────────┤
│ ESC: Quit                       │ ↑↓→←:Select Item                 │
│ F10: Save & Exit Setup          │ (Shift) F2 : Change Color        │
├─────────────────────────────────┴──────────────────────────────────┤
│              Sleep Timer, Suspend Timer, .....                      │
└─────────────────────────────────────────────────────────────────────┘
```

```
                    ROM PCI/ISA BIOS (2A59GA29)
                     POWER MANAGEMENT SETUP
                      AWARD SOFTWARE, INC.
┌─────────────────────────────────────┬──────────────────────────────────┐
│ Power Management    : Disabled     │ IRQ3  (COM 2)          : OFF     │
│ PM Control by APM   : Yes          │ IRQ4  (COM 1)          : OFF     │
│ Video Off Method    : V/H SYNC     │ IRQ5  (LPT 2)          : OFF     │
│                       +Blank       │ IRQ6  (Floppy Disk)    : OFF     │
│                                    │ IRQ7  (LPT 1)          : OFF     │
│ Doze Mode           : Disabled     │ IRQ8  (RTC Alarm)      : OFF     │
│ Standby Mode        : Disabled     │ IRQ9  (IRQ2 Redir)     : OFF     │
│ Suspend Mode        : Disabled     │ IRQ10 (Reserved)       : OFF     │
│ HDD Power Down      : Disabled     │ IRQ11 (Reserved)       : OFF     │
│                                    │ IRQ12 (PS/2 Mouse)     : OFF     │
│                                    │ IRQ13 (Coprocessor)    : OFF     │
│ *Wake Up Events In Doze &          │ IRQ14 (Hard Disk)      : OFF     │
│ Standby*                           │                                  │
│ IRQ3 (Wake-Up Event)  : OFF        │ IRQ15 (Reserved)       : OFF     │
│ IRQ4 (Wake-Up Event)  : OFF        │                                  │
│ IRQ8 (Wake-Up Event)  : OFF        │ Esc: Quit  ↑↓→←   :Select Item  │
└─────────────────────────────────────┴──────────────────────────────────┘
```

IRQ12(Wake-Up Event)	: OFF	F1 : Help	PU/PD/+/- : Modify
		F5 : Old Values	(Shift) F2: Color
		F6 : Load BIOS Defaults	
		F7 : Load Setup Defaults	

Power Management

Suspend;

This category allows you to select the type (or degree) of power saving and is dirctly related to the following modes **: Doze; Standby;**

HDD Power Down.

Disabled	No power management. Disables all 4 modes
Min. Power Saving	Minimum power management. Doze =1hr.; Standby=1hr.; Suspend=1hr.; HDD Power Down=15min
Max. Power Saving	Maximum power management only available for **SL CPU's**.Doze=1min.; Standby=1min.;Suspend=1min.;HDD Power Down=1min
User Defined	Allows you to set each mode indivi-dually. When not disabled, each of the ranges are from 1min. to 1hr. except for HDD Power Down which ranges from 1 to 15min. and disable

PM Control
Management Max.

When enabled, an Advanced Power **_by APM_** device will be activated to enhance the

Power Saving Mode and stop the CPU internal clock. If the Max. Power Saving is not enabled, this will be present to NO.

Video Off
monitor
Method

This determines the manner in which the

is blanked.

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

The Following 4 modes are Green PC power saving function which are only user configuration when 'User Defined' power management has been selected.

Doze Mode When enabled and after the set time of system inactivity, the CPU clock will run at slower speed while all other devices still operate at full speed

Standby Mode When enabled and after the set time of system inactivity, the fixed disk drive and the video would be shut off while all other devices still operate at full speed

Suspend Mode When enabled and after the set time of system inactivity, all devices expect the CPU will be

shut

   off

HDD Power Down When enabled and after the set time of system inactivity, the hard disk drive will be powered down while all other devices remain active

**Wake Up Events
In Doze & Standby**

**Power Down &
Resume Events** These are I/O events whose occurrence can prevent the system from entering a power saving mode or can awaken the system from such a

IRQ3 ~ IRQ15   mode. In effect, the system remains alert for anything which occurs to a device which is configured as **On**, even when the system is in a power down mode. When an I/O device wants to gain the attention of the operating system, it signals this by causing an IRQ (Interrupt

ReQuests)

to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service. When set off, activity will neither prevent the system from going into a

power

management mode nor awaken it.

This screen configures the PCI Bus slots.

ROM PCI/ISA BIOS (2A59GA29)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP
LOAD BIOS DEFAULTS	EXIT WITHOUT SAVING
LOAD SETUP DEFAULTS	
ESC: Quit	↑↓→←:Select Item
F10: Save & Exit Setup	(Shift) F2 : Change Color
IRQ Settings, Latency Timers, ...	

ROM PCI/ISA BIOS (2A59GA29)
PNP/PCI CONFIGURATION
AWARD SOFTWARE, INC.

Resources Controlled by	: Auto	PCI IRQ Actived by : Level
Reset Configuration Data	: Disabled	PCI IDE IRQ Map to : PCI-AUTO

```
                                    Primary IDE INT#    : A
                                    Secondary IDE INT# : B




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

Resource capacity
Controlled by

The Award Plug and Play BIOS has the

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 OS such as Windows 95
Choices are Auto and Manual

Reset Config-
uration Data

This item allows you to determine reset the
configuration data or not.

PCI IRQ
Actived By a

This sets the method by which the PCI bus reco-
gnizes that an IRQ service is being requested by

device. Under all circumstances, you should retain
the default configuration unless advised otherwise
by your system's manufacturer.
Choices are Level and Edge

PCI IDE IRQ
Map To

This allows you to configure your system to the
type of IDE disk controller in use. If you have
equipped your system with a PCI controller,

changing this allows you to specify which slot has the controller and which PCI interrupt (A,B,C,D) is associated with the connected hard disk. Select 'PCI Auto' allows the system to automatically determine how your IDE disk system is configured.

This section page includes all the items of IDE hard drive and Programmed Input/Output features. See also Section "Chipset FeaturesSetup".

ROM PCI/ISA BIOS (2A59GA29)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP
LOAD BIOS DEFAULTS	EXIT WITHOUT SAVING
LOAD SETUP DEFAULTS	
ESC: Quit	↑↓→←:Select Item
F10: Save & Exit Setup	(Shift) F2 : Change Color
Time, Date, Hard Disk Type	

ROM PCI/ISA BIOS (2A59GA29)

INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

IDE HDD Block Mode	: Enabled	ECP Mode Use DMA : 3
IDE 32-bit Transfer Mode	: Enabled	
IDE Primary Master PIO	: Auto	
IDE Primary Slave PIO	: Auto	
IDE Secondary Master PIO	: Auto	
IDE Secondary Slave PIO	: Auto	
On-Chip Primary PCI IDE	: Enabled	
On-Chip Secondary PCI IDE	: Enabled	
PCI Slot IDE 2nd Channel	: Enabled	
USB Controller	: Disabled	
Onboard FDD Controller	: Enabled	
Onboard Serial Port 1	: Auto	
Onboard Serial Port 2	: Auto	Esc: Quit ↑↓→← :Select Item
UART 2 Mode	: Standard	F1 : Help PU/PD/+/- : Modify
Onboard Parallel Port	: 378H/IRQ7	F5 : Old Values (Shift) F2: Color
Onboard Parallel Mode	: ECP	F6 : Load BIOS Defaults
		F7 : Load Setup Defaults

IDE HDD Block Mode   This allows your HD controller to use the fast block mode to transfer data to and from your HD drive

Enabled	IDE controller uses block mode
Disabled	IDE controller uses standard mode

IDE Primary Master/Slave PIO
IDE Secondary Master/Slave PIO   PIO - Programmed Input/Output, it allows the BIOS to tell the controller what it wants and then let the controller and the CPU perform the complete task by themselves. This simpler and more faster. Your system supports five mods, 0 - 4, which primarily differ in timing. When **Auto** is selected, the BIOS will select the best available mode.

On-Chip Primary   This setup item allows you either to enable or

__PCI IDE__	disable the primary/secondary controller. You might
__On-Chip Second-ary PCI IDE__	choose to disable the controller if you were to add a higher performance or specialized controller.

__PCI Slot IDE 2nd Channel__	This item allows you designate an IDE controller controller board insert into one of the physical PCI slots as your secondary IDE

Enabled	External IDE controller designated as the secondary controller
Disabled	No IDE controller occupying a PCI slot

The last step is 'save and exit'. If you select this item and press 'Y', then these records will be saved in the CMOS memory on the mainboard. It will be checked every time when you turn your computer on.

ROM PCI/ISA BIOS (2A59GA29)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP	USER PASSWORD
POWER MANAGEMENT SETUP	IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION	SAVE & EXIT SETUP
LOAD BIOS DEFAULTS	EXIT WITHOUT SAVING

```
LOAD SETUP DEFAULTS                    │
ESC: Quit                      ↑↓→←:Select Item
F10: Save & Exit Setup         (Shift) F2 : Change Color
         Time, Date, Hard Disk Type .....
```

```
STANDARD CMOS SETUP          INTEGRATED PERIPHERALS
BIOS FEATURES SETUP          SUPERVISOR PASSWORD
CHIPSET FEATURES SETUP       USER PASSWORD
POWER MANAGEMENT SETUP       IDE HDD AUTO DETECTION
PNP/PCI CONFIGURATION        SAVE & EXIT SETUP
LOAD BIOS DEFAULTS           EXIT WITHOUT SAVING
LOAD SETUP DEFAULTS          SAVE to CMOS and EXIT (Y/N):Y


ESC: Quit                      ↑↓→←:Select Item
 F10: Save & Exit Setup        (Shift) F2 : Change Color
        Auto-Configure HDD: Sector, Cylinder, Head .....
```

LOAD BIOS DEFAULTS

When your mainboard has problems and need to debug
or   troubleshoot the system, you can use this function.
The default values loaded only affect the BIOS Features
Setup, Chipset Features Setup, Power Management
Setup and PNP/PCI Configuration Setup. There is no
effect on the Standard CMOS Setup. To use this function,
select it from main menu and press <Enter>. A line will
appear on the screen asking if you want to load the BIOS
default values. Press <Yes> and <Enter> then the BIOS
default values will be loaded.

LOAD SETUP DEFAULTS

This allows you load optimal settings which are stored in

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the BIOS ROM. The default values loaded only affect the BIOS Features Setup, Chipset Features Setup, Power Management Setup and PNP/PCI Configuration Setup. There is no effect on the Standard CMOS Setup. To use this function, select it from main menu and press <Enter>. A line will appear on the screen asking if you want to load the Setup default values. Press <Yes> and <Enter> then the Setup default values will be loaded.

SUPERVISOR PASSWORD / USER PASSWORD

This allows you to set the password. the mainboard defaults password disabled.

Enter/Change password : Enter the current password, at the prompt key-in your new password (up to eight alphanumeric characters), press <Enter>. At the next prompt, confirm the new password by typing it and press <Enter> again.

Disable password : Press <Enter> key instead of entering a new password when the 'Enter Password' dialog box appears. A message will appear confirming that

the password is disable.

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

CAUTION : If you forget your password, you must disable the CMOS by turning power off and set JP8 'close'. Then reload the system. Please refer to page 13.

IDD HDD AUTO DETECTION

This allows you to detect IDE hard drivers' parameters and enter them into 'Standard CMOS Setup' automatically.

If the auto-detected parameters displayed do not match the ones that should be used for your hard drive,

do not accept them. Press <N> to reject the values and enter the correct ones manually on the Standard

CMOS Setup screen.

SAVE & EXIT SETUP

This allows you to save the new setting values in the CMOS memory and continue with the booting
process.

Select what you want to do, press <Enter>.

EXIT WITHOUT SAVING

This allows you to exit the BIOS setup utility without recording any new values or changing old ones.

Control Key Description

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	Esc	Main Menu : Quit and not save changes 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	Help	General help
F2 KEY	Shift+F2	Change color from total 16 colors
F5 KEY	Old Value	Restore the pervious CMOS value from CMOS
F6 KEY	Load BIOS default	Load the default CMOS value from BIOS default table
F7 KEY	Load setup default	Load Setup default
F10 KEY	Save & Exit Setup	Save all the CMOS changes and Exit setup, only for Main Menu

APPENDIX A

TECHNICAL SUPPORT REQUEST FORM

If the mainboard doesn't function properly, please complete the following information and return it to your system dealer. If the further information

is needed, please attach this separating sheets.

Model No : ATC-1020   Date of Purchase : _____

Serial No : _____

HARDWARE :

	BRAND	MODEL	SPEED	Q'TY
CPU				
SIM Module				
PB. Cache on Board				
TAG SRAM				
Sync. SRAM Module				

SIMM :_____MB (__ EDO, __FastPage)
Hard Disk Interface Controller : __ __ IDE, ____ SCSI
Hard Disk Brand :_____, Model :_____, Capacity :_____
Display Controller Brand :_____,Model :_____
       Controller Chip Brand :_____,Model :_____
AWARD SYSTEM BIOS: Version _____ Date Code _____
Keyboard BIOS: Brand _____

Other Add-on Cards Information:

Add-on Card	Bus Interface	Model	Remark