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CHAPTER 1 INTRODUCTION

Thank for you purchasing the ATC-5030 mainboard, upon purchasing this product from the supplier, or any of its distributors, vendors local dealers, you are qualified for one year warranty.
This manual describes to configure the ATC-5030 mainboard for different environments. It's an overview of the layout and features of the ATC-5030 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 to it when you configure the system.

Chapter 1   is an overview of the ATC-5030 mainboard features
          and packing items.
Chapter 2   describes how to upgrade and to change hardware
          configurations such as memory size, CPU type, and
          the 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 is shown in this chapter
          will be indicated the value of the default settings.

     Your system dealer will set up the ATC-5030 mainboard according to your demand of the computer. It means that the current settings of your ATC-5030 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

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1-1 SYSTEM FEATURES

⌨ Supports Intel Pentium (P54C) CPU operating at 90MHz to 200MHz & Intel Pentium MMX™ 166~233MHz (P55C), AMD K5, AMD K6, Cyrix 6x86MX™, 6x86L.

⌨ INTEL 430TX PCIset.

⌨ Using four 72-pin SIMM sockets, provides two banks of 64-bit wide path up to 256MB addressing page mode DRAMs.

⌨ Using two 168-pin DIMM sockets for 3.3V SDRAM or 3.3V EDO DRAM module.

⌨ Built-in 512KB PB SRAM on board

⌨ Supporting four PCI bus master revision 2.1, 5V interface compliant and three 16-bit ISA slots.

⌨ Dual Master IDE connectors support Ultra UMA/33 (33MB/sec transfer rate), 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 header.

⌨ The Ultra Multi-I/O chipset, integrated Keyboard controller.
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

⌨ Supporting Dual channel USB connection.

⌨ Built-in Switching Voltage Regulator

⌨ Supports ACPI Power Management - OSPM (OS directed power management)

⌨ ATX and AT power connector

⌨ PCB Dimension is 220mm x 230mm (8.66" x 9.0") with four layers designed.

1-2 SOFT-OFF CONTROL (option)

The ATC-5030 mainboard design supports Soft-Off Control feature through the SMM code in the BIOS under Windows 95, Windows 3.1x, and MS-DOS operation system environment. It needs to use ATX power supply. (please contact your supplier for this option)

Firstly, you should connect power switch cable (provided by ATX case supplier) to the PS_ON (CONN1) (next to FAN & socket 7) on the ATC-5030 mainboard.

In Windows 95, if you would like to soft power off the system, you just choose "shutdown the computer ?" in "Shut Down Windows" from Windows 95, then push the Power Switch* (on ATX case), then system will be in soft off status directly. If you would like to restart the system, just press the button of the power switch, and the system will be power on.
* Default value (Power management of BIOS screen) is "Instant-off', you can change to 'Delay 4 Sec.', then you should push the Power Switch at least 4 seconds otherwise the system will be under SMI mode only.

In Windows 3.1x or MS-DOS, you should copy the program of "down.com" (you can find it in the diskette of IDE driver) into 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.

PS_ON

CONN1   FAN
               CPU
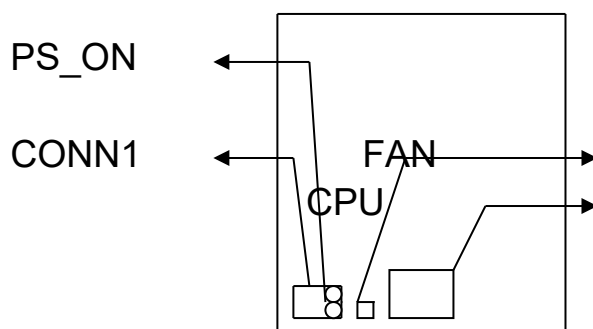
Note : If you will leave your system several days, we suggest you use hardware mechanical power off to shutdown your system.

1-3 CHECK LIST OF THE PACKING

The ATC-5030 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 ATC-5030 mainboard containing:

Q'TY	Description	
1	Mainboard	: ATC-5030.
1	Diskette	: Enhanced IDE driver (3.5"). Award system BIOS driver Update Utility
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 ATC-5030 mainboard in its original packing until you are ready to install it.

1-5 Wake-On-LAN

The remote Wake-On-LAN mode of operation is a mechanism that uses Advanced Micro Device Magic Packet technology to power up a sleeping workstation on the network. This mechanism is accomplished when the LAN card receives a specific packet of information, called a Magic Packet, addressed to thenode on the network. For additional protection, Secure ON is an optional security feature that can be added to the Magic Packet that requires a password to power up the sleeping workstation. When the LAN card is in remote Wake-On-LAN mode, main system power can be shut down leaving power only for the LAN card and auxiliary power recondition.

The LAN card performs no network activities while in the remote Wake-On-LAN mode of operation-It only monitors the network for receipt of a Magic Packet. If a Magic Packet is addressed to the LAN card on the network, the LAN card wake up the system. If the Secure ON feature has been enabled, the password added to the Magic Packet is also verified prior to waking up the system.

You should select the LAN card also support WOL function. WOL has two protocol . That are INTEL and DEC. JP7 is set to recongize your LAN card is INTEL or DEC protocol.

WOL LAN card will provide a 3-pin line to connect the WOL connector on the mainboard.

WOL	JP7
INTEL	1-2
DEC	2-3

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 ATC-5030 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-5030 supports one Pentium level CPU.

It can auto detect CPU voltage value either single or dual CPU voltage power supply type without jumper setting. 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 specification. Then choose the right installation in section 2-2-1 based on your CPU type/brand and follow the description to setup DIP Switch (SW1). If your CPU is not in the list of 2-2-1, please refer to 2-2-2 and 2-2-3 for installation. The ATC-5030 mainboard provides auto-detection function to detect CPU core voltages and CPU core voltages range from 2.1V to 3.5V.

2-2-1 CPU TYPE SELECTION

The DIP switch 1 on the ATC-5030 motherboard is to adjust the CPU internal clocks by using external CPU frequencies techniques for all brands of the CPU.
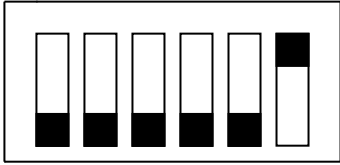
A. INTEL PENTIUM CPU (P54C)

※ **P54C VRE : 3.400V ~ 3.600V** (The fourth line of the mark on the under-side of the processor contains a code that identifies the voltage level type. V is VRE, S is standard.)
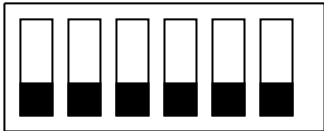
※ **P54C STD : 3.135V ~ 3.600V** (The fourth line of the mark on the under-side of the processor contains a code that identifies the voltage level type. V is VRE, S is standard.)

CPU ←

SW1

JP14
JP13
JP12
JP11
JP10
JP9
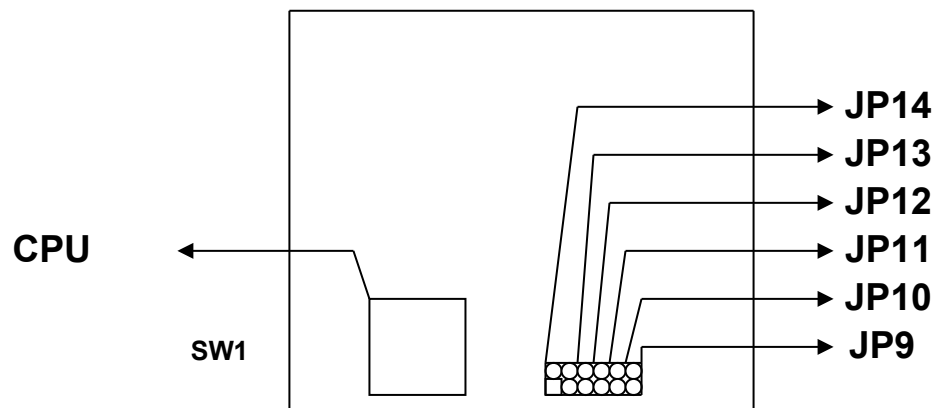
Intel Pentium 90MHz

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
90MHz	ON ▮(6) OFF ▮▮▮(1,2,3) — switches 1 2 3 4 5 6	60 x 1.5

Intel Pentium 100MHz

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
100MHz	ON OFF ▮▮▮▮▮▮ (1 2 3 4 5 6)	66 x 1.5

Intel Pentium 120MHz

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
120MHz	ON ▮(1)▮(3)▮(6) OFF ▮(2)▮(4)▮(5) — switches 1 2 3 4 5 6	60 x 2.0

Intel Pentium 133MHz

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
133MHz	ON ▮(1)▮(3) OFF ▮(2)▮(4)▮(5)▮(6) — switches 1 2 3 4 5 6	66 x 2.0
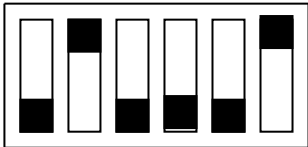
Intel Pentium 150MHz

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
150MHz	ON / OFF — 1 2 3 4 5 6	60 x 2.5
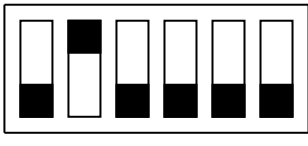
Intel Pentium 166MHz

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
166MHz	ON / OFF — 1 2 3 4 5 6	66 x 2.5

Intel Pentium 180MHz
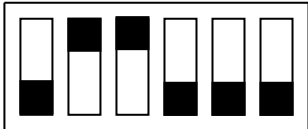
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
180MHz	ON / OFF — 1 2 3 4 5 6	60 x 3.0

Intel Pentium 200MHz
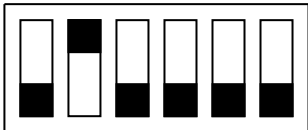
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
200MHz	ON / OFF — 1 2 3 4 5 6	66 x 3.0

B. INTEL PENTIUM MMX™ CPU (P55C)

B-1. Intel Pentium MMX 166MHz

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
166MHz	ON / OFF 1 2 3 4 5 6	66 x 2.5

B-2. Intel Pentium MMX 200MHz
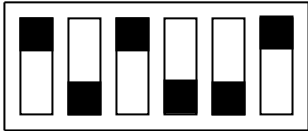
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
200MHz	ON / OFF 1 2 3 4 5 6	66 x 3.0

B-3. Intel Pentium MMX 233MHz
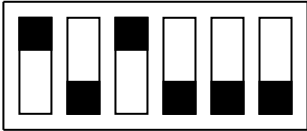
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
233MHz	ON / OFF 1 2 3 4 5 6	66 x 3.5

C. Cyrix 6x86(028) CPU
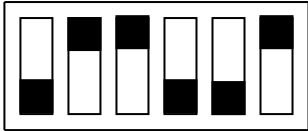
C-1. Cyrix 6x86MX PR150 @ 60 Bus 2x

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR150MHz	ON / OFF 1 2 3 4 5 6	60 x 2.0
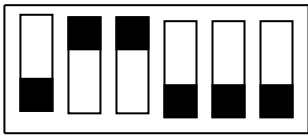
C-2. Cyrix 6x86MX PR166 @ 66 Bus 2x

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR166MHz	ON / OFF 1 2 3 4 5 6	66 x 2.0

C-3. Cyrix 6x86MX PR166 @ 60 Bus 2.5x

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR166MHz	ON / OFF 1 2 3 4 5 6	60 x 2.5
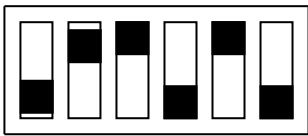
C-4. Cyrix 6x86MX PR200 @ 66 Bus 2.5x

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR200MHz	ON / OFF 1 2 3 4 5 6	66 x 2.5

C-5. Cyrix 6x86MX PR200 @ 75 Bus 2x
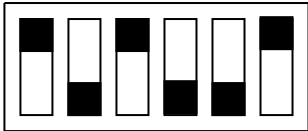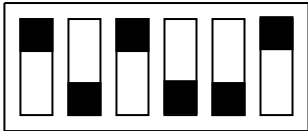
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR200MHz	ON / OFF 1 2 3 4 5 6	75 x 2.0

C-6. Cyrix 6x86MX PR233 @ 75 Bus 2.5x
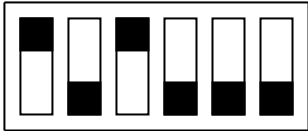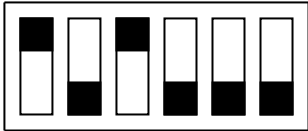
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR233MHz	ON / OFF 1 2 3 4 5 6	75 x 2.5

D. Cyrix 6x86L CPU (dual voltage)
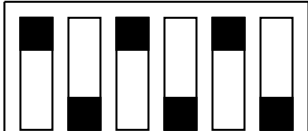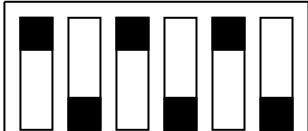
D-1. Cyrix 6x86L PR150+

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR150+MHz	ON / OFF 1 2 3 4 5 6	60 x 2.0

D-2. Cyrix 6x86L PR166+
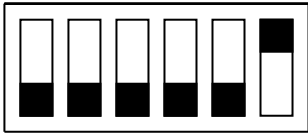
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR166+MHz	ON / OFF 1 2 3 4 5 6	66 x 2.0

D-3. Cyrix 6x86L PR200+
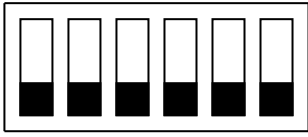
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR200+MHz	ON / OFF 1 2 3 4 5 6	75 x 2.0

E. AMD-K5 CPU Series
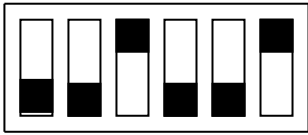
E-1. AMD-K5 PR90

INTERNAL CPU CLOCK	SW1		Ext.x Frq.
PR90MHz	ON OFF	 1 2 3 4 5 6	60 x 1.5
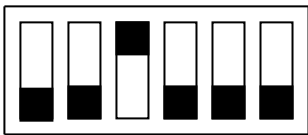
E-2. AMD-K5 PR100

INTERNAL CPU CLOCK	SW1		Ext.x Frq.
PR100MHz	ON OFF	 1 2 3 4 5 6	66 x 1.5
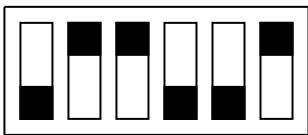
E-3. AMD-K5 PR120

INTERNAL CPU CLOCK	SW1		Ext.x Frq.
PR120MHz	ON OFF	 1 2 3 4 5 6	60 x 2.0

E-4. AMD-K5 PR133

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR133MHz	ON / OFF 1 2 3 4 5 6	66 x 2.0

E-5. AMD-K5 PR166
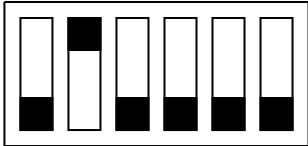
INTERNAL CPU CLOCK	SW1	Ext.x Frq.
PR166MHz	ON / OFF 1 2 3 4 5 6	60 x 2.5

F. AMD-K6 CPU
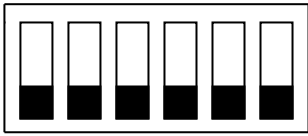
F-1. AMD-K6 166ALR

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
166 ALR (MHz)	ON / OFF 1 2 3 4 5 6	66 x 2.5

F-2. AMD-K6 200 ALR

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
200 ALR (MHz)	ON / OFF — 1 2 3 4 5 6	66 x 3.0

F-3. AMD-K6-233 ANR CPU : 3.2V

INTERNAL CPU CLOCK	SW1	Ext.x Frq.
233 ANR (MHz)	ON / OFF — 1 2 3 4 5 6	66 x 3.5

2-2-2 CPU Voltage, CPU Bus Clock and Bus Freq. Ratio Setting

A. CPU Bus Clock :

Clock Gen. CPU Bus Clock: ■6 Pin DIP-SW (Option)   2x6 Header

2x3 Header □

BASE CLK	SW1-6 (JP9)	SW1-5 (JP10)	SW1-4 (JP11)
60MHz	ON	OFF	OFF
66MHz	OFF	OFF	OFF
75MHz	OFF	ON	OFF
83MHz	ON	ON	ON

B. CPU Bus Frq.

Core/Bus Freq. Ratio: ■6 Pin DIP-SW (Option)   2x6 Header

2x3 Header □

RATE	SW1-3 (JP12)	SW1-2 (JP13)	SW1-1 (JP14)
1.5x	OFF	OFF	OFF
2.0x	ON	OFF	ON
2.5x	ON	ON	OFF
3.0x	OFF	ON	OFF
3.5x	OFF	OFF	OFF
4.0x	ON	OFF	ON
4.5x	ON	ON	ON

*Remark: JP14 is Only Useful AMD CPU ; Other Please set off
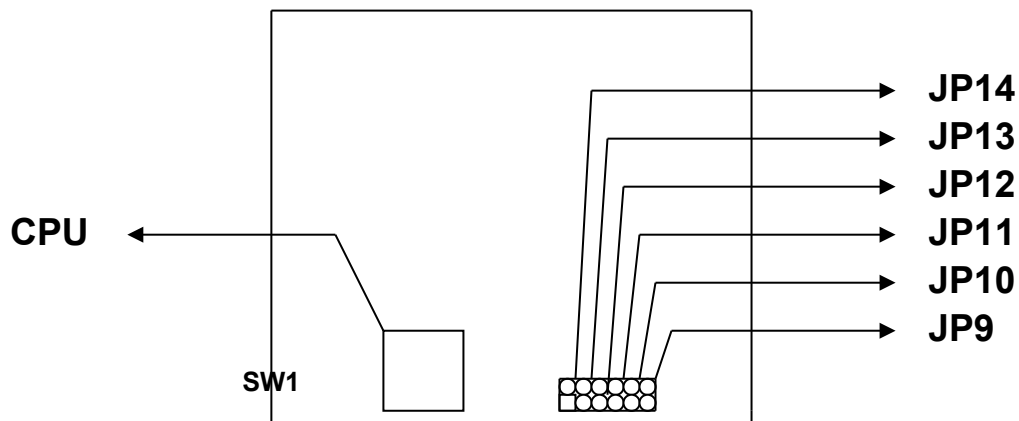
2-3 SYSTEM MEMORY INSTALLATION

ATC-5030 provides four 72-pin SIMM sockets for system memory expansion from 4MB to 256MB. These four SIMMs 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 no slower than 70 nanosecond. You should plug DRAM modules into two sockets (same bank) or four sockets at one time. Each pair of modules in the same bank 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 two optional 168-pin DIMM sockets for 3.3V SDRAM or 3.3V EDO DRAM expansion. You should plug SDRAM/DRAM module into each DIMM sockets (as a bank) or two sockets at one time.

CAUTION: It's not recommended to install the 3.3V SDRAM and 5V EDO or Fast Paged mode memory within a system. The 72-pin DRAM cannot work with 168-pin DRAM in the same time. 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
4MBx2	-	8MB
-	4MBx2	8MB
8MBx2	-	16MB
-	8MBx2	16MB
4MBx2	4MBx2	16MB
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
64MBx2	-	128MB
-	64MBx2	128MB

- continue -

4MBx2	**64MBx2**	**136MB**
64MBx2	**4MBx2**	**136MB**
8MBx2	**64MBx2**	**144MB**
64MBx2	**8MBx2**	**144MB**
16MBx2	**64MBx2**	**160MB**
64MBx2	**16MBx2**	**160MB**
32MBx2	**64MBx2**	**192MB**
64MBx2	**32MBx2**	**192MB**
64MBx2	**64MBx2**	**256MB**
***128MBx2**	**-**	**256MB**
-	***128MBx2**	**256MB**

* Please confirm this with your supplier firstly.

2-4 SRAM INSTALLATION

ATC-5030 is built-in 512KB Sync. Pipeline Burst SRAM on board

2-5 OTHER JUMPERS AND CONNECTORS DESCRIPTION

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, power LED, reset, SMI, turbo LED, and IDE LED connectors.
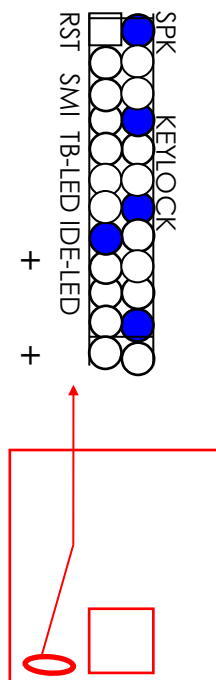
SPK : speaker

- VCC
- GND
- GND
- Speaker
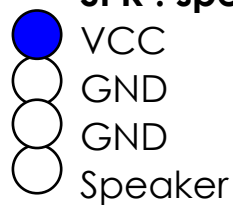
KEYLOCK   (**Power LED connector)**

- GND (power)
- N/C
- Power LED +

RST : Reset connector

- GND
- Reset Signal
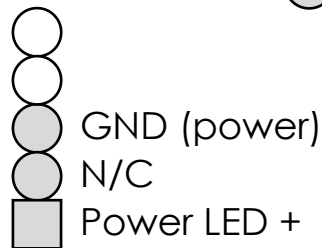
SMI : SMI lead

- SMI Signal
- GND

TB-LED : Turbo LED indicator

⬤ +5V
◯ GND

IDE-LED : IDE devices indicator LED connector. IDE-LED stays ON indicates
⬤ +5V on-board IDE devices in operation. If
◯ GND plug wire into wrong connector, color of LED will be lighter and the IDE dvices can still function properly.
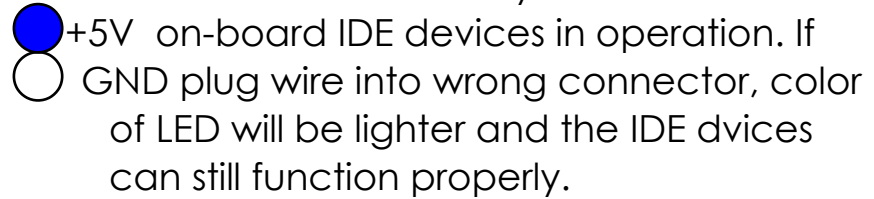
FAN1 : CPU cooling fan connector. Wire with +12V voltage (most likely red wire) must be plugged into pin2, and GROUND wires (most likely ck wires) must be plugged into pin1 and/or pin3. Please confirm the wire color represtation with your supplier.

1 ⬜ SENSE
2 ◯ +12V
3 ◯ GND
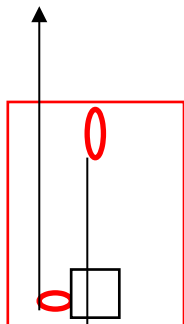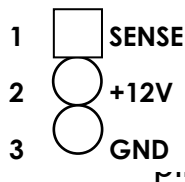
CAUTION: Plug wire into wrong connector will DAMAGE fan and mainboard.

IR1 : Infrared module connector.

1 ⬜ +5V
2 ◯ N/C
3 ◯ IRRX
4 ◯ GND
5 ◯ IRTX

(red)

VCC ■ ○ GND
D1 - ○○ D0 +
D1+ ○○ D0 -
GND ○○ VCC
OC0 ○○ OC1

(black)
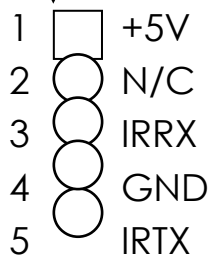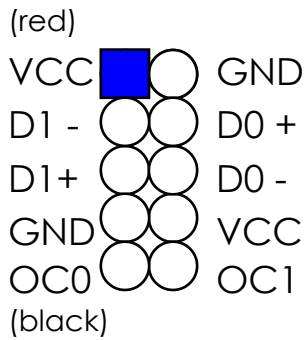
USB1 : USB connector; Universal Serial Bus;this is used to connect USB devices through an optional dual head cable with a iron plane. OC0 and OC1 are used to mention the status of the USB power supply lines.

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

0
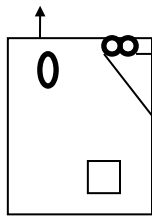
KB1 : 5-pin AT style keyboard connector.

4 ○○ 6
2 ○
1 □
3 ○○ 5

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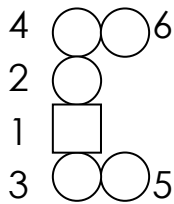
pin1 : data
pin2 : N/C
pin3 : GND
pin4 : VCC
pin5 : clock
pin6 : N/C

PW1 : AT mode +5 Voltage power supply connector.(P8,P9)

PG   +12V   GND   +5V

+5V   -12V   -5V
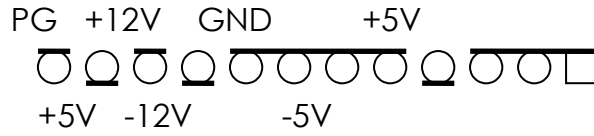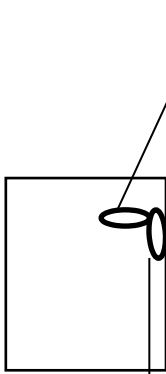
PW2 : ATX mode +3.3/5/12V power supply connector.(optional)
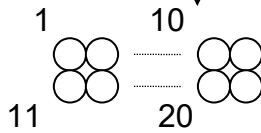
1	3.3V	6	+5V	11	3.3V	16	GND
2	3.3V	7	GND	12	-12V	17	GND
3	GND	8	PWRGD	13	GND	18	-5V
4	+5V	9	5VSB	14 *	PS_ON	19	+5V
5	GND	10	+12V	15	GND	20	+5V

1   10

11   20

COM1/COM2 : these two connectors are used to connect serial port cables.

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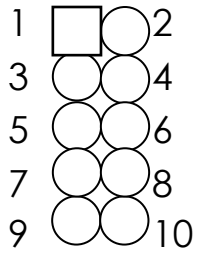
pin	signal name
1	DCD
2	Serial In
3	Serial Out
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI
10	N/C

COM1/COM2
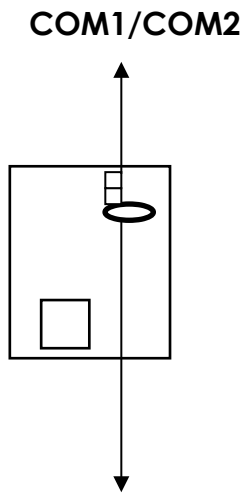
FDC : this connector is used to connect floppy disk drive through cable.
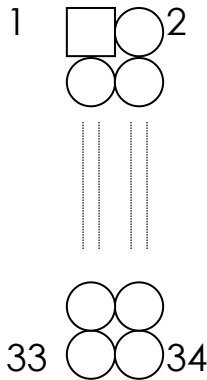
pin	signal	pin	signal
2	RWC-	20	STEP-
4	reserved	22	Write Data
6	FDEDIN	24	Write Gate
8	Index-	26	Track 00-
10	Motor EnableA-	28	Write Protect-
12	Drive Sele.B-	30	Read Data-
14	Drive Sele.A-	32	Side 1 Sele.-
16	Motor EnableB-	34	DisketteChange
8	DIR-		
All of odd pins are ground(except pin 5)			

LPT : this connector is used to connect parallel port cable.
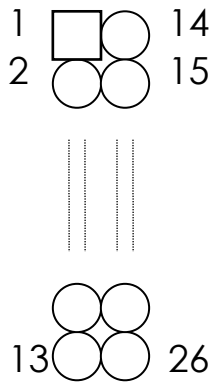
pin	signal	pin	signal
1	STROBE-	10	ACK-
2	Data Bit 0	11	BUSY
3	Data Bit 1	12	PE
4	Data Bit 2	13	SLCT
5	Data Bit 3	14	Auto Feed-
6	Data Bit 4	15	ERROR-
7	Data Bit 5	16	INIT-
8	Data Bit 6	17	SLCT IN-
9	Data Bit 7	26	N/C
pin18 -- pin25 are ground			

IDE1/IDE2 : these two connectors are used to connect max. 4 devices through IDE cable.

1 □ ○ 2
3 ○ ○ 4

39 ○ ○ 40

＊
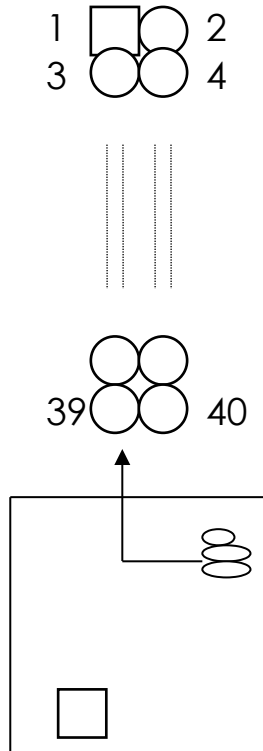
IDE1: pin31 is IRQ14;
IDE2: pin31 is IRQ15
or MIRQ0

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

Setup for Windows 95 : (Windows 95 version 950/950a/950b)

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 ！, 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 drive, 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 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-5030 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.

The update CMOS process is <u>mechanical power off</u> (or unplug the power cord) to ensure there is no power to the mainboard, firstly. Set JP8 to 'open', then the CMOS is cleared. Reset is set JP8 to 'close', power on the power switch (or plug the power cord).

1-2	NORMAL
2-3	CLEAR CMOS

* is default setting

JP8

NORMAL CLEAR
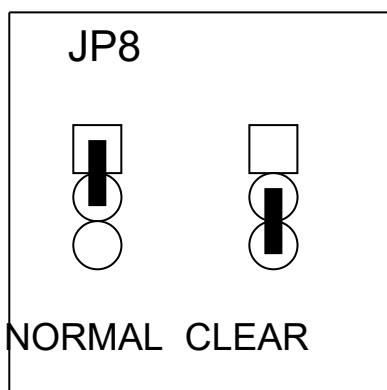
3-1 UPDATE BIOS PROCEDURES

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).bin"

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).bin", 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. 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 (ATC-5030)
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 tocontrol this screen. The other one section displays the itemshighlighted 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 (ATC-5030)
                  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 (2A59IA29-S672)
                   STANDARD CMOS SETUP
                  AWARD SOFTWARE, INC.
┌──────────────────────────────────────────────────────────────┐
│ Date (mm:dd:yy) : Tue,  Jan  13 1998                         │
│ Time(hh:mm:ss) : 11 : 47 : 11                                │
│ 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  :  64512K    │
│ Floopy 3 Mode support : Disabled │ Other Memory  :    384K   │
│                              │ ----------------------------- │
│ Video  : EGA/VGA             │ Total Memory     :  65536K    │
│ Halt On: All Errors          │                               │
├──────────────────────────────┴───────────────────────────────┤
│ 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
Primary Slave
Secondary Master
Secondary Slave

The categories identify the types of 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'** 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

Floopy 3 mode   This is the Japanese standard floppy drive.
 support   The standard stores 1.2MB in a 3.5" diskette

 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 detected 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 deter-
mined 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 (ATC-5030)
                      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 (ATC-5030)
                      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     │                                    ║
║ Typematic Delay(Msec)  : 250      │ Esc : Quit   ↑↓→←:Select Item      ║
║ Security Option        : Setup    │ F1  : Help   PU/PD/+/- : Modify    ║
║ PCI/VGA Palette Snoop  : Disabled │ F5  : Old Values  (SHIFT)F2 : Color║
║ Assign IRQ for VGA     : Enabled  │ F6  : Load BIOS Defaults           ║
║ OS select for DRAM>64MB : Non-OS2 │ F7  : Load Setup Defaults          ║
║ Report No FDD for WIN 95 : 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
Internal Cache
External Cache   These two categories speed up memory access.However, it depends on CPU/ chipset design.The default value

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

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 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.

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 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 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 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 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 support of onboard SCSI.

Boot Sequence   This category determines which drive to search first for the disk operating system (i.e. DOS). Default value is A, C, SCSI.

A, C, SCSI	System will first search for floppy disk drive then Hard disk drive, and the next is SCSI device.
C, A, SCSI	System will first search for hard disk drive then Floppy disk drive, and the next is SCSI device.
C, CDROM, A	System will first search for hard disk drive then CDROM drive, and the next is floppy disk drive.
CDROM, C, A	System will first search for CDROM drive then Hard disk drive, and the next is floppy disk drive.
D, A, SCSI	System will first search for secondary hard disk Drive then floppy disk drive, and the next is SCSI device.
E, A, SCSI	System will first search for third hard disk drive Then floppy disk drive, and the next is SCSI device.
F, A, SCSI	System will first search for fourth hard disk drive Then floppy disk drive, and the next is SCSI device.
SCSI, A, C	System will first search for SCSI device then Floppy disk drive, and the next is hard disk drive.
SCSI, C, A	System will first search for SCSI device then hard Disk drive, and the next is floppy disk drive.
C only	System will search for hard disk drive only.
LS/ZIP, C	System will first search for LS120 or IOMEGA (ZIP) drive, and the next is hard disk drive.

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

ROM PCI/ISA BIOS (ATC-5030)

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 (ATC-5030)

CHIPSET FEATURES SETUP

AWARD SOFTWARE, INC.

Auto Configuration	: Enabled		
DRAM Timing	: 60ns	CPU Core Voltage	: Auto
		CPU Warning	: Disabled
		Temperature	
DRAM Leadoff Timing	: 10/6/3	Current CPU Temperature	: 43°C/109°F
DRAM Read Burst (EDO/FP)	: x222/X333	Current CPUFAN Speed	: 0 RPM
DRAM Write Burst Timing	: x222	Current Vin (V)	: 2.90V
Fast EDO Lead Off	: Disabled		
Refresh RAS# Assertion	: 4 Clks		
Fast RAS to CAS Delay	: 3		
DRAM Page Idle Timer	: 2 Clks		
DRAM Enhanced Paging	: Enabled		
Fast MA to RAS# Delay	: 1 Clks		
SDRAM (CAS Lat/RAS-to-CAS)	: 2/2		
SDRAM Speculative Read	: Disabled		
System BIOS Cacheable	: Disabled		
Video BIOS Cacheable	: Disabled	Esc: Quit	:Select Item
8-bit I/O Recovery Time	: 1	F1 : Help	PU/PD/+/-:Modify
16-bit I/O Recovery Time	: 2	F5 : Old Values	(Shift)F2 :Color
Memory Hole At 15M-16M	: Disabled	F6 :Load BIOS Defaults	
PCI 2.1conpliance	: Disabled	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 design.
Fast 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 (EDO/FP) DRAM Write Burst Timing	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.
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 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.

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

* are only enabled under ATX power environment

ROM PCI/ISA BIOS (ATC-5030)

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 (ATC-5030)

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		
Resume by Ring	: Enabled	Esc: Quit ↑↓→← :Select Item	
Resume by Alarm	: Disabled	F1 : Help PU/PD/+/- : Modify	
		F5 : Old values (Shift) F2: Color	
IRQ 8 Break Suspend	: Disabled	F6 : Load BIOS Defaults	
		F7 : Load Setup 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 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 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 present to 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 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

This screen configures the PCI Bus slots.

```
                    ROM PCI/ISA BIOS (ATC-5030)
                       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 (ATC-5030)
                       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     ║
║                                       │ F7 : Load Setup Defaults    ║
║                                       │                            ║
╚═══════════════════════════════════════╧═══════════════════════════╝
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Resource Controlled by	The Award Plug and Play BIOS has the capacity to automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play 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 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 Features Setup".

```
                    ROM PCI/ISA BIOS (ATC-5030)
                        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 .....             ║
╚═══════════════════════════════════════════════════════════════╝
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```
                    ROM PCI/ISA BIOS (ATC-5030)
                     INTEGRATED PERIPHERALS
                       AWARD SOFTWARE, INC.
╔═══════════════════════════════════════════════════════════════╗
║ IDE HDD Block Mode       : Enabled │ Onboard Parallel Port  : 378/IRQ7 ║
║ IDE Primary Master PIO   : Auto    │ Parallel Port 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│                                 ║
║                                    │                                 ║
║ Onboard FDC Controller   : Enabled │ Esc: Quit  ↑↓→←  :Select Item   ║
║ Onboard Serial Port 1    : 3F8/IRQ4│ F1 : Help      PU/PD/+/- : Modify ║
║ Onboard Serial Port 2    : 2F8/IRQ3│ F5 : Old Values (Shift) F2: Color ║
║ UART 2 Mode              : Standard│ 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 PCI IDE
On-Chip Secondary PCI IDE   This setup item allows you either to 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.

ROM PCI/ISA BIOS (ATC-5030)
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 Mster :

Select Primary Master Option (N=Skip) : N

Options	Size	CYLS	Head	PRECOMP	LANDZ	Sector	Mode
2(Y)	1280	620	64	0	2481	63	LBA
1	1281	2482	16	65535	2481	63	NORMAL
3	1280	620	64	65535	2481	63	LARGE

Note : Some Oses (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 when you turn your computer on.

ROM PCI/ISA BIOS (ATC-5030)
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 the BIOS ROM to get better performance. 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 'open'. Then reload the system.

IDD HDD AUTO DETECTION

This allows you to detect IDE hard drives' 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

<p style="text-align:center">※※**TECHNICAL SUPPORT REQUEST FORM**※※</p>

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-5030   Date of Purchase : _____

Serial No : _____

HARDWARE :

	BRAND	MODEL	SPEED	Q'TY
CPU				
SIM Module				
DIMM Module				
PB SRAM on Board				
TAG SRAM				

SIMM :_____MB (__ EDO, __FPM) DIMM :_____MB (__ SDRAM, __EDO)

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 _____

Other Add-on Cards Information:

Add-on Card	Bus Interface	Model	Remark

Error Description :

-5030-010000-80120