Table of Contents

CHAPTER 1 INTRODUCTION

This manual describes how to configure the ATC-6120 mainboard for different environments. 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 Three parts :

PART ONE   includes page A and two chapters as following:
                Page A contains layout diagram of the mainboard. Please refer to 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 the Award BIOS setup utility and Flash ROM BIOS.
                The menu shown in this chapter are the default settings.

PART THREE   includes APPENDIX A and APPENDIX B,

APPENDIX A   is a technical support form
APPENDIX B   is the user's guide of how to setup Pentium II

Your system dealer will set up the mainboard according to your demand of the computer. I 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 first. Be sure this will not void your system warranty, or ask your dealer to do it for you.

REMARK
Intel$^{®}$ is a registered trademark of Intel Corporation.
All other brands and product names are trademarks registered trademarks of their respective companies.

1-1 SYSTEM FEATURES

- INTEL Pentium II CPU operating at 233MHz and 300MHz by using Single Edge Contact (S.E.C.) cartridge (or named Slot 1).
- INTEL 82440LX PCIset.
- Pentium II CPU with MMX^{TM} Technology, and 512 or 256KB L2 Cache. Cacheable 512MB.
- Using three 168-pin DIMM sockets, provides three banks of 64-bit wide path up to 384MB SDRAM or 768MB EDO DRAM (with parity chip ECC support).
- Built-in Switching Voltage Regulator.
- Built-in LM78, LM75 supports INTEL LDCM.(option)
- Supports auto-detect CPU core voltage range 1.8V to 3.5V.
- Supports one AGP slot, four PCI revision 2.1 interface compliant and three 16-bit ISA slots.
- Dual Master IDE connectors support Ultra DMA/33, up to four devices in two channels for connecting of high capacity hard drive, CD-ROM, tape backup etc..
- Supports the USB (Universal Serial Bus) header.
- PS/2 keyboard connector and PS/2 mouse connector.
- Winbond 83977 high-speed Ultra Multi-I/O chipset.
- Supports Infrared transfer (IrDA TX/RX) connection.
- One FDC port supports two devices up to 2.88MB
- Two 16550A fast UARTs compatible serial ports
- One EPP/ECP mode parallel port
- Hardware Dimension is 210mm x 305mm (8.26" x 12.00").

1-2 SOFTWARE POWER OFF CONTROL

The mainboard design supports Software Power Off Control feature through the SMM code in the BIOS under Windows 95, Windows 3.1x, and MS-DOS operation system environment. This is Intel ATX form factor feature and you should use ATX power supply.

First, you should connect the power switch cable (provided by the ATX case supplier) to the connector "PS-ON" (next to SW1) on the mainboard. In the BIOS screen of 'POWER MANAGEMENT SETUP', choose "User Defined" (or "Min. Power Saving" or "Max. Power Saving") in 'Power Manager' and choose "Yes" in 'PM Control by APM'.

In Windows 95, if you would like to power off the system, you just choose "shutdown the computer ?" in the "Shut Down Windows" from Windows 95, then the system power will be off directly, and become the stand-by status. You will find the power LED light blinking. If you would like to restart the system, just press the power switch button, and the system will be powered on.

In Windows 3.1x or MS-DOS, you should copy the program of "down.com" (you can find it in the diskette of the IDE driver) into the hard drive. When you would like to power off the system, just run this "**down.com**", then the system will be shutdown and stay in standby status.

Note : If you will leave your system for several days, we suggest you use hardware power off to shutdown your system.

1-3 LDCM ¡]LANDesk Client Manager¡^(option)

ATC-6120 built-in LM 78 / LM 75 support Intel LDCM. LDCM can satisfy users who want manageable systems that can interact automatically with the user. Client manager is the answer, enabling both administrators and clients to manage systems. The features of LDCM are as following :

¡° **Review system inventory**

Client Manager enables you to view hundreds of inventoried items. Some of these items are software related, while many others are hardware related.

¡° **View DMI-compliant component information**

Client manager enables you to view component information that is compliant with the Desktop Manager Interface¡]DMI¡^. This means you can manage third-party DMI-compliant components not included with Client manager.

¡° **Back up and restore system configuration files.**

Client Manager enables you back up and restore system configuration files. Whenever you plan on changing the system configuration , you can make a backup set. If the system no longer works correctly, after you the change the system configuration , you can simply restore the system configuration with the backup set.

¡° **Troubleshoot**

Since Client manager enables you to view the system inventory, you can easily troubleshoot system problems.

¡° **Receive notifications for system events**

Client manager enables you to receive notification of certain system events. For example, if the system is running low on virtual memory, you are notified of the potential problem.

¡° **Transfer files to and from client workstations**

As an administrator, you have the ability to transfer files to and from client workstation. This is helpful, for example, when you need to update a client workstation driver.

¡° **Remotely reboot client workstations**

Administrator also have the ability to remotely reboot a workstation . This is helpful when you want system configuration changes to take effect.

1-3 CHECK LIST OF THE PACKAGING

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

Each mainboard contains:

Q'TY	Description
1	Mainboard : ATC-6120.
1	Retention module (for Pentium II installation)
1	Diskette : Enhanced IDE driver (3.5")
	Award system BIOS
	Update Utility
1	Cable : Enhanced IDE connector.
1	Cable : F.D.D. connector.
1	Manual : User`s manual.

NOTE : Leave the mainboard in its original packaging 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 drive, keyboard, CD-ROM; and accessories such as cables. Then, install the system as following:

1. Plug CPU/ heat sink (refer to Pentium II installation guide), and DRAM modules in the mainboard.
2. Set DIP switch 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 peripherals, 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-6120 supports INTEL Pentium II CPU cartridge.

2-2-1 CPU TYPE SELECTION

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
233MHz	ON ■ ■ ■ ▪ OFF 1 2 3 4	66x3.5
266MHz	ON ▪ ▪ ▪ ▪ OFF 1 2 3 4	66x4.0
300MHz	ON ■ ▪ ▪ ■ ▪ OFF 1 2 3 4	66x4.5
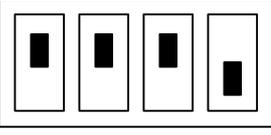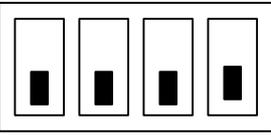
SW1
1 2 3 4 → Slot 1

ON   DIP
■ ■ ■ ▪
1   2   3   4
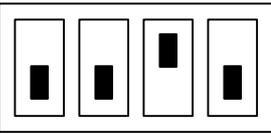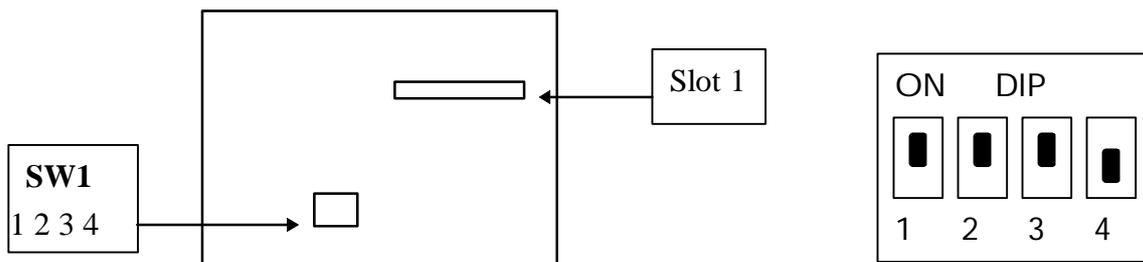
DIP switch, (ex. : ON,ON,ON,OFF)
O N : switch to the 'ON' position.
OFF : switch to the 'OFF' position.

2-2-2 CPU VOLTAGE SETTING

The ATC-6120 mainboard has built-in VID (Voltage IDentify) function to auto-detect various CPU voltages, you do not need to adjust the CPU voltage setting when you install the Pentium II CPU card on this mainboard.

2-3 SYSTEM MEMORY INSTALLATION

The ATC-6120 provides three 168-pin DIMM sockets for system memory expansion from 8MB to 384MB. These three DIMMs are arranged to three banks, please refer to page A. Each bank provides 64-bit wide data path.

¡° Samples of System Memory Combinations Options ¡°

BANK0 DIMM 1	BANK1 DIMM 2	BANK2 DIMM 3	Total Memory DIMM 1-3
8MBx1	-	-	8MB
-	8MBx1	-	8MB
-	-	8MBx1	8MB
8MBx1	8MBx1		16MB
-	8MBx1	8MBx1	16MB
8MBx1	-	8MBx1	16MB
16MBx1	-	-	16MB
-	16MBx1	-	16MB
-	-	16MBx1	16MB
8MBx1	8MBx1	8MBx1	24MB
8MBx1	16MBx1	-	32MB
	16MBx1	16MBx1	32MB
16MBx1	-	16MBx1	32MB
32MBx1	-	-	32MB
-	32MBx1	-	32MB
-	-	32MBx1	32MB
8MBx1	16MBx2	16MBx1	40MB

- continue -

32MBx1	32MBx1	-	64MB
-	32MBx1	32MBx1	64MB
64MBx1	-	-	64MB
-	64MBx1	64MBx1	128MB
:	:	:	:
:	:	:	:
128MBx1	128MBx1	128MBx1	384MB

2-4 CONNECTORS   DESCRIPTION

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 align with the pin 1 end of the connector.

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

SPK : speaker
Speaker
GND
GND
VCC

Power LED connector

Power LED +
N/C
GND (power)
Keylock
GND
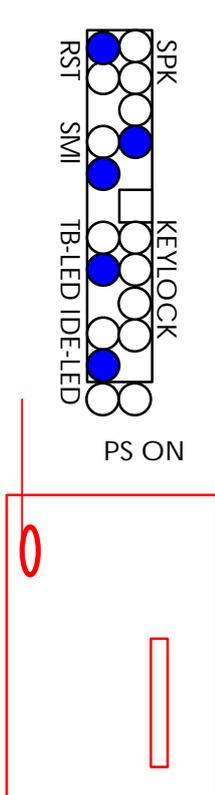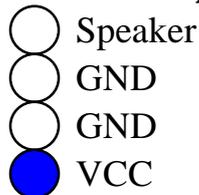
RST : Reset connector
Reset Signal
GND
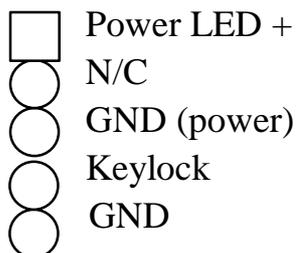
SMI : SMI lead
GND
SMI Signal

**TB-LED : Turbo LED indicator, LED on
when system runs higher speed**
GND
+5V (next to CPU)

RST   SPK
SMI
TB-LED IDE-LED   KEYLOCK

PS ON
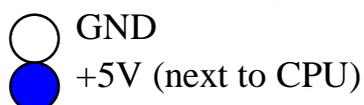
IDE-LED : IDE devices indicator LED connector. IDE-LED stays ON indicates on-board IDE devices in operation. If plug wire into wrong connector, color of LED will be lighter and the IDE dvices can still function properly.

○ GND
● +5V
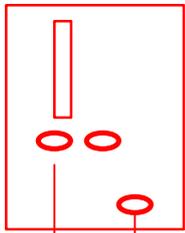
FAN : CPU cooling fan connector. Wire with +12V voltage (most likely red wire) must be plugged into pin2, and GROUND wires (most likely black wires) must be plugged into pin3. Please confirm the wire color re-presentation with your supplier.

CAUTION: Plug wire into wrong connector will DAMAGE fan and mainboard.
FAN1 for Pentium II CPU Fan, FAN2 ATX case, FAN3 for AGP card.

1 □ Sense
2 ○ +12V
3 ○ GND

IR1 : Infrared module connector.

1 □ +5V
2 ○ N/C
3 ○ IRRX
4 ○ GND
5 ○ IRTX
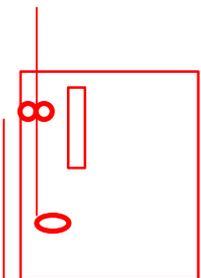
USB : USB connector; Universal Serial Bus; this is used to connect USB devices. There are three connectors on board, user can choice two in the same time.

1 +5V
2 USB P1-
3 USB P1+
4 Ground
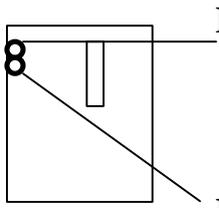
PS/2 KB : 6-pin PS/2 style compatible keyboard connector.

PS/2 mouse : PS/2 mouse connector, which is used to connect an optional cable.
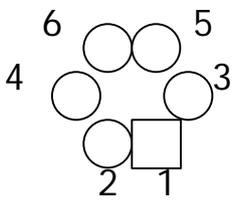
pin1 : data

pin2 : N/C

pin3 : GND

pin4 : VCC

pin5 : clock

pin6 : N/C

PW1 : ATX mode +3.3/5/12V power supply connector.
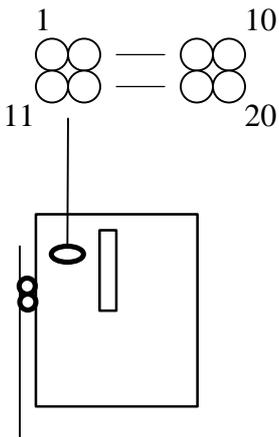
1	3.3V	6	+5V	11	3.3V	16	GND
2	3.3V	7	GND	12	-12V	17	GND
3	GND	8	PWRGD	13	GND	18	-5V
4	+5V	9	5VSB	14*	PS_ON	19	+5V
5	GND	10	+12V	15	GND	20	+5V

* PS_ON : Soft-Off power control

COM1/COM2 : these two connectors are used to connect serial port cables.
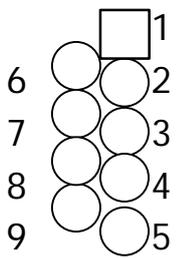
Pin	signal name
1	NDCDA/B
2	NSINA/B
3	NSOUTA/B
4	NDTRA/B
5	GND
6	NDSRA/B
7	NRTSA/B
8	NCTSA/B
9	NRIA/B

A is COM1, B is COM2

FDC1 : this connector is used to connect the floppy

drive through a cable.

34 ◯◯ 33

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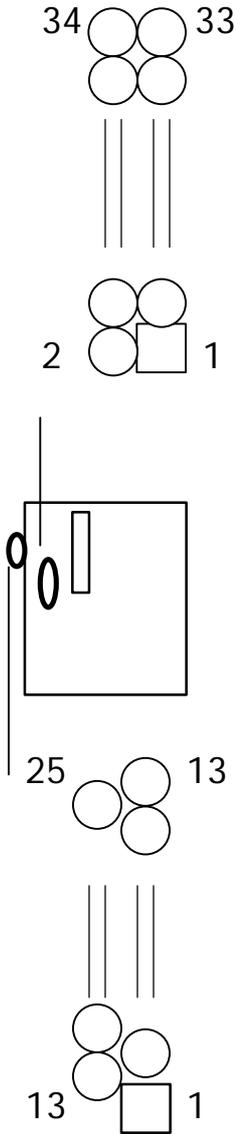
| pin	signal	pin	signal
2	RWC-	20	STEP-
4	reserved	22	Write Data
6	FDEDIN	24	Write Gate
8	Index-	26	Track 00-
10	Motor EnableA-	28	Write Protect-
12	Drive Sele.B-	30	Read Data-
14	Drive Sele.A-	32	Side 1 Sele.-
16	Motor EnableB-	34	DisketteChange
18	DIR-		
All of odd pins are ground			

LPT : this connector is used to connect parallel port cable.

25 ◯◯ 13

13 ◯◻ 1

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		
pin18 -- pin25 are ground			

LPT

Keyboard conn.

COM 1

COM2

Dual USB
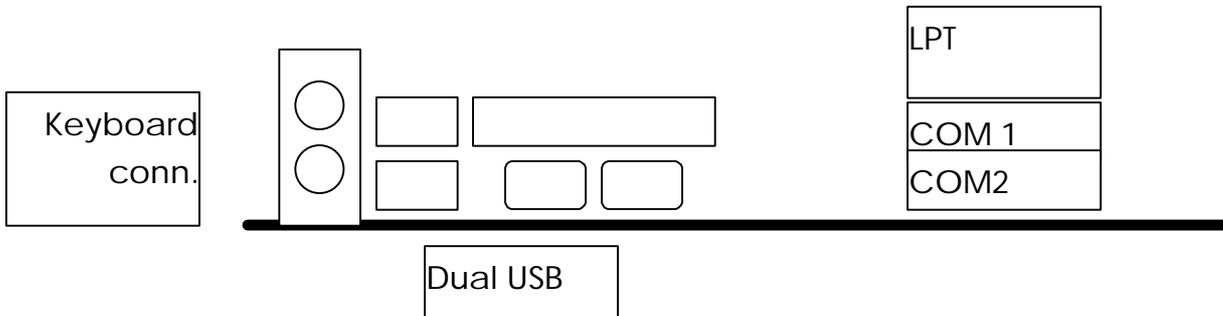
IDE1/IDE2 : these two connectors are used to connect IDE devices through IDE cables, a total of 4 devices can be connected.
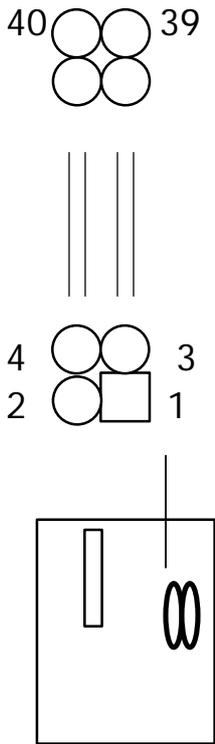
pin	signal	pin	signal
1	Reset IDE	21	DDRQ0(1)
2	GND	22	GND
3	Host Data 7	23	I/O Write-
4	Host Data 8	24	GND
5	Host Data 6	25	I/O Read-
6	Host Data 9	26	GND
7	Host Data 5	27	IORDY
8	Host Data 10	28	N/C
9	Host Data 4	29	DDAK0- (1-)
10	Host Data 11	30	GND
11	Host Data 3	31	IRQ14*
12	Host Data 12	32	IOCS16-
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

* IDE1 : pin31 is IRQ14;

　IDE2 : pin31 is IRQ15 or MIRQ0

2-5 IDE DRIVER INSTALLATION

The IDE driver installation procedure is as following :

Setup for Windows 95 :

1. Starting Windows 95

2. Select "START", "RUN".

3. Install INF.EXE before you install IDE driver, please refer to readme file.

4. Type "A:\WIN95\SETUP.EXE".

5. Restart computer, then follow the instructions on your screen to install new IDE driver we offer in the 3.5" diskette

6. Exit Windows 95, turn power off; then turn power on.

   After installation, the screen will show a yellow ¡I, please ignore it.

   (The other platforms please refer to readme file.)

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. Some of the brands devices combination may not work under this sequence, you can try to re-arrange the devices sequence, or contact your vendor.

Primary Master	Primary Slave	Secondary Master	Secondary Slave	
ATA				no ATAPI
ATA		ATAPI		disk & CD-ROM
ATA	ATAPI			use only one cable
ATA		ATAPI	ATAPI	CD-ROM and a tape or two CD-ROMs

CHAPTER 3   Award BIOS SETUP

     This chapter explains the system BIOS setup, and how to update to a new BIOS. All BIOS screens shown in the following pages are default values, your system dealer will set up these values according to your demand of the computer. Please refer to the next page for the update procedure.

  ATC-6120 uses Flash ROM to make the BIOS easily to be updated by the floppy disk-based program. and to meet Microsoft Windows 95 plug & play feature. After the BIOS is updated, you should clear the setup data stored in the CMOS.

¡° JP2 Setting is for Update System CMOS

	JP2
Normal	1-2
Clear	2-3

NOTE :

    To clear CMOS you should unplug the power cord, then set 2-3 to clear, put it back to normal position and plug the power cord again.

JP2	JP2
Normal CMOS	Clear CMOS
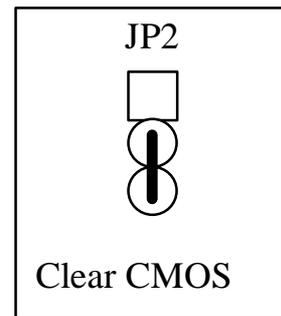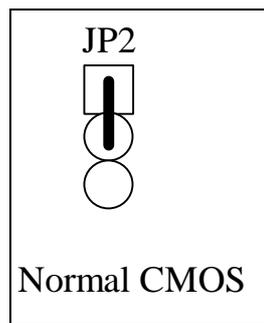
3-1 UPDATE BIOS PROCEDURES

If the BIOS needs to be updated, you can get a diskette with the updated BIOS from your system supplier. The BIOS diskette includes :
"awdflash.exe"   --   BIOS update utility program
"awdflash.doc"
"(update BIOS filename with version number).bin"

The update procedure is 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).bin", ENTER.
6. If you do not want to save the old BIOS 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. Turn the power off. Clear the data in CMOS according to the procedure described in the previous page.
10. Turn the system power on and test that your system is working properly.

3-1-2 UPDATE PENTIUM II BIOS API

Intel also provides BIOS API(Applications Programming Interface) for Pentium II processor-based mainboard user to update data block in BIOS quickly and easily. (You can find this utility in the 3.5" diskette in the package).

The BIOS code on the Pentium II processor-based mainboards contains data that is specific to each silicon stepping of the processor. Integrators must ensure that this BIOS stepping data matches the processor stepping used. When the BIOS does not contain stepping data that matches the processor stepping, integrators must update the data in the BIOS before shipping the system. Historically, Pentium II systems have been updated by replacing the entire BIOS with a new revision of BIOS that contains the correct stepping data.

Intel's BIOS update API allows just the stepping data within the BIOS to be updated as needed. Mainboards that contain a BIOS with the Intel-defined BIOS update API can be quickly and easily updated, if required, without obtaining a complete BIOS upgrade. Using this utility, integrators can easily verify that the correct stepping data is present in all Pentium II processor-based mainboards. However, if the stepping data requires updating, the mainboard BIOS must contain the Intel-defined BIOS update API, otherwise a complete BIOS upgrade is required from the mainboard vendor.

Yould should set your diskette to "write protect, then type
   A:\>cd api; A:\api>checkup3

The main menu should now be displayed, showing the following four options :
 1) Check and load update
 2) Specify stepping data file [current : pep.pdb]
 3) Help
 4) Quit without loading update

Select 1 to know the stepping filename, select 2 to load right patch code, then select 1 to update proper patch code. Now, the screen will show the message "please remove floppy diskette from floppy disk drive". Then cold boot (mechanical power off) system to continue. For more information, please refer to "CHECKUP.HLP" file.

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. To do 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 (2A69JA29)
                        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 section displays the items highlighted in the list.

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

ROM PCI/ISA BIOS (2A69JA29)
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 (2A69JA29)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

Date (mm:dd:yy)   : Wed, Jun   14 1996
Time(hh:mm:ss)   : 13 : 37 : 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.   Base Memory   :   640K
Drive B : None   Extended memory   :   7168K
                                      Other Memory   :   384K
Video   : EGA/VGA   ---
Halt On: All Errors   Total Memory   :   8192K

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 0 to 59
ss	from 0 to 59

Primary Master
Primary Slave
Secondary Master
Secondary Slave

These categories identify the types of the 2 channels that have been installed in the computer. There are 45 predefined types and 4 user definable 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', the** BIOS will auto-detect the HDD & CD-ROM Drive at the POST stage and show 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 the HDD interface is ESDI, the selection shall be '**Type1'**; if SCSI, the selection shall be **'None'**. If no device is 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* | This category identifies the types of floppy disk |
| *Drive B* | 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　　This 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　　This category determines whether the computer will stop if an error is detectd during power up.

No errors	The system boot will not be stopped for any error that may be detected
All errors	When the BIOS detects a non-fatal error the system will be stopped and you will be prompted
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　　This 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 (2A69JA29)
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 (2A69JA29)
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	: Enabled	D0000-D3FFF Shadow	: Disabled
Boot Sequence	: A,C,SCSI	D4000-D7FFF Shadow	: Disabled
Swap Floppy Drive	: Disabled	D8000-DBFFF Shadow	: Disabled
Boot Up Floppy Seek	: Enabled	DC000-DFFFF Shadow	: Disabled
Boot Up NumLock Status	: On		
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	
Assign IRQ For VGA	: Enabled	F7 : Load Setup Defaults	
OS Select for DRAM>64MB	: Non-OS2		

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 prompt
following error message will appear and wait for
user input . 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, if anything attempts to access the boot sector or hard disk partition table will cause a warning message to appear.
Disabled	No warning message will appear when anything attempts to access the boot sector or hard disk partition table.

CPU   These two categories speed up memory access.
Internal Cache However, it depends on CPU/chipset design.
External Cache The default value is 'enabled'.

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

Boot Sequence   This category determines which drive to search
first for the disk operating system (i.e., DOS).
Choices are A,C, SCSI; C, A, SCSI;
C, CDROM, A; CDROM, C, A; D, A, SCSI;
E, A, SCSI; F, A, SCSI; SCSI, A, C; SCSI, C, A;
and C only.

For example :

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

C is primary master; D is primary slave;
E is secondary master, F is secondary slave

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

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

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

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

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

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   It determines whether the MPEG ISA/VESA

Palette Snoop   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 is over 64MB in OS/2

Video BIOS
Shadow
   Determines whether video BIOS will be copied to 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 the support of onboard SCSI.

Report No FDD
For WIN 95
   For Windows 3.1x users set 'NO' (default); for Windows 95 users set 'NO' or 'YES'.

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

```
                    ROM PCI/ISA BIOS (2A69JA29)
                       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

AT Clock, DRAM Timmings, ...

```
                    ROM PCI/ISA BIOS (2A69JA29)
                     CHIPSET FEATURES SETUP
                      AWARD SOFTWARE, INC.
```

Auto Configuration	: Enabled	SDRAM CAS latency Time	: 3
DRAM Speed Selection	: 60 ns	CPU Waning Temperature	: Disabled
MA Wait State	: Slow	*Current CPU Temperature	: 39 $^{\circ}$C/ 102 $^{\circ}$F
EDO RAS# To CAS# Delay	: 3		
EDO RAS# Precharge Time	: 3		
EDO DRAM Read Burst (B/E/F)	: x333	*Only if LM75 exist*	
EDO DRAM Write Burst (B/E/F)	: x222		
DRAM Data Integrity Mode	: Non-ECC		
CPU-to-PCI IDE Posting	: Enabled		
System BIOS Cacheable	: Disabled		
Video BIOS Cacheable	: Disabled		
Video RAM Cacheable	: Disabled		
8-bit I/O Recovery Time	: 1		
16-bit I/O Recovery Time	: 1		
Memory Hole At 15M-16M	: Disabled		
Passive Release	: Enabled	Esc: Quit	:Select Item
Delayed Transaction	: Enabled	F1 : Help	PU/PD/+/-:Modify
AGP Aperture Size (MB)	: 64	F5 : Old Values	(Shift)F2 :Color
SDRAM RAS-to-CAS Delay	: Slow	F6 :Load BIOS Defaults	
SDRAM RAS Precharge Time	: Slow		

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 Speed Selection	The DRAM speed is controlled by the DRAM timing Registers. The timings programmed into this register are dependent on the system design.
DRAM RAS# Precharge Time	DRAM must continually be refreshed or it will lose 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.
RAS# to CAS# Delay	When DRAM is refreshed, both rows and columns are addressed separately. This setup item allows you to determine the timing of the transition from RAS to Column Address Strobe (CAS).
DRAM Read Burst (B/E/F) DRAM Write Burst (B/E/F)	This sets the timing for burst mode read (or writes)from DRAM. Burst read and write requests are generated by the CPU in four separate parts. 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 Cacheable	When enabled, accesses to the system BIOS ROM addressed at F0000H-FFFFFH are cached, provided that the cache controller is enabled.

Video BIOS Cacheable	As with changing the system BIOS above, 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 Recovery Time	The recovery time is the length of time, measured in CPU clocks, which the system will be delay after the completion of an I/O request. This item allows 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	This item allows you to determine the recovery time allowed for 16-bit I/O. Choices are from NA, 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.
DRAM ECC/ Parity Select	During CPU reads of the DRAM, the 430HX provides error checking and correction or parity of the data.

The BIOS will auto detect if the mainboard have LM75 components or not. If there is LM75, the screen will show these LM75 related items, and these items are *SHOWN ONLY* except " CPU Warning Temperature " The following are LM75 related items :

'***CPU Warning Temperature***'   set the temperature for CPU warning. When the CPU temperature reaches the setting temperature, the system will lower the CPU clock according to the Throttle Duty Cycle.

'***Current CPU Temperature***'   the current temperature of the CPU

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

```
              ROM PCI/ISA BIOS (2A69JA29)
                  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 (2A69JA29)
               POWER MANAGEMENT SETUP
                 AWARD SOFTWARE, INC.
 ╔══════════════════════════════════╤═══════════════════════════════╗
 ║ Power Management    : Disabled   │ *Reload Global Timer Events*   ║
 ║ PM Control by APM   : Yes        │ IRQ [3-7, 9-15], NMI :Enabled  ║
 ║ Video Off Method    : V/H SYNC   │ Primary IDE 0        :Disabled ║
 ║                       +Blank     │ Primary IDE 1        :Disabled ║
 ║ Video Off After     : Standby    │ Secondary IDE 0      :Disabled ║
 ║ Modem Use IRQ       : 3          │ Secondary IDE 1      :Disabled ║
 ║ Doze Mode           : Disabled   │ Floppy Disk          :Disabled ║
 ║ Standby Mode        : Disabled   │ Serial Port          :Enabled  ║
 ║ Suspend Mode        : Disabled   │ Parallel Port        :Disabled ║
 ║ HDD Power Down      : Disabled   │                                ║
 ║ Throttle Duty Cycle : 62.5%      │                                ║
 ║ ZZ Active in Suspend: Disabled   │                                ║
 ║ VGA Active Monitor  : Enabled    │                                ║
 ║ Soft-Off by PWR-BTTN: Instant-Off│                                ║
 ║ CPUFAN Off In Suspend: Enabled   │ Esc: Quit  ↑↓→←  :Select Item  ║
 ║ Resume by Ring      : Enabled    │ F1  : Help   PU/PD/+/- : Modify║
 ║ IRQ 8 Break Suspend : Disabled   │ F5  : Old Values (Shift) F2: Color║
 ║                                  │ F6  : Load BIOS Defaults       ║
 ╚══════════════════════════════════╧═══════════════════════════════╝
```

**Power Management**	This category allows you to select the type (or degree) of power saving and is directly related to the following modes **: Doze; Standby; Suspend; 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 individually. When not disabled, each of the ranges are from 1min. to 1hr. exect for HDD Power Down which ranges from 1 to 15min. and disable

If you would like to use Software Power-off Control function, you cannot choose "Disabled "here, and should select "Yes" in PM Control by APM.

**PM Control by APM**	When enabled, an Advanced Power Management device will be activated to enhance the Max. Power Saving Mode and stop the CPU internal clock. If the Max. Power Saving is not enabled, this will be shown as NO.

**Video Off Method**	This determines the manner in which the monitor 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 functions which are only user configurable 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 except 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_** **_IRQ3 ~ IRQ15_**	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 mode. In effect, the system remains alert for anything which occurs on a device which is configured as **On**, even when the system is in a powered 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 to 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 (2A69JA29)
                       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 (2A69JA29)
                      PNP/PCI CONFIGURATION
                      AWARD SOFTWARE, INC.
╔══════════════════════════════════════════════════════════════════╗
║ PNP OS Installed       : No     │ PCI IDE IRQ Map to    : PCI-AUTO ║
║ Resources Controlled by : Auto  │ Primary IDE INT#      : A        ║
║ Reset Configuration Data : Disabled │ Secondary IDE INT#  : B      ║
║                                 │                                  ║
║                                 │                                  ║
║                                 │                                  ║
║                                 ├──────────────────────────────────║
║                                 │ Esc: Quit    ↑↓→←  :Select Item  ║
║                                 │ F1   : Help      PU/PD/+/- : Modify ║
║                                 │ F5   : Old Values  (Shift) F2: Color ║
║                                 │ F6   : Load BIOS Defaults         ║
║                                 │                                  ║
╚══════════════════════════════════════════════════════════════════╝
```

Resource ***Controlled by***	The Award Plug and Play BIOS has the capability 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 whether to reset the configuration data or not.
PCI IRQ ***Actived By***	This sets the method by which the PCI bus reco- gnizes that an IRQ service is being requested by a 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 holds 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 Features Setup".

ROM PCI/ISA BIOS (2A69JA29)
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 (2A69JA29)
INTEGRATED PERIPHERALS
AWARD SOFTWARE, INC.

IDE HDD Block Mode	: Enabled	Onboard Parallel Port : 378H/IRQ7
IDE Primary Master PIO	: Auto	Onboard Parallel Mode : ECP
IDE Primary Slave PIO	: Auto	ECP Mode Use DMA : 3
IDE Secondary Master PIO	: Auto	
IDE Secondary Slave PIO	: Auto	
IDE Primary Master UDMA	: Auto	
IDE Primary Slave UDMA	: Auto	
IDE Secondary Master UDMA	: Auto	
IDE Secondary Slave UDMA	: Auto	
On-Chip Primary PCI IDE	: Enabled	
On-Chip Secondary PCI IDE	: Enabled	
USB Keyboard Support	: Disabled	
KBC input clock	: 8 MHz	Esc: Quit ↑↓→← :Select Item
Onboard FDD Controller	: Enabled	F1 : Help PU/PD/+/- : Modify
Onboard Serial Port 1	: 3F8/IRQ4	F5 : Old Values (Shift) F2: Color
Onboard Serial Port 2	: 3F8/IRQ3	F6 : Load BIOS Defaults
UART Mode Select	: Normal	

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

PCI Slot IDE 2nd Channel	This item allows you designate an IDE controller board inserted 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

On-Chip Primary PCI IDE *On-Chip Secondary PCI IDE*	This setup item allows you to either enable or disable the primary/secondary controller. You might choose to disable the controller if you were to add a higher performance or specialized controller.

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 to complete the task by themselves. This is simpler and more faster. Your system supports five modes, 0 - 4, which primarily differ in timing. When **Auto** is selected, the BIOS will select the best available mode.

UART 2 Mode	This lets you select the Infrared mode. Choices are Standard, HPIR, and ASKIR. If you choose HPIR or ASKIR mode, the screen will show another two lines to let you choose 'IR Function Duplex' (Full or Half) and 'RxD TxD Active' (Hi Lo; Lo Hi; Hi Hi; Lo Lo).

ROM PCI/ISA BIOS (2A69JA29)

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 .....

Hard Disks   Type   Size   CYLS   HEAD   PRECOMP   LANDZ   SECTOR   MODE

Primary Master :

Select Primary Master   Option (N=Skip) : N

Options	Size	CYLS	Head	PRECOMP	LANDZ	Sector	Mode
2(Y)	1337	648	64	0	2594	63	LBA
1	1339	2595	16	65535	2594	63	NORMAL
3	1338	1297	32	65535	2594	63	LARGE

Note : Some OS (like SCO-UNIX) must use "Normal" for installation

ESC : Skip

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 you turn your computer on.

ROM PCI/ISA BIOS (2A69JA29)
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 (2A69JA29)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

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

ESC: Quit	↑↓→←:Select Item
F10: Save & Exit Setup	(Shift) F2 : Change Color

Save Data to CMOS & Exit SETUP

LOAD BIOS DEFAULTS

When your mainboard has problems and needs to 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 to load optimal settings which are stored in 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 with 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 again and press <Enter>.

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

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

CAUTION : If you forgot your password, you must disable
the CMOS by turning power off and set JP10 to 'close'. And then
open reload the system.

IDE HDD AUTO DETECTION

This allows you to detect the IDE hard disk 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	¡ô	Move to previous item
DOWN ARROW	¡õ	Move to next item
LEFT ARROW	¡ö	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	¡õ Shift ¡Ö+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 it.

Model No : ___ATC-6120___   Date of Purchase : _____

Serial No : _____

HARDWARE :

	BRAND	MODEL	SPEED	Q'TY
SIM Module				

CPU SPEED : _____ MHz

DRAM :_____MB (__ EDO, __FastPage, __ECC)

Hard Disk Interface Controller : _____ IDE, ____ SCSI

Hard Disk Brand :_____, Model :_____, Capacity :_____

Display Controller Brand :_____,Model :_____

Controller Chip Brand :_____,Model :_____

SOFTWARE:

AWARD SYSTEM BIOS: Version _____   Date Code _____

Keyboard BIOS: Brand _____

Other Add-on Cards Information:

Add-on Card	Bus Interface	Model	Remark

Error Description :