FCC Compliance Statement:

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna

-Move the equipment away from the receiver

-Plug the equipment into an outlet on a circuit different from that to which the receiver is connected

-Consult the dealer or an experienced radio/television technician for additional suggestions

You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void Your authority to operate such equipment.

This device complies with Part 15 of the FCC Rules. Operation is subjected to the following two conditions 1) this device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation.

DECLARATION OF CONFORMITY
Per FCC Part 2 Section 2. 1077(a)

FC

Responsible Party Name: G.B.T. INC.

**Address: 18305 Valley Blvd., Suite#A
LA Puent, CA 91744**

Phone/Fax No: (818) 854- 9338/ (818) 854-9339

hereby declare s that the product

Product Name: Mother Board

Model Number: GA-6CXDW/GA-6CXD

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109(a), Class B Digital Device

Supplementary Information:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful and (2) this device must accept any inference received, including that may cause undesired operation.

Representative Person's Name: _____ERIC LU_____

Signature: _____Eric Lu_____

Date: _____Mar. 29, 2000_____

Declaration of Conformity

We, Manufacturer/Importer
(full address)

G.B.T. Technology Träding GMbH
Ausschlager Weg 41, 1F, 20537 Hamburg, Germany

declare that the product
(description of the apparatus, system, installation to which it refers)

Mother Board
GA-6CXDW/GA-6CXD

is in conformity with
(reference to the specification under which conformity is declared)
in accordance with 89/336 EEC-EMC Directive

☐ **EN 55011**	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM high frequency equipment	☐ **EN 61000-3-2*** ☒ **EN60555-2**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Harmonics"
☐ **EN55013**	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	☐ **EN61000-3-3*** ☒ **EN60555-3**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"
☐ **EN 55014**	Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus	☒ **EN 50081-1**	Generic emission standard Part 1: Residual, commercial and light industry
		☒ **EN 50082-1**	Generic immunity standard Part 1: Residual, commercial and light industry
☐ **EN 55015**	Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaries	☐ **EN 55081-2**	Generic emission standard Part 2: Industrial environment
☐ **EN 55020**	Immunity from radio interference of broadcast receivers and associated equipment	☐ **EN 55082-2**	Generic immunity standard Part 2: Industrial environment
☒ **EN 55022**	Limits and methods of measurement of radio disturbance characteristics of information technology equipment	☐ **ENV 55104**	Immunity requirements for household appliances tools and similar apparatus
☐ **DIN VDE 0855** ☐ **part 10** ☐ **part 12**	Cabled distribution systems; Equipment for receiving and/or **distribution** from sound and television signals	☐ **EN 50091- 2**	EMC requirements for uninterruptible power systems (UPS)
☒ **CE marking**		$C\epsilon$	(EC conformity marking)

The manufacturer also declares the conformity of above mentioned product
with the actual required safety standards in accordance with LVD 73/23 EEC

☐ **EN 60065**	Safety requirements for mains operated electronic and related apparatus for household and similar general use	☐ **EN 60950**	Safety for information technology equipment including electrical business equipment
☐ **EN 60335**	Safety of household and similar electrical appliances	☐ **EN 50091-1**	General and Safety requirements for uninterruptible power systems (UPS)

Manufacturer/Importer

(Stamp)

Date : Mar. 29, 2000

Signature : *Rex Lin*

Name : Rex Lin

6CXD(W)

Dual Pentium® II/*!!!* Processor Motherboard

USER'S MANUAL

Dual Pentium® II/*!!!* Processor Motherboard
REV. 1.0 First Edition
R-10-01-000330

How This Manual Is Organized

This manual is divided into the following sections:

1) Revision History	Manual revision information
2) Item Checklist	Product item list
3) Features	Product information & specification
4) Hardware Setup	Instructions on setting up the motherboard
5) Performance & Block Diagram	Product performance & block diagram
6) Dual BIOS	Dual BIOS
7) BIOS Setup	Instructions on setting up the BIOS software
8) Appendix	General reference

Table Of Contents

Revision History

Revision	Revision Note	Date
1.0	Initial release of the 6CXD(W) motherboard user's manual.	Mar.2000

The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to update the information contained herein. Third-party brands and names are the property of their respective owners.

Item Checklist

☑The 6CXD(W) Motherboard

☑Cable for IDE / Floppy device

☑CD (IUCD) for motherboard utilities (If you want to use LDCM to view dual CPU Health, please run Patch file.)

☐Internal COM 2 Cable (Optional)

☐Internal USB Cable (Optional)

☑Cable for SCSI device (Optional)

☑**External LVD SCSI port adapter** (Optional)
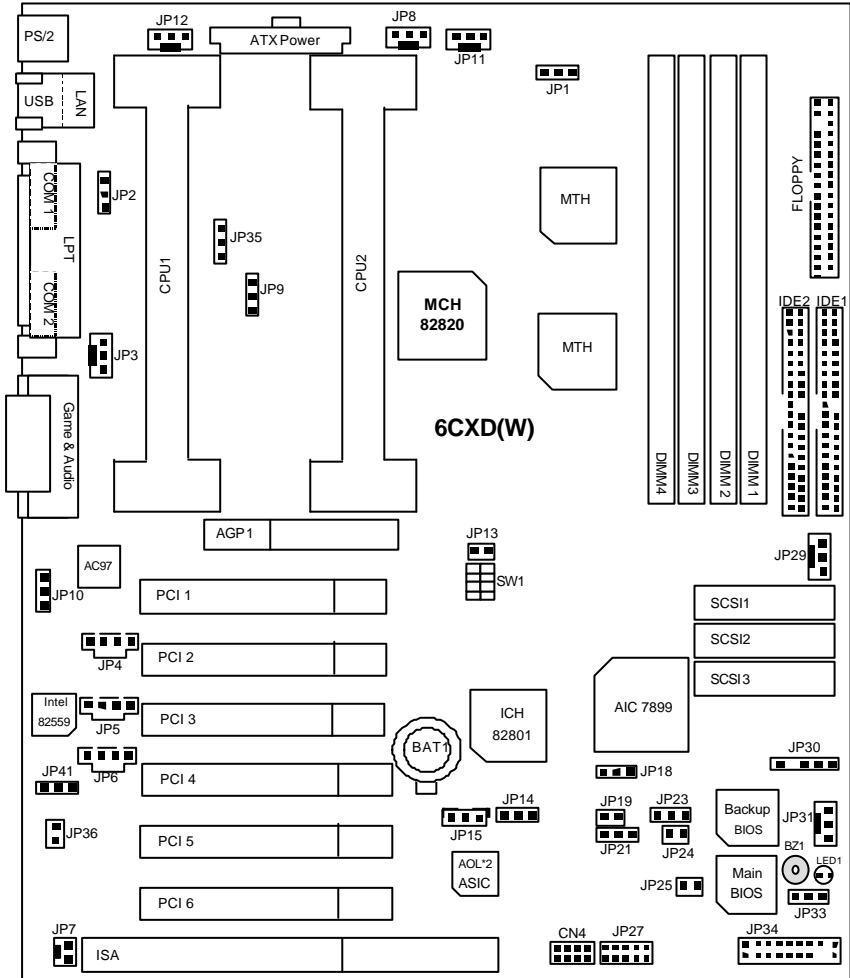
☑6CXD(W) User's Manual

Summary Of Features

Form factor	•	30.7 cm x 28.8 cm ATX Size form factor, 6 layers PCB
CPU	• •	Pentium® II/!!! Processor 512 KB 2nd cache in CPU
Chipset	• • •	82820 HOST / AGP / RDRAM Controller 82805AA Memory translator Hub 82801AA(ICH) I/O Controller Hub
Clock Generator	• •	Supports 100 / 133MHz 105/114/120/128/138/140/142/148/145/152/156/162 /170/180/200 MHz clocks (reserved)
Memory	• • •	4 168-pin DIMM Sockets Supports PC-100 SDRAM 64MB~2GB(Max) Supports only 3.3V SDRAM DIMM
I/O Control	•	Winbond W83627
Slots	• • •	1 Universal AGP slot (1X / 2X / 4X 1.5V/3.3V device support) 6 32-bit Master PCI Bus slots 1 16-bit ISA Bus slot (Optional)
On-Board IDE	• •	An IDE controller on the Intel® 82801AA (ICH) PCI chipset provides IDE HDD/ CD-ROM with PIO, Bus Master (Ultra DMA33/ATA66) operation modes Can connect up to four IDE devices
On-Board Peripherals	• • • • •	1 Floppy port supports 2 FDD with 360K, 720K, 1.2M, 1.44M and 2.88M bytes 1 Parallel ports supports SPP/EPP/ECP mode 2 Serial Ports (COM 1 & COM 2) 4 USB ports 1 IrDA connector for IR/CIR (Optional)
Hardware Monitor	• • • • • •	CPU/Power Supply/System Fan Revolution detect CPU / Power / System Fan Control System Voltage Detect CPU Overheat Warning Chassis Intrusion Detect Display Actual Current Voltage
PS/2 Connector	•	PS/2® Keyboard interface and PS/2® Mouse interface

BIOS	• Licensed AMI BIOS, 4M bit FLASH ROM
	• Support Dual BIOS
On-board SCSI	• AIC-7899 Dual Channel Ultra160 (Optional)
On-board Sound	• AC'97 CODEC
	• Line In/Line Out/Mic In/AUX In/CD In/TEL/Game Port
On-board LAN	• Intel® GD 82559(Optional)
	• Alert On LAN*2 ASIC(Optional)
Additional Features	• Internal/External Modem Wake up
	• Wake On LAN
	• Keyboard Password Wake up
	• System after AC back
	• Poly fuse for keyboard, USB, Game port over- current protection

6CXD(W) Motherboard Layout

6CXD(W) Motherboard

| JP21 (Safe mode/ Recovery / Normal) | P.25 |

JP23 (SCSI LED)[Optional]	P.26
JP24 (Top Block Lock)	P.26
JP25 (FWH Write Protection)	P.27
JP33 (Internal Buzzer Connector) [Optional]	P.27
BAT1 (Battery)	P.28

CPU Speed Setup

The CPU bus frequency can be switched at 100MHz and 133MHz by adjusting JP13 & SW 1. The CPU ratio selection is control by BIOS.

JP13& SW1: CPU Speed Setup   (O: ON / X: OFF)

JP13	SW1				CPU	CPU/2	PCI	AGP	IOAPIC	Memory Clock
	S1	S2	S3	S4						
O	X	X	X	X	100/133 /Auto					
X	X	X	X	X	133.3	66.7	33.3	66.7	16.7	100
X	X	X	X	O	138	69	34.5	69	17	105
X	X	X	O	X	142.9	71.5	35.7	71.5	17.9	109
X	X	X	O	O	148	74	37	74	18.5	114
X	X	O	X	X	152.5	76.2	38.1	76.2	19.1	119
X	O	X	X	X	100.2	50.1	33.4	66.8	16.7	100
X	O	X	X	O	105	52.5	35	70	17.5	105
X	O	X	O	X	114	57	37.8	75.7	18.9	113
X	O	X	O	O	120	60	40	80	20	120
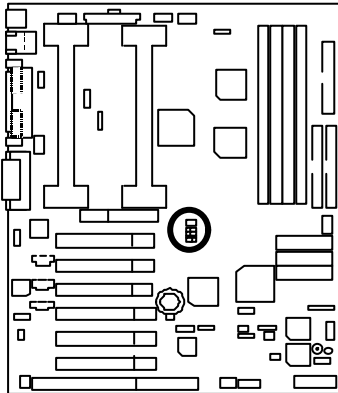
☞ If you use single CPU, please insert CPU into the CPU 1 slot and then insert terminator card into the CPU 2 slot.

Connectors

Game & Audio Port

Game Port

Line Out
Line In
MIC In
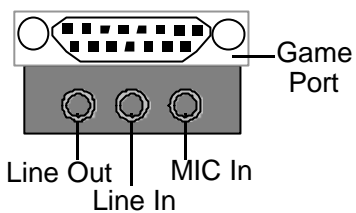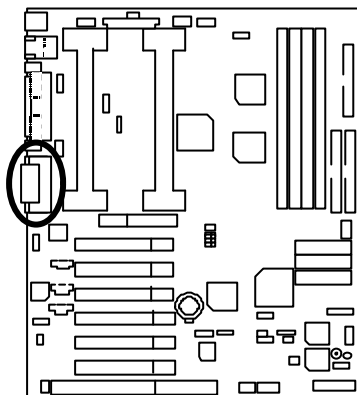
COM 1 / COM 2 / LPT Port

LPT Port

COM 1   COM 2
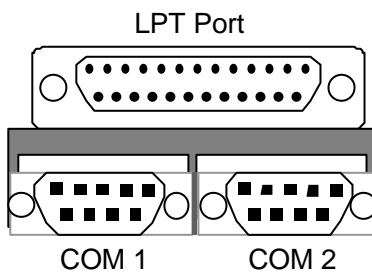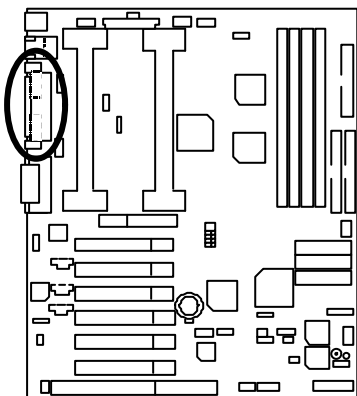
CN1 (Back): USB & LAN Connector (LAN is optional)

Pin No.	Definition
1	USB V0
2	USB D0-
3	USB D0+
4	GND
5	USB V1
6	USB D1-
7	USB D1+
8	GND

1 – Green LED
(LAN Link LED)

2 – Yellow LED
(LAN Active LED)
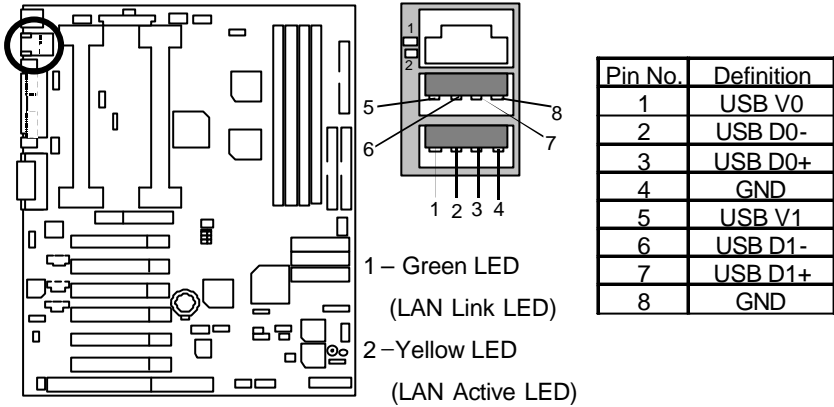
PS/2 Keyboard & PS/2 Mouse Connector

PS/2 Mouse

PS/2 Keyboard

PS/2 Mouse/ Keyboard	
Pin No.	Definition
1	Data
2	NC
3	GND
4	VCC(+5V)
5	Clock
6	NC
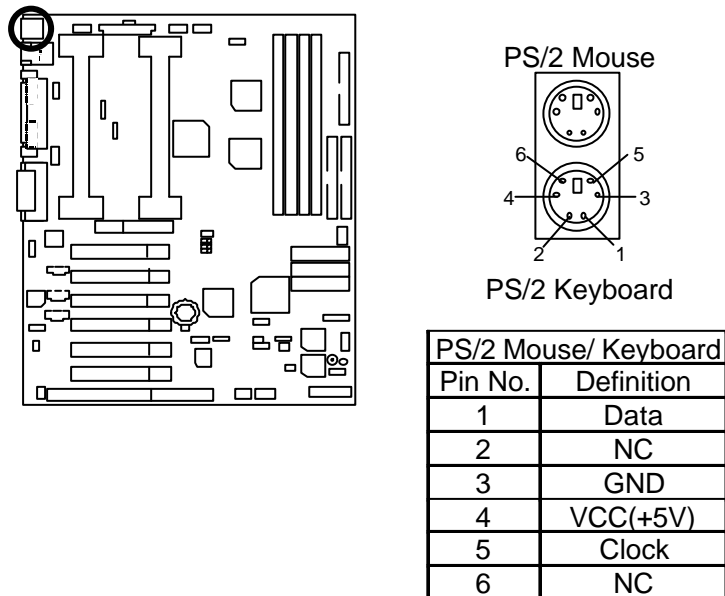
JP12: CPU1 Fan
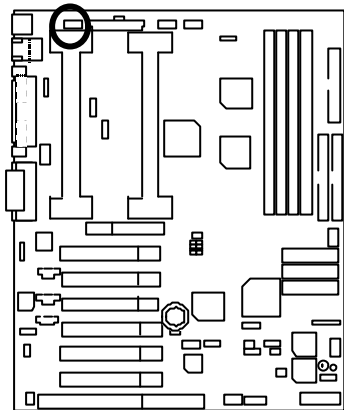
Pin No.	Definition
1	GND
2	+12V
3	SENSE

JP11: CPU2 Fan
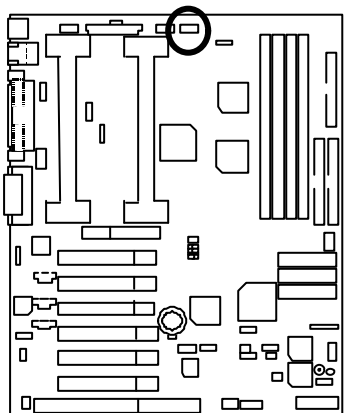
Pin No.	Definition
1	GND
2	+12V
3	SENSE

JP3: System Fan1
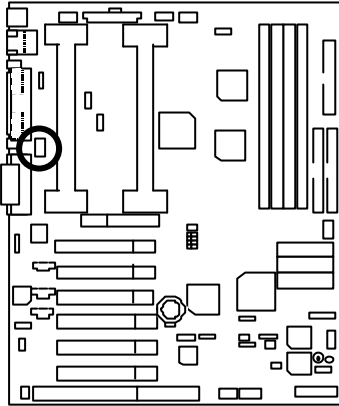
Pin No.	Definition
1	GND
2	+12V
3	SENSE

JP29: System Fan2
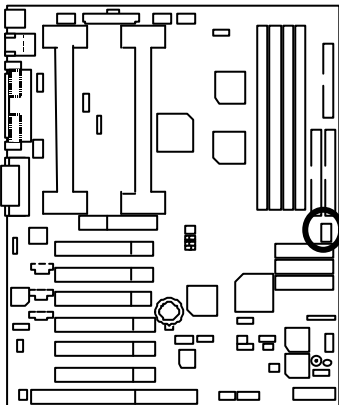
Pin No.	Definition
1	GND
2	+12V
3	SENSE

JP31: System Fan3
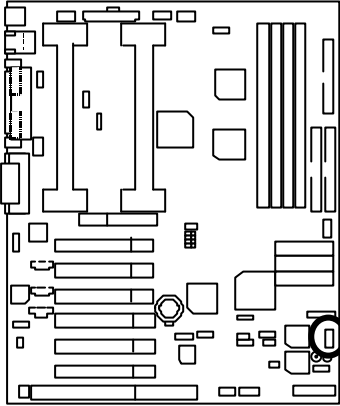
Pin No.	Definition
1	GND
2	+12V
3	SENSE

JP8: Power Fan
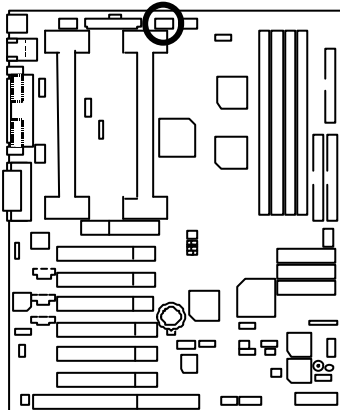
Pin No.	Definition
1	GND
2	+12V
3	SENSE

ATX Power

| 20 | | | | | | | | | 11 |
| 10 | | | | | | | | | 1 |
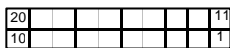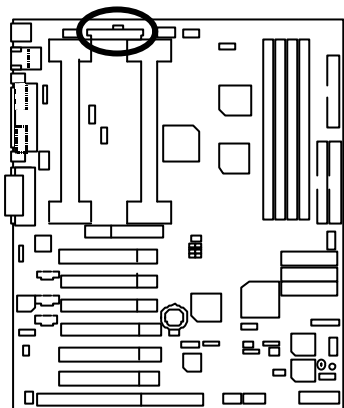
Pin No.	Definition
3,5,7,13, 15-17	GND
1,2,11	3.3V
4,6,19,20	VCC
10	+12V
12	-12V
18	-5V
8	Power Good
9	5V SB stand by+5V
14	PS-ON(Soft On/Off)

JP27: IR/CIR (Optional)

2   10
1   9
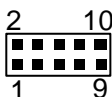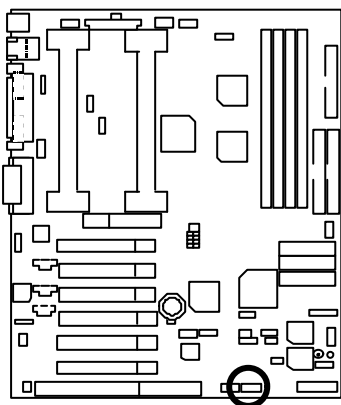
Pin No.	Definition
1	VCC
2	NC
3	IRRX
4	GND
5	IRTX
6	NC
7	CIRRX
8	VCC
9	NC
10	NC

Floppy Port
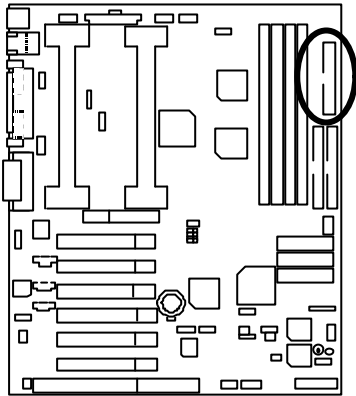
RED LINE

IDE1 (Primary), IDE2 (Secondary) Port
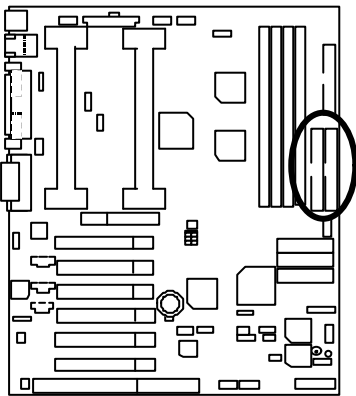
RED LINE
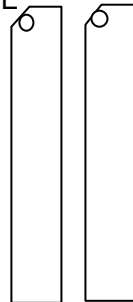
IDE 2   IDE 1

JP4: AUX-IN
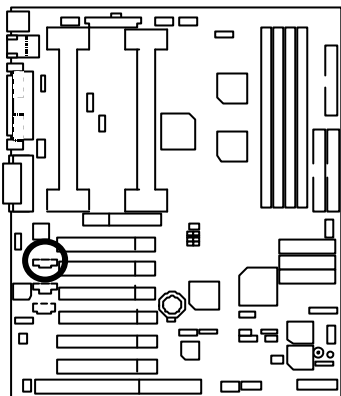
Pin No.	Definition
1	AUX-L
2	GND
3	GND
4	AUX-R

JP5: CD Audio Line In
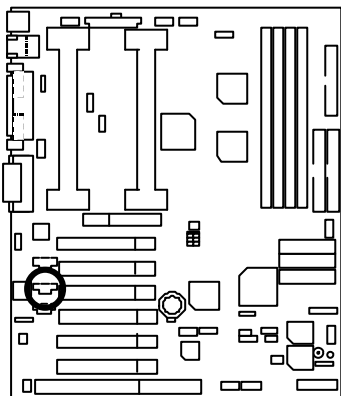
Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R

JP6: TEL : The connector is for Modem with internal voice connector
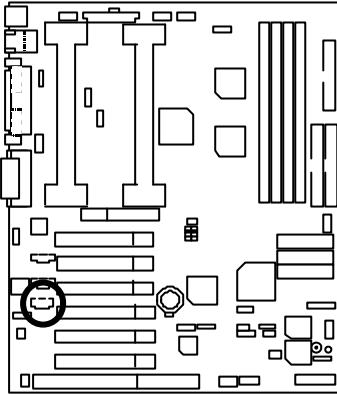
Pin No.	Definition
1	Signal-In
2	GND
3	GND
4	Signal-Out

JP15: Wake On LAN
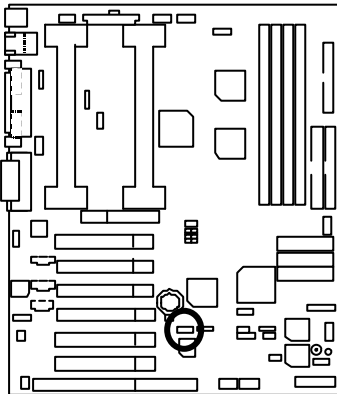
Pin No.	Definition
1	+5V SB
2	GND
3	Signal

CN4 (Front): USB Port


```
8 ■ ■ ■ ■ 5
1 ■ ■ ■ ■ 4
```
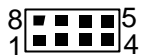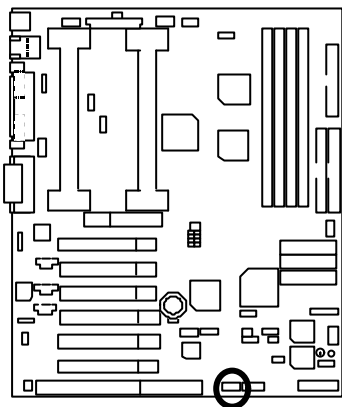
Pin No.	Definition
1	VCC
2	USB D0-
3	USB D0+
4	GND
5	VCC
6	USB D1-
7	USB D1+
8	GND

JP30: SMBUS Port


```
1
■ ■ ■ ■
```
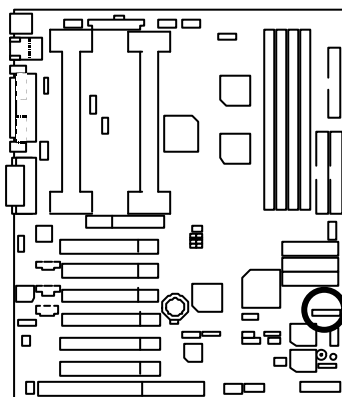
Pin No.	Definition
1	SCL
2	NC
3	GND
4	SDA
5	VCC

JP7: Ring Power On (Internal Modem Card Wake Up)
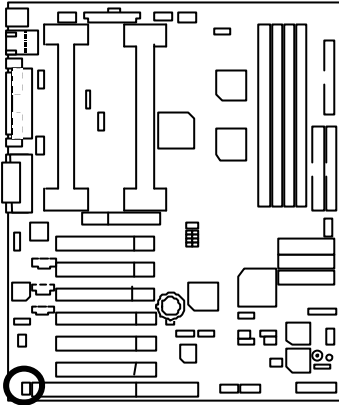
Pin No.	Definition
1	Signal
2	GND

Panel And Jumper Definition

JP34: For 2x11 Pins Jumper
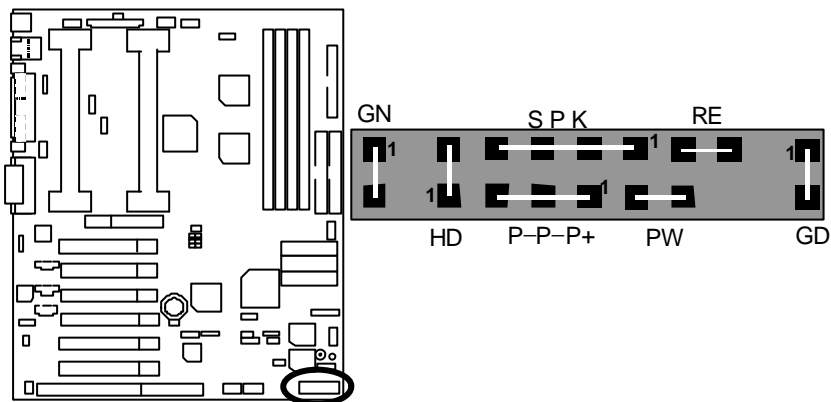
GN (Green Switch)	Open: Normal Operation
	Close: Entering Green Mode
GD (Green LED)	Pin 1: LED anode(+)
	Pin 2: LED cathode(−)
HD (IDE Hard Disk Active LED)	Pin 1: LED anode(+)
	Pin 2: LED cathode(−)
SPK (Speaker Connector)	Pin 1: VCC(+)
	Pin 2- Pin 3: NC
	Pin 4: Data(−)
RE (Reset Switch)	Open: Normal Operation
	Close: Reset Hardware System
P+P−P−(Power LED)	Pin 1: LED anode(+)
	Pin 2: LED cathode(−)
	Pin 3: LED cathode(−)
PW (Soft Power Connector)	Open: Normal Operation
	Close: Power On/Off

JP1: Over Clock Voltage Control (Optional)
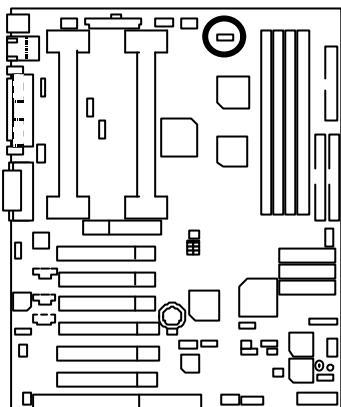
Pin No.	Definition
1-2 close	Over Clock
2-3 close	Normal (Default)

Note:
We don't recommend you to set up this function, because "over clock voltage" enhancement will hurt the chipset (MCH and MTH).

JP2: PS/2 Keyboard/Mouse Power On
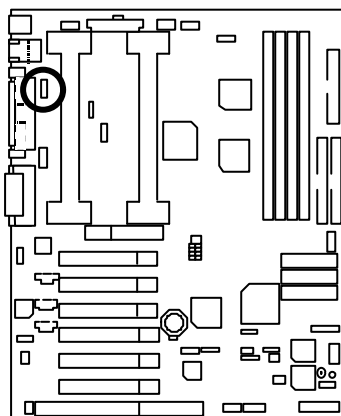
Pin No.	Definition
1-2 close	PS/2 Keyboard/Mouse Wakeup Enabled
2-3 close	Normal (Default)

JP9/JP35: CPU Over Voltage Select **(Magic Booster)**
(When JP9/JP35 set "1-2 close", CPU Voltage is rising 10%)
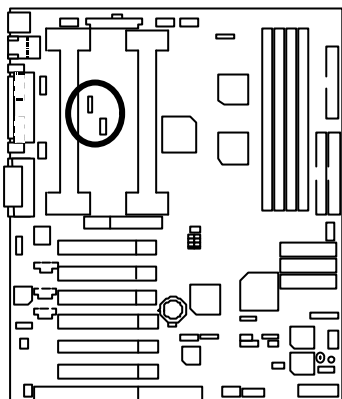
Pin No.	Definition
1-2 close	Turbo
2-3 close	Normal (Default)

JP10: AC'97 Sound
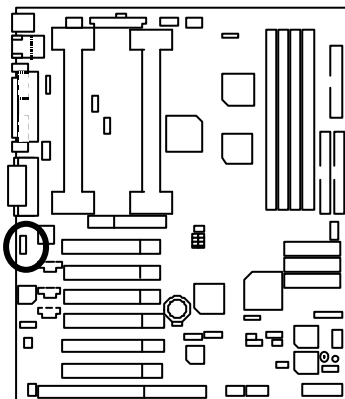
Pin No.	Definition
1-2 close	AC'97 Enabled (Default)
2-3 close	AC'97 Disabled

JP41: Ethernet 82559 (Optional)
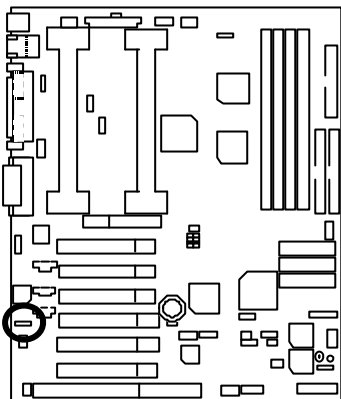
Pin No.	Definition
1-2 close	Hardware Enabled (Default)
2-3 close	Hardware Disabled

JP36: Case Open
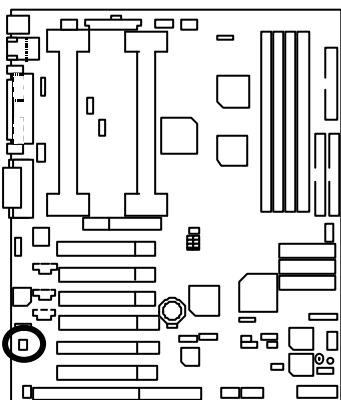
Pin No.	Definition
1	Signal
2	GND

JP14: Clear CMOS Function

1 🔲🔳🔳◻
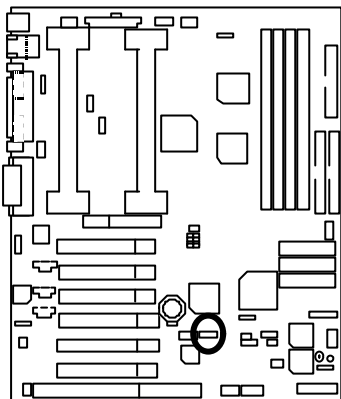
Pin No.	Definition
1-2 close	Normal (Default)
2-3 close	Clear CMOS

JP18: SCSI (Optional)

1
🔳🔳🔳◻
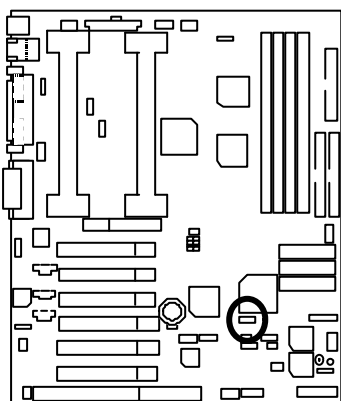
Pin No.	Definition
1-2 close	SCSI Enabled (Default)
2-3 close	SCSI Disabled

JP19: Timeout Reboot Function
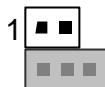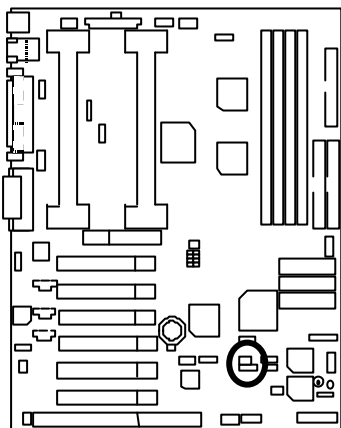
Pin No.	Definition
Open	Timeout Reboot Enabled
Close	Timeout Reboot Disabled

JP21: Safe mode/Recovery/Normal
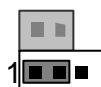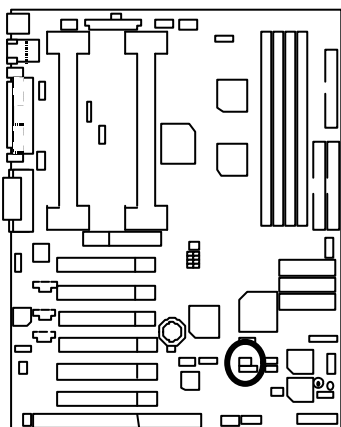
Pin No.	Definition
1-2close	Normal (Default)
2-3close	Safe mode
1-2-3open	Recovery

JP23: SCSI LED (Optional)

1 ▪▪▪
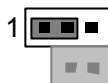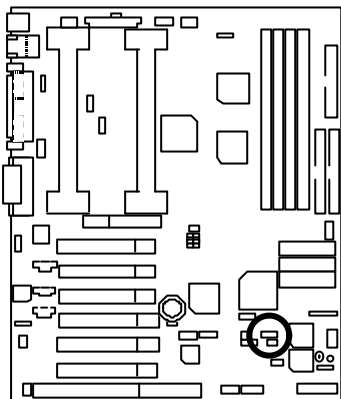
Pin No.	Definition
1-2 close	Enabled (Default)
2-3 close	Disabled

JP24: Top Block Lock

1 ▪▪
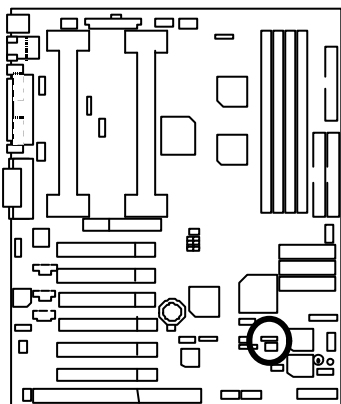
Pin No.	Definition
Open	Top Block Lock
Close	Top Block Unlock (Default)

JP25: FWH Write Protection

1
■ ■
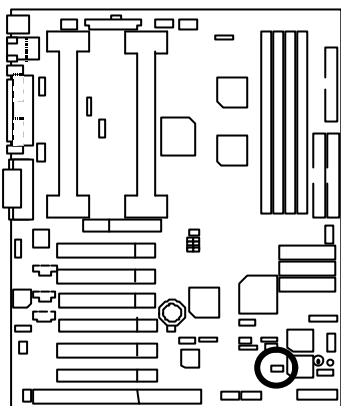
Pin No.	Definition
Close	Write Protection
Open	Normal (Default)

☛Please set Jumper JP25 to "Open" to enabled BIOS write function when you update new BIOS or new device.

JP33: Internal Buzzer Connector (Optional)

1 ■ ■ ■
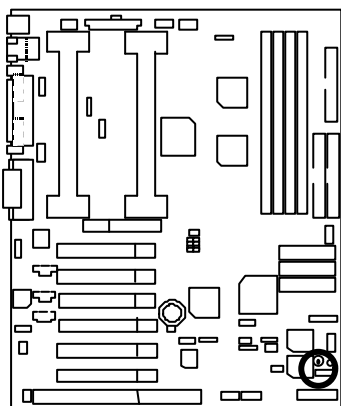
Pin No.	Definition
1-2 Close	Internal Buzzer Enabled (Default)
2-3 Close	Internal Buzzer Disable

BAT1: Battery
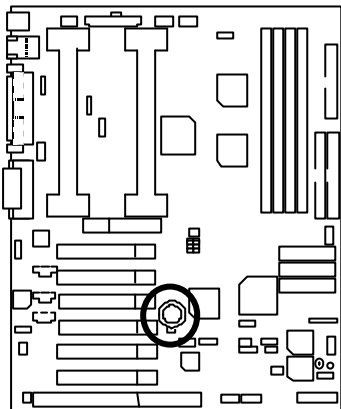
☞ Danger of explosion if battery is incorrectly replaced.
☞ Replace only with the same or equivalent type recommended by the manufacturer.
☞ Dispose of used batteries according to the manufacturer's instructions.

Performance List

The following performance data list is the testing results of some popular benchmark testing programs. These data are just referred by users, and there is no responsibility for different testing data values gotten by users. (The different Hardware & Software configuration will result in different benchmark testing results.)

- CPU   Pentium® *!!!* 800MHz processor x 2
- DRAM   (128 x 2)MB SDRAM (Buffalo KM48S8030CT-GA)
- CACHE SIZE   256 KB included in CPU
- DISPLAY   GA-GF2560 (32MB)
- STORAGE   Onboard IDE (Quantum KA13600AT) (13.6GB)
- O.S.   Windows NT™ 4.0 SP6a
- DRIVER   Display Driver at 1024 x 768 x 16bit colors x 75Hz.

Processor	Intel Pentium® *!!!*	
	800MHz (133 x 6)	800MHz (100 x 8)
Winbench99		
CPU mark99	68.5	67.5
FPU Winmark 99	4270	4280
Business Disk Winmark 99	5270	5380
Hi-End Disk Winmark 99	12800	12500
Business Graphics Winmark 99	379	370
Hi-End Graphics Winmark 99	733	723
Winstone99		
Business Winstone99	42.7	42.4

Hi-End Winstone99	44.4	44.2

Block Diagram
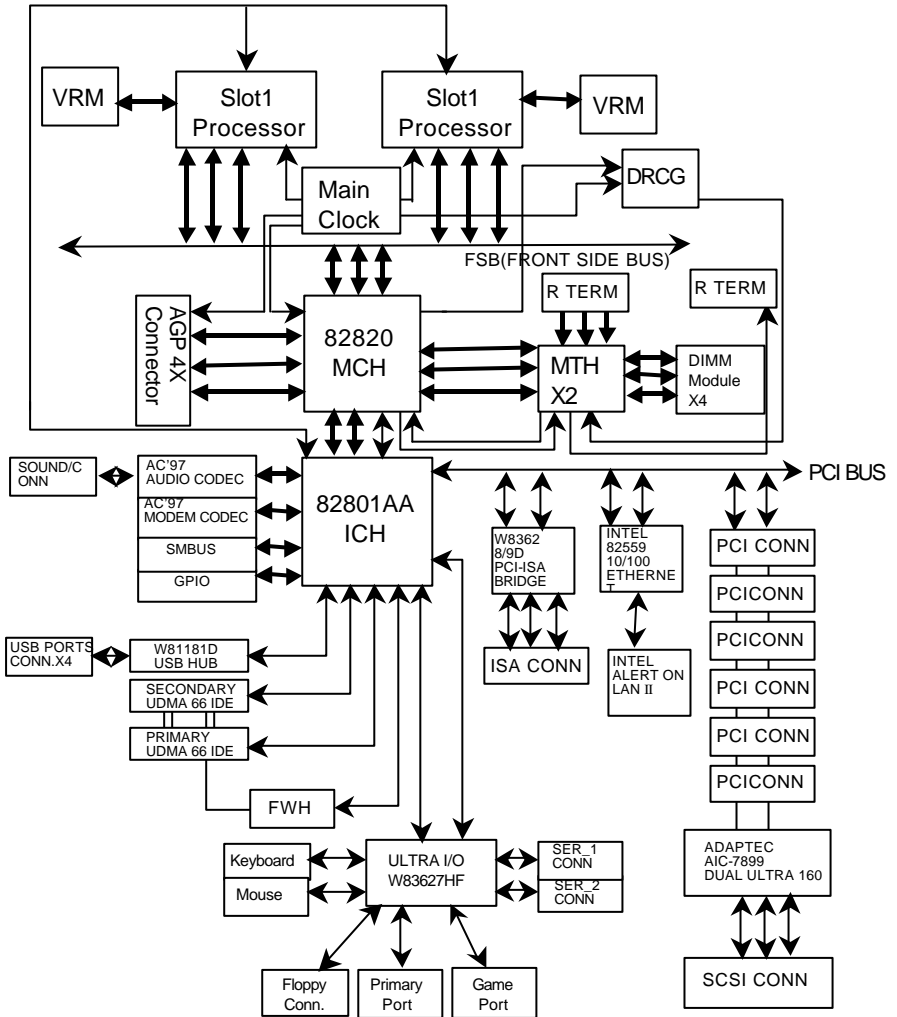
Dual BIOS Introduction

A.   What is Dual BIOS Technology?

Dual BIOS means that there are two system BIOS (ROM) on the motherboard, one is the Main BIOS and the other is Backup BIOS. Under the normal circumstances, the system works on the Main BIOS. If the Main BIOS is corrupted or damaged, the Backup BIOS can take over while the system is powered on. This means that your PC will still be able to run stably as if nothing has happened in your BIOS.

B.   How to use Dual BIOS?

a. Boot Screen

b. AMI Dual BIOS Flash ROM Programming Utility

```
┌─────────────────────────────────────────────────────────────┐
│          AMI Dual BIOS Flash ROM Programming Utility          │
├─────────────────────────────────────────────────────────────┤
│ Boot From……………………….. Main BIOS                           │
│ Main ROM Type…………………  Intel N82802AB                      │
│ Backup ROM Type………………  Intel N82802AB                      │
│                                                               │
│         Wide Range Protection Disable                         │
│                     Boot From Main BIOS                       │
│                 Auto Recovery Enable                          │
│                  Halt On Error Disable                        │
│              Copy Main ROM Data to Backup                     │
│                  Load Default Settings                        │
│                  Save Settings to CMOS                        │
│                                                               │
│                                                               │
├─────────────────────────────────────────────────────────────┤
│ PgDn/PgUp:Modify(Enter:Run) ↑↓:Move  ESC:Reset  F10:Power Off │
└─────────────────────────────────────────────────────────────┘
```
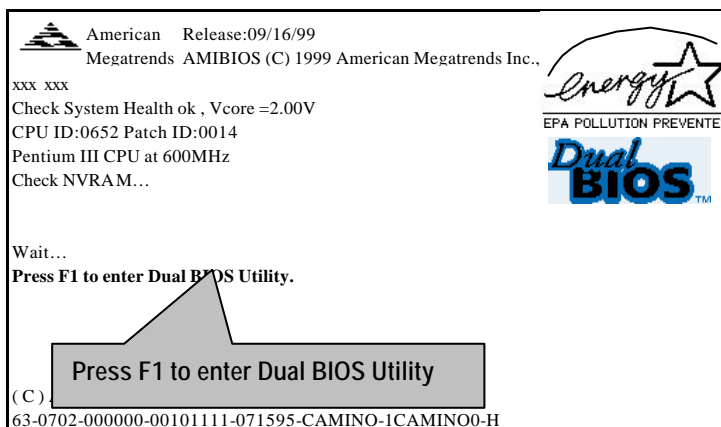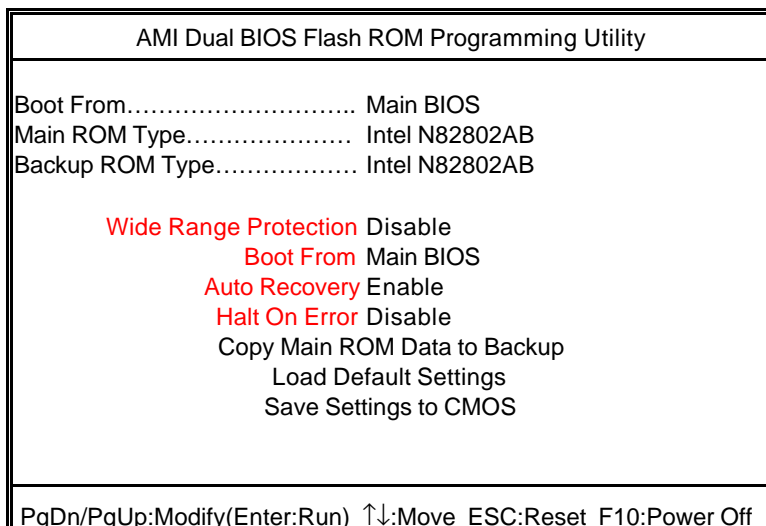
c. Dual BIOS Item explanation:

BIOS will auto detect:

Boot From : Main BIOS
Main ROM Type : Intel N82802AB
Backup ROM Type : Intel N82802AB

Wide Range Protection: Disable(Default), Enable

Status 1:
   If any failure (ex. Update ESCD failure, checksum error or reset…) occurs in the Main
   BIOS , just before the Operating System is loaded and after the power is on, and that the
   Wide Range Protection is set to "Enable", the PC will boot from Backup BIOS automatically.

Status 2:
   If the ROM BIOS on peripherals cards(ex. SCSI Cards, LAN Cards,..) emits signals to
   request restart of the system after the user make any alteration on it, the boot up BIOS will
   not be changed to the Backup BIOS.

Boot From : Main BIOS (Default), Backup BIOS

Status 1:

The user can set to boot from main BIOS or Backup BIOS.

Auto Recovery : Enabled(Default), Disabled

When one of the Main BIOS or Backup BIOS occurs checksum failure, the working BIOS will automatically recover the BIOS of checksum failure.

(In the Power Management Setup of the BIOS Setting, if ACPI Suspend Type is set to Suspend to RAM, the Auto Recovery will be set to Enable automatically.)

(If you want to enter the BIOS setting, please press **"Del"** key when the boot screen appears.)

Halt On Error : Disable(Default), Enable

If the BIOS occurs a checksum error or the Main BIOS occurs a WIDE RANGE PROTECTION error and Halt On BIOS Defects set to Enable, the PC will show messages on the boot screen, and the system will pause and wait for the user's instruction.

If Auto Recovery :**Disable**, it will show *<or the other key to continue.>*
If Auto Recovery :**Enable**, it will show *<or the other key to Auto Recover.>*

Copy Main ROM Data to Backup

Backup message:

> ***Are you sure to copy BIOS?***
> ***[Enter] to continue or [Esc] to abort …***

The means that the Main BIOS works normally and could automatically recover the Backup BIOS. Or the means that the Backup BIOS works normally and could automatically recover the Main BIOS.

(This auto recovery utility is set by system automatically and can't be changed by user.)

DualBIOS^{TM} Technology FAQ

GIGABYTE Technology is pleased to introduce DualBIOS technology, a hot spare for your system BIOS. This newness "Value-added" feature, in a long series of innovations from GIGABYTE, is available on GA-6CXD(W) motherboard. Future GIGABYTE motherboards will also incorporate this innovation.

What's DualBIOS^{TM}?

On GIGABYTE motherboards with DualBIOS there are physically two BIOS chips. For simplicity we'll call one your "Main BIOS" and the other we'll call your "Backup" BIOS (your "hot spare"). If your Main BIOS fails, the Backup BIOS almost automatically takes over on your next system boot. Almost automatically and with virtually zero down time! Whether the problem is a failure in flashing your BIOS or a virus or a catastrophic failure of the Main BIOS chip, the result is the same - the Backup BIOS backs you up, almost automatically.

I. Q: What is DualBIOS™ technology?

Answer:
DualBIOS technology is a patented technology from Giga-Byte Technology. The concept of this technology is based on the redundancy and fault tolerance theory. DualBIOS™ technology simply means there are two system BIOSes (ROM) integrated onto the motherboard. One is a main BIOS, and the other is a backup BIOS. The mainboard will operate normally with the main BIOS, however, if the main BIOS is corrupt or damaged for various reasons, the backup BIOS will be automatically used when the system powered-On. Your PC will operate as before the main BIOS was damaged, and is completely transparent to the user.

II. Q: Why does anyone need a motherboard with DualBIOS™ technology?
Answer:
In today's systems there are more and more BIOS failures. The most common reasons are virus attacks, BIOS upgrade failures, and/or deterioration of the BIOS (ROM) chip itself.

1. New computer viruses are being found that attack and destroy the system BIOS. They may corrupt your BIOS code, causing your PC to be unstable or even not boot normally.
2. BIOS data will be corrupted if a power loss/surge occurs, or if a user resets the system, or if the power button is pressed during the process of performing a system BIOS upgrade.
3. If a user mistakenly updates their mainboard with the incorrect BIOS file, then the system may not be able to boot correctly. This may cause the PC system hang in operation or during boot.
4. A flash ROM's life cycle is limited according to electronic characteristics. The modern PC utilizes the Plug and Play BIOS, and is updated regularly. If a user changes peripherals often, there is a slight chance of damage to the flash ROM.

With Giga-Byte Technology's patented DualBIOS™ technology you can reduce the possibility of hangs during system boot up, and/or loss BIOS data due to above reasons. This new technology will eliminate valuable system down time and costly repair bills cause by BIOS failures.

III. Q: How does DualBIOS™ technology work?

Answer:

1. DualBIOS™ technology provides a wide range of protection during the boot up procedure. It protects your BIOS during system POST, ESCD update, and even all the way to PNP detection/assignment.

2. DualBIOS™ provides automatic recovery for the BIOS. When the first BIOS used during boot up does not complete or if a BIOS checksum error occurs, boot-up is still possible. In the DualBIOS™ utility, the "Auto Recovery" option will guarantee that if either the main BIOS or backup BIOS is corrupted, the DualBIOS™ technology will use the good BIOS and correct the wrong BIOS automatically.

3. DualBIOS™ provides manual recovery for the BIOS. DualBIOS™ technology contains a built-in flash utility, which can flash your system BIOS from backup to main and/or visa versa. There is no need for an OS-dependent flash utility program.

4. DualBIOS™ contains a one-way flash utility. The built-in one-way flash utility will ensure that the corrupt BIOS is not mistaken as the good BIOS during recovery and that the correct BIOS (main vs. backup) will be flashed. This will prevent the good BIOS from being flashed.

IV. Q: Who Needs DualBIOS™ technology?
Answer:

1. Every user should have DualBIOS™ technology due to the advancement of computer viruses. Everyday, there are new BIOS-type viruses discovered that will destroy your system BIOS. Most commercial products on the market do not have solutions to guard against this type of virus intrusion. The DualBIOS™ technology will provide a state-of-the-art solution to protect your PC:

   Case I.) Vicious computer viruses may wipe out your entire system BIOS. With a conventional single system BIOS PC, the PC will not be functional until it is sent for repairs.

   Case II.) If the "Auto Recovery" option is enabled in the DualBIOS™ utility, and if a virus corrupts your system BIOS, the backup BIOS will automatically reboot the system and correct the main BIOS.

   Case III.) A user may override booting from the main system BIOS. The DualBIOS™ utility may be entered to manually change the boot sequence to boot from the backup BIOS.

2. During or after a BIOS upgrade, if DualBIOS™ detects that the main BIOS is corrupt, the backup BIOS will take over the boot-up process automatically. Moreover, it will verify the main and backup BIOS checksums when booting-up. DualBIOS™ technology examines the checksum of the main and backup BIOS while the system is powered on to guarantee your BIOS operates properly.

3. Power Users will have the advantage of having two BIOS versions on their mainboard. The benefit is being able to select either version BIOS to suit the performance system needs.

4. Flexibility for high-end desktop PCs and workstation/servers. In the DualBIOS™ utility, the option can be set, "Halt On When BIOS Defects," to be enabled to halt your system with a warning message that the main BIOS has been corrupted. Most workstation/servers require constant operation to guarantee services have not been interrupted. In this situation, the "Halt On When BIOS Defects" message may be disabled to avoid system pauses during normal booting. Another advantage you gain from Giga-Byte's DualBIOS™ technology is the ability to upgrade from dual 2 Mbit BIOS to dual 4 Mbit BIOS in the future if extra BIOS storage is need.

Memory Installation

The motherboard has 4 dual inline memory module (DIMM) sockets. The BIOS will automatically detects memory type and size. To install the memory module, just push it vertically into the DIMM Slot .The DIMM module can only fit in one direction due to the two notch. Memory size can vary between sockets.

Install memory in any combination table:

DIMM	168-pin SDRAM DIMM Modules	
DIMM1	Supports 64 / 128 / 256 / 512 MB	X 1 pcs
DIMM2	Supports 64 / 128 / 256 / 512 MB	X 1 pcs
DIMM3	Supports 64 / 128 / 256 / 512 MB	X 1 pcs
DIMM4	Supports 64 / 128 / 256 / 512 MB	X 1 pcs

BIOS Setup

BIOS Setup is an overview of the BIOS Setup Program. The program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS RAM so that it retains the Setup information when the power is turned off.

ENTERING SETUP

Power On the computer and press <Del> immediately will allow you to enter Setup. If the message disappears before you respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" bottom on the system case. You may also restart by simultaneously press <Ctrl> – <Alt>– <Del> keys.

CONTROL KEYS

Key	Description
<↑>	Move to previous item
<↓>	Move to next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<Esc>	Main Menu - Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu - Exit current page and return to Main Menu
<+/ PgUp>	Increase the numeric value or make changes
<-/ PgDn>	Decrease the numeric value or make changes
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F2>	Reserved
<F3>	Reserved
<F4>	Reserved
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
<F7>	Load the Setup Defaults.
<F8>	Reserved
<F9>	Reserved
<F10>	Save all the CMOS changes, only for Main Menu

GETTING HELP

Main Menu

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

Status Page Setup Menu / Option Page Setup Menu

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

The Main Menu

Once you enter AMI BIOS CMOS Setup Utility, the Main Menu (Figure 1) will appear on the screen. The Main Menu allows you to select from nine setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

```
AMIBIOS SIMPLE SETUP UTILITY – VERSION 1.21
(C) 1999 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP            INTEGRATED PERIPHERALS

BIOS FEATURES SETUP            HARDWARE MONITOR SETUP

CHIPSET FEATURES SETUP         SUPERVISOR PASSWORD

POWER MANAGEMENT SETUP         USER PASSWORD

PNP / PCI CONFIGURATION         IDE HDD AUTO DETECTION

LOAD BIOS DEFAULTS             SAVE & EXIT SETUP

LOAD SETUP DEFAULTS            EXIT WITHOUT SAVING

ESC: Quit    ↑↓→←: Select Item  (Shift)F2 : Change Color   F5: Old Values
F6: Load BIOS Defaults     F7: Load Setup Defaults     F10:Save & Exit

Time, Date , Hard Disk Type…
```

Figure 1: Main Menu

- **Standard CMOS Setup**

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

- **BIOS Features Setup**

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

- **Chipset Features Setup**

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

- **Power Management Setup**

  This setup page includes all the items of Green function features.

- **PnP/PCI Configuration**

  This setup page includes all the configurations of PCI & PnP ISA resources.

- **Load BIOS Defaults**

  BIOS Defaults indicates the value of the system parameters which the system would be in safe configuration.

- **Load Setup Defaults**

  Setup Defaults indicates the value of the system parameters which the system would be in best performance configuration.

- **Integrated Peripherals**

  This setup page includes all onboard peripherals.

- **Hardware Monitor Setup**

  This setup page is the System auto detect Temperature, voltage, fan, speed.

- **Supervisor password**

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

- **User password**

  Change, set, or disable password. It allows you to limit access to the system.

- **IDE HDD Auto Detection**

  Automatically configure hard disk parameters.

- **Save & Exit Setup**

    Save CMOS value settings to CMOS and exit setup.

- **Exit Without Saving**

    Abandon all CMOS value changes and exit setup.

Standard CMOS Setup

The items in Standard CMOS Setup Menu (Figure 2) are divided into 9 categories. Each category includes no, one or more than one setup items. Use the arrows to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want in each item.

```
                    AMIBIOS SETUP – STANDARD CMOS SETUP
                  ( C ) 1999 American Megatrends, Inc. All Rights Reserved
 Date (mm/dd/yyyy) : Tue, Jan 18, 2000
 Time (hh/mm/ss)   : 14:44:35

              TYPE  SIZE  CYLS  HEAD  PRECOMP  LANDZ  SECTOR  MODE
 Pri Master  Auto
 Pri Slave   Auto
 Sec Master  Auto
 Sec Slave   Auto


 Floppy Drive A : 1.44 MB 3½          Base Memory :  640 Kb
 Floppy Drive B : Not Installed       Other Memory : 384 Kb
                                      Extended Memory :  63 Mb
 Boot Sector Virus Protection : Disabled   Total Memory :   64 Mb
 Month : Jan – Dec                    ESC : Exit
 Day    : 01– 31                      ↑↓    : Select Item
 Year   : 1990 – 2099                 PU / PD / + / – :Modify
                                      (Shift) F2 : Color
```

Figure 2: Standard CMOS Setup

- **Date**

   The date format is <week>, <month> <day> <year>.

Week	The week, from Sun to Sat, determined by the BIOS and is display -only
Month	The month, Jan. Through Dec.
Day	The day, from 1 to 31 (or the maximum allowed in the month)
Year	The year, from 1990 through 2099

- **Time**

   The times format in <hour> <minute> <second>. The time is calculated base on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

• **Primary Master, Slave / Secondary Master, Slave**

The category identifies the types of hard disk from drive C to F that has been installed in the computer. There are two types: auto type, and user definable type. User type is user-definable; Auto type which will automatically detect HDD type.

Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category.

If you select User Type, related information will be asked to enter to the following items. Enter the information directly from the keyboard and press <Enter>. Such information should be provided in the documentation form your hard disk vendor or the system manufacturer.

CYLS.	Number of cylinders
HEADS	number of heads
PRECOMP	write precomp
LANDZONE	Landing zone
SECTORS	number of sectors

If a hard disk has not been installed select NONE and press <Enter>.

• **Floppy Drive A type / Drive B**

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

None	No floppy drive installed
360K, 5.25 in.	5.25 inch PC-type standard drive; 360K byte capacity.
1.2M, 5.25 in.	5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).
720K, 3.5 in.	3.5 inch double-sided drive; 720K byte capacity
1.44M, 3.5 in.	3.5 inch double-sided drive; 1.44M byte capacity.
2.88M, 3.5 in.	3.5 inch double-sided drive; 2.88M byte capacity.

- ## Boot Sector Virus Protection

    If it is set to enable, the category will flash on the screen when there is any attempt to write to the boot sector or partition table of the hard disk drive. The system will halt and the following error message will appear in the mean time. You can run anti-virus program to locate the problem.

Enabled	Activate automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector or hard disk partition table.
Disabled	No warning message to appear when anything attempts to access the boot sector or hard disk partition table. **(Default Value)**

- ## Memory

    The category is display -only which is determined by POST (Power On Self Test) of the BIOS.

    ### Base Memory

    > The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.

    > The value of the base memory is typically 512 K for systems with 512 K memory installed on the motherboard, or 640 K for systems with 640 K or more memory installed on the motherboard.

    ### Other Memory

    > This refers to the memory located in the 640 K to 1024 K address space. This is memory that can be used for different applications.

    > DOS uses this area to load device drivers to keep as much base memory free for application programs. Most use for this area is Shadow RAM.

    ### Extended Memory

    > The BIOS determines how much extended memory is present during the POST. This is the amount of memory located above 1 MB in the CPU's memory address map.

BIOS Features Setup

```
╔═══════════════════════════════════════════════════════════════════╗
            AMIBIOS SETUP – BIOS FEATURES SETUP
      ( C ) 1999 American Megatrends, Inc. All Rights Reserved
╠═══════════════════════════════════════════════════════════════════╣
  1st Boot Device              Floppy    │
  2nd Boot Device              IDE-0     │
  3rd Boot Device              CDROM     │
  S.M.A.R.T. for Hard Disks    Disabled  │
  BootUp Num-Lock              On        │
  Floppy Drive Seek            Disabled  │
  Password Check               Setup     │
  Processor Serial Number      Enabled   │
  System BIOS Cacheable        Enabled   │
  BIOS Write Protect           Disabled  │
                                         │
                                         │
                                         ├─────────────────────────
                                         │ ESC: Quit    ↑↓→←: Select Item
                                         │ F1  : Help   PU/PD+/-/ : Modify
                                         │ F5  :Old Values  (Shift)F2:Color
                                         │ F6  : Load BIOS Defaults
                                         │ F7  : Load Setup Defaults
╚═══════════════════════════════════════════════════════════════════╝
```

Figure 3: BIOS Features Setup

● **1st / 2nd / 3rd Boot Device**

Floppy	Boot Device by Floppy.
LS/ZIP A:	Boot Device by LS/ZIP A:.
CDROM	Boot Device by CDROM.
SCSI	Boot Device by SCSI.
NETWORK	Boot Device by NETWORK.
IDE-0~IDE-3	Boot Device by IDE-0~IDE-3.
Disabled	Boot Device by Disabled.
ATAPI ZIP C:	Boot Device by ATAPI ZIP C:.

● **S.M.A.R.T. for Hard Disks**

Enabled	Enabled S.M.A.R.T. Hard for Disks.
Disabled	Disabled S.M.A.R.T. Hard for Disks. **(Default Value)**

• **Boot Up Num-Lock**

On	Keypad is number keys. **(Default Value)**
Off	Keypad is arrow keys.

● **Floppy Drive Seek**

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

Enabled	BIOS searches for floppy disk drive to determine if it is 40 or 80 tracks. Note that BIOS can not tell from 720, 1.2 or 1.44 drive type as they are all 80 tracks.
Disabled	BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360. **(Default Value)**

● **Password Check**

Setup	Set Password Check to Setup. **(Default Value)**
Always	Set Password Check to Always.

● **Processor Serial Number**

Disabled	Disabled Processor Serial Number.
Enabled	Enabled Processor Serial Number. **(Default Value)**

● **System BIOS Cacheable**

Enabled	Enabled System BIOS Cacheable. **(Default Value)**
Disabled	Disabled System BIOS Cacheable.

● **BIOS Write Protect**

Enabled	Enabled BIOS Write Protect.
Disabled	Disabled BIOS Write Protect. **(Default Value)**

Chipset Features Setup

```
AMIBIOS SETUP – CHIPSET FEATURES SETUP
( C ) 1999 American Megatrends, Inc. All Rights Reserved

DRAM Integrity Mode          Non-ECC
Memory Buffer Strength       Auto
ICH Delayed Transaction      Enabled
ICH DCB Enable               Disabled
Graphics Aperture Size       64 MB
CPU Ratio Selection          3.0x
USB Controller               Enabled
USB Legacy Support           Disabled
AOL Support                  Enabled


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

Figure 4: Chipset Features Setup

- **DRAM Integrity Mode**

Non-ECC	For 64bit standard type RIMM module. **(Default Value)**
EC Mode	For 72bit ECC type RIMM module.
H/W ECC	Hard ware ECC mode.

- **Memory Buffer Strength**

Auto	Set Memory Buffer Strength to Auto. **(Default Value)**
x1	Set Memory Buffer Strength to x1.

- **ICH Delayed Transaction**

Disabled	Disabled ICH Delayed Transaction.
Enabled	Enabled ICH Delayed Transaction. **(Default Value)**

- **ICH DCB Enable**

Disabled	Disable ICH DCB. **(Default Value)**
Enabled	Enable ICH DCB.

- **Graphics Aperture Size**

4 MB	Display Graphics Aperture Size is 4MB.
8 MB	Display Graphics Aperture Size is 8MB.
16 MB	Display Graphics Aperture Size is 16MB.
32 MB	Display Graphics Aperture Size is 32MB.
64 MB	Display Graphics Aperture Size is 64MB. **(Default Value)**
128 MB	Display Graphics Aperture Size is 128MB.
256 MB	Display Graphics Aperture Size is 256MB.

- **CPU Ratio Selection**

3.0x/3.5x /4.0x/4.5x/5.0x/5.5x/6.0x/6.5x/7.0x/7.5x/8.0x/Locked (Depend on CPU)

- **USB Controller**

Disabled	Disable USB Controller function.
Enabled	Enable USB Controller function. **(Default Value)**

- **USB Legacy Support**

  USB Legacy Support can be set when USB Function is Enabled.

Disabled	Disable USB Legacy Support. **(Default Value)**
Keyb+ Mouse	USB Keyboard and Mouse Support.
Keyboard	USB Keyboard Support.

- **AOL Support**

Disabled	Disabled this function.
Enabled	For Alert On Lan function. **(Default value)**

Power Management Setup

```
.................................................................................................
        AMIBIOS SETUP – POWER MANAGEMENT SETUP
         ( C ) 1999 American Megatrends, Inc. All Rights Reserved
 ───────────────────────────────────────────────────────────────────────────────
  HDD Power Down              Disabled     RTC Alarm Hour           00
  Suspend Mode                Disabled     RTC Alarm Minute         00
  K/B & PS/2 Mouse Access     Monitor      RTC Alarm Second         00
  FDC/LPT/COM Ports Access    Monitor
  Pri. Master IDE Access      Monitor
  Pri. Slave IDE Access       Ignore
  Sec. Master IDE Access      Monitor
  Sec. Slave IDE Access       Ignore
  PIRQ[A] IRQ Active          Ignore
  PIRQ[B] IRQ Active          Ignore
  PIRQ[C] IRQ Active          Ignore
  PIRQ[D] IRQ Active          Ignore
  System Thermal              Monitor
  Soft-Off by Power Button    Instant Off  ──────────────────────────────────────
  System After AC Back        Soft-Off     ESC: Quit        ↑↓→ ←: Select Item
  Modem Ring On/Wake On Lan   Disabled     F1   : Help     PU/PD+/-/ : Modify
  PME Event Wake Up           Enabled      F5   :Old  Values   (Shift)F2:Color
  RTC by Alarm                Disabled     F6   : Load BIOS Defaults
  RTC Alarm Date              Every Day    F7   : Load Setup Defaults
```

Figure 5: Power Management Setup

- **HDD Power Down**

Disabled	Disabled HDD Power Down mode function. **(Default value)**
Suspend	Set HDD Power Down to Suspend.
Stand By	Set HDD Power Down to Stand By.

● **Suspend Mode (Minute)**

Disabled	Disabled Suspend Mode Function. **(Default Value)**
1	Enabled Suspend Mode after 1min.
2	Enabled Suspend Mode after 2min.
4	Enabled Suspend Mode after 4min.
8	Enabled Suspend Mode after 8min.
10	Enabled Suspend Mode after 10min.
20	Enabled Suspend Mode after 20min.
30	Enabled Suspend Mode after 30min.
40	Enabled Suspend Mode after 40min.
50	Enabled Suspend Mode after 50min.
60	Enabled Suspend Mode after 60min.

- **K/B & PS/2 Mouse Access**

Monitor	Monitor Keyboard & PS/2 Mouse Access. **(Default Value)**
Ignore	Ignore Keyboard & PS/2 Mouse Access.

- **FDC/LPT/COM Ports Access**

Monitor	Monitor FDC/LPT/COM Ports Access. **(Default Value)**
Ignore	Ignore FDC/LPT/COM Ports Access.

- **Pri. Master IDE Access**

Monitor	Monitor Primary Master IDE Access. **(Default Value)**
Ignore	Ignore Primary Master IDE Access.

- **Pri. slave IDE Access**

Monitor	Monitor Primary slave IDE Access.
Ignore	Ignore Primary slave IDE Access. **(Default Value)**

- **Sec. Master IDE Access**

Monitor	Monitor Secondary Master IDE Access. **(Default Value)**
Ignore	Ignore Secondary Master IDE Access.

- **Sec. slave IDE Access**

Monitor	Monitor Secondary slave IDE Access.
Ignore	Ignore Secondary slave IDE Access. **(Default Value)**

- **PIRQ[A] IRQ Active**

Monitor	Monitor PIRQ[A] IRQ Active.
Ignore	Ignore PIRQ[A] IRQ Active. **(Default Value)**

- **PIRQ[B] IRQ Active**

Monitor	Monitor PIRQ[B] IRQ Active.
Ignore	Ignore PIRQ[B] IRQ Active. **(Default Value)**

- **PIRQ[C] IRQ Active**

Monitor	Monitor PIRQ[C] IRQ Active.
Ignore	Ignore PIRQ[C] IRQ Active. **(Default Value)**

- **PIRQ[D] IRQ Active**

Monitor	Monitor PIRQ[D] IRQ Active.
Ignore	Ignore PIRQ[D] IRQ Active. **(Default Value)**

- **System Thermal**

Monitor	Monitor System Thermal. **(Default Value)**
Ignore	Ignore System Thermal.

- **Soft-off by Power Button**

Instant-off	Soft switch ON/OFF for POWER ON/OFF. **(Default Value)**
Delay 4 Sec.	Soft switch ON 4sec. for POWER OFF.

- **System After AC Back Function**

Disabled	Disabled this function.
Memory	This function depends on computer status.
Soft-Off	Set System Soft-Off Status. **(Default value)**
Full-On	Set System Full-On Status.

- **Modem Ring On / Wake On Lan**

Disabled	Disabled Modem Ring On / Wake On Lan. **(Default Value)**
Enabled	Enabled Modem Ring On / Wake On Lan.

- **PME Event Wake Up**

Disabled	Disabled PME Event Wake Up.
Enabled	Enabled PME Event Wake Up. **(Default Value)**

- **RTC by Alarm**

You can set "RTC by Alarm" item to Enabled and key in date/time to power on system.

Disabled	Disabled this function. **(Default Value)**
Enabled	Enabled alarm function to POWER ON system.

If the "RTC by Alarm" is Enabled.

Alarm Date:	Every Day, 1~31
Alarm Hour:	0~23
Alarm Minute:	0~59
Alarm Second:	0~59

PNP/PCI Configuration

```
╔════════════════════════════════════════════════════════════════════╗
║            AMIBIOS SETUP – PNP / PCI CONFIGURATION                   ║
║        ( C ) 1999 American Megatrends, Inc. All Rights Reserved      ║
╠════════════════════════════════════╦═══════════════════════════════╣
║ PnP OS Installed            No     ║                               ║
║ Reset Configuration Data    Disabled                               ║
║ VGA Boot From               AGP    ║                               ║
║ PCI/VGA Palette Snoop       Disabled                               ║
║ DMA-0                       PnP    ║                               ║
║ DMA-1                       PnP    ║                               ║
║ DMA-3                       PnP    ║                               ║
║ DMA-5                       PnP    ║                               ║
║ DMA-6                       PnP    ║                               ║
║ DMA-7                       PnP    ║                               ║
║ IRQ-3                       PCI/PnP║                               ║
║ IRQ-4                       PCI/PnP║                               ║
║ IRQ-5                       PCI/PnP║                               ║
║ IRQ-7                       PCI/PnP║                               ║
║ IRQ-9                       PCI/PnP║                               ║
║ IRQ-10                      PCI/PnP║ ESC: Quit    ↑↓→ ←: Select Item║
║ IRQ-11                      PCI/PnP║ F1  : Help   PU/PD+/-/ : Modify║
║                                    ║ F5  :Old Values (Shift)F2:Color║
║                                    ║ F6  : Load BIOS Defaults       ║
║                                    ║ F7  : Load Setup Defaults      ║
╚════════════════════════════════════╩═══════════════════════════════╝
```

Figure 6: PNP/ PCI Configuration

- **PNP OS Installed**

Yes	Enable PNP OS Installed function.
No	Disable PNP OS Installed function. **(Default Value)**

- **Reset Configuration Data**

Disabled	Disabled this function. **(Default Value)**
Enabled	Enabled Reset Configuration Data function.

- **VGA Boot From**

AGP	Set VGA Boot From AGP. **(Default Value)**
PCI	Set VGA Boot From PCI.

- **PCI/VGA Palette Snoop**

Enabled	For having Video Card on ISA Bus and VGA Card on PCI Bus.
Disabled	For VGA Card only. **(Default Value)**

- **DMA (0,1,3,5,6,7)**

ISA/EISA	The resource is used by Legacy ISA device.
PnP	The resource is used by PnP device.

- **IRQ (3,4,5,7,9,10,11)**

ISA/EISA	The resource is used by Legacy ISA device.
PCI/PnP	The resource is used by PCI/ PnP device.

Load BIOS Defaults

```
┌─────────────────────────────────────────────────────────────┐
│              AMIBIOS SIMPLE SETUP UTILITY-VERSION 1.21        │
│       ( C ) 1999 American Megatrends, Inc. All Rights Reserved │
├──────────────────────────────┬──────────────────────────────┤
│  STANDARD CMOS SETUP         │   INTEGRATED PERIPHERALS      │
│                              │                               │
│  BIOS FEATURES SETUP         │   HARDWARE MONITOR SETUP      │
│                              │                               │
│  CHIPSET FEATURES SETUP      │   SUPERVISOR PASSWORD         │
│                              │                               │
│  POWER MANAGE                ┌──────────────────────┐        │
│                              │  Load BIOS Defaults (Y/N)?   │
│  PNP/PCI CONFIG              └──────────────────────┘  CTION │
│                              │                               │
│  LOAD BIOS DEFAULTS          │   SAVE & EXIT SETUP           │
│                              │                               │
│  LOAD SETUP DEFAULTS         │   EXIT WITHOUT SAVING         │
├──────────────────────────────┴──────────────────────────────┤
│  ESC : Quit  ↑↓→← : Select Item  (Shift) F2 : Change Color  F5 : Old Values │
│  F6   : Load BIOS Defaults      F7: Load Setup Defaults     F10: Save & Exit │
├─────────────────────────────────────────────────────────────┤
│           Load BIOS Defaults except Standard CMOS SETUP      │
└─────────────────────────────────────────────────────────────┘
```

Figure 7: Load BIOS Defaults

- **Load BIOS Defaults**

  To load BIOS defaults value to CMOS, enter "Y". If not, enter "N".

Load Setup Defaults

```
╔════════════════════════════════════════════════════════════════╗
║        AMIBIOS SIMPLE SETUP UTILITY-VERSION 1.21               ║
║      ( C ) 1999 American Megatrends, Inc. All Rights Reserved  ║
╠════════════════════════════════════════════════════════════════╣
║  STANDARD CMOS SETUP          │  INTEGRATED PERIPHERALS         ║
║                               │                                 ║
║  BIOS FEATURES SETUP          │  HARDWARE MONITOR SETUP         ║
║                               │                                 ║
║  CHIPSET FEATURES SETUP       │  SUPERVISOR PASSWORD            ║
║                               │                                 ║
║  POWER MANAG┌────────────────────────────┐                     ║
║             │   Load Setup Defaults (Y/N)?│                     ║
║  PNP/PCI CONFIG└────────────────────────────┘         CTION     ║
║                               │                                 ║
║  LOAD BIOS DEFAULTS           │  SAVE & EXIT SETUP             ║
║                               │                                 ║
║  LOAD SETUP DEFAULTS          │  EXIT WITHOUT SAVING            ║
╠════════════════════════════════════════════════════════════════╣
║ ESC : Quit  ↑↓→← : Select Item  (Shift) F2 : Change Color  F5 : Old Values ║
║ F6   : Load BIOS Defaults     F7: Load Setup Defaults    F10: Save & Exit  ║
╠════════════════════════════════════════════════════════════════╣
║        Load Setup Defaults except Standard CMOS SETUP          ║
╚════════════════════════════════════════════════════════════════╝
```
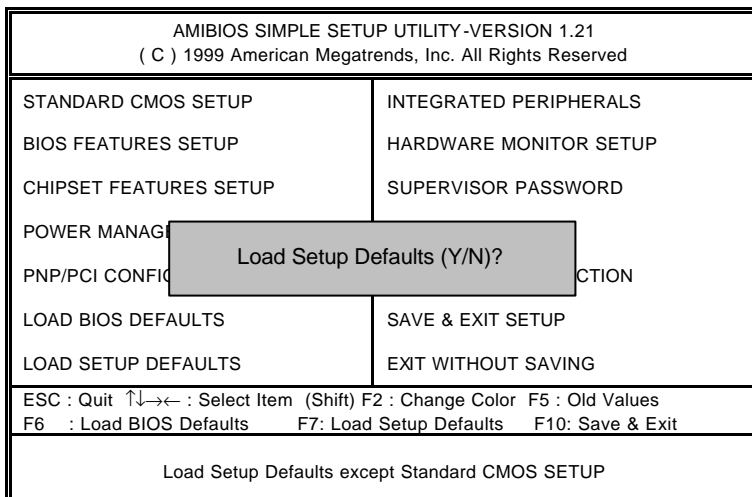
Figure 8: Load Setup Defaults

• **Load SETUP Defaults**

To load SETUP defaults value to CMOS, enter "Y". If not, enter "N".

Integrated Peripherals

```
                    AMIBIOS SETUP – INTEGRATED PERIPHERALS
                ( C ) 1999 American Megatrends, Inc. All Rights Reserved

 On-Chip PCI IDE              Both        Mouse PowerOn Function      Disabled
 OnBoard PCI SCSI Chip        Enabled
  AC97 Audio                  Auto
 OnBoard FDC Controller       Auto
 OnBoard Serial Port A        Auto
 OnBoard Serial Port B        Auto
   Serial Port B Mode         Normal
    ✱IR Duplex Mode           N/A
    ✱IR Pin Select            N/A
 OnBoard CIR Port             Disabled
   CIR IRQ Select             10
 OnBoard Parallel Port        Auto
   Parallel Port Mode         ECP
   Parallel Port IRQ          Auto
   Parallel Port DMA          Auto
 OnBoard Midi Port            330         ESC: Quit        ↑↓→ ←: Select Item
   Midi IRQ Select            10          F1   : Help      PU/PD+/-/ : Modify
 OnBoard Game Port            201         F5   :Old Values  (Shift)F2:Color
 Keyboard PowerOn Function    Disabled    F6   : Load BIOS Defaults
 Specific Key for PowerOn     N/A         F7   : Load Setup Defaults
```

Figure 9: Integrated Peripherals

✱These two items will be available when "Serial Port B Mode" is set to IrDA (1.6 μ S), IrDA (3/16) or ASKIR.

- **On-Chip PCI IDE**

Disabled	Disabled On-Chip PCI IDE.
Both	Set On-Chip PCI IDE is Both. **(Default Value)**
Primary	Set On-Chip PCI IDE is Primary.
Secondary	Set On-Chip PCI IDE is Secondary.

- **OnBoard PCI SCSI Chip**

Disabled	Disabled this function.
Enabled	Enabled OnBoard PCI SCSI Chip function. **(Default Value)**

- **AC'97 Audio**

Auto	Auto Detect AC'97 Audio. **(Default Value)**
Disabled	Disabled AC'97 Audio.

● **OnBoard FDC Controller**

Auto	Set OnBoard FDC Controller is Auto. **(Default Value)**
Disabled	Disabled OnBoard FDC Controller.
Enabled	Enabled OnBoard FDC Controller.

● **OnBoard Serial Port A**

Auto	BIOS will automatically setup the port A address. **(Default Value)**
3F8/COM1	Enable onBoard Serial port A and address is 3F8.
2F8/COM2	Enable onBoard Serial port A and address is 2F8.
3E8/COM3	Enable onBoard Serial port A and address is 3E8.
2E8/COM4	Enable onBoard Serial port A and address is 2E8.
Disabled	Disable onBoard Serial port A.

● **OnBoard Serial Port B**

Auto	BIOS will automatically setup the port B address. **(Default Value)**
3F8/COM1	Enable onBoard Serial port B and address is 3F8.
2F8/COM2	Enable onBoard Serial port B and address is 2F8.
3E8/COM3	Enable onBoard Serial port B and address is 3E8.
2E8/COM4	Enable onBoard Serial port B and address is 2E8.
Disabled	Disable onBoard Serial port B.

● **Serial Port B Mode**

(This item allows you to determine which Serial Port B Mode of onboard I/O chip)

Normal	Set onboard I/O chip Serial Port B to Normal Mode. **(Default Value)**
IrDA (1.6 μ S)	Set onboard I/O chip Serial Port B to IrDA (1.6 μ S) Mode.
IrDA (3/16)	Set onboard I/O chip Serial Port B to IrDA (3/16) Mode.
ASKIR	Set onboard I/O chip Serial Port B to ASKIR Mode.

● **IR Duplex Mode**

N/A	Disabled this function. **(Default Value)**
Half Duplex	IR Function Duplex Half.
Full Duplex	IR Function Duplex Full.

- **IR Pin Select**

N/A	Disabled this function. **(Default Value)**
IRRX/IRTX	IR Pin Select is IRRX/IRTX.
SINB/SOUTB	IR Pin Select is SINB/SOUTB.

- **OnBoard CIR port**

Disabled	Disabled OnBoard CIR port. **(Default Value)**
Enabled	Enabled OnBoard CIR port.

- **CIR IRQ Select**

IRQ 3 / 4 / 9 / 10 **(Default Value)** / 11

- **OnBoard Parallel port**

378	Enable OnBoard LPT port and address is 378.
278	Enable OnBoard LPT port and address is 278.
3BC	Enable OnBoard LPT port and address is 3BC.
Auto	Set OnBoard LPT port is Auto. **(Default Value)**
Disabled	Disable OnBoard LPT port.

- **Parallel Port Mode**

EPP	Using Parallel port as Enhanced Parallel Port.
ECP	Using Parallel port as Extended Capabilities Port. **(Default Value)**
Normal	Normal Operation.

- **Parallel Port IRQ**

7	Set Parallel Port IRQ is 7.
5	Set Parallel Port IRQ is 5.
Auto	Set Parallel Port IRQ is Auto. **(Default Value)**

- **Parallel Port DMA**

3	Set Parallel Port DMA is 3.
1	Set Parallel Port DMA is 1.
Auto	Set Parallel Port DMA is Auto. **(Default Value)**

● **OnBoard Midi Port**

Disabled	Disabled OnBoard Midi Port.
290	Set OnBoard Midi Port is 290.
292	Set OnBoard Midi Port is 292.
300	Set OnBoard Midi Port is 300.
330	Set OnBoard Midi Port is 330. **(Default Value)**

● **Midi IRQ Select**

IRQ 5 / 7 / 9 / 10 **(Default Value)**

● **OnBoard Game Port**

Disabled	Disabled OnBoard Game port.
201	Set onBoard Game port is 201. **(Default Value)**
209	Set onBoard Game port is 209.

● **Keyboard Power On Function**

Disabled	Disable this function. **(Default Value)**
Specific Key	Set specific key to power on by keyboard.
Power Key	Set "Power key" to power on the system.

● **Specific Key for Power On**

N/A	Disable this function. **(Default Value)**
Password↵	Enter from 1 to 5 characters to set the Keyboard Power On Password.

● **Mouse Power On Function**

Disabled	Disable this function. **(Default Value)**
Left-button	Double click twice on PS/2 left button.
Right-button	Double click twice on PS/2 right button.

6CXD(W) Motherboard

Hardware Monitor Setup

```
................................................................................
               AMIBIOS SETUP – HARDWARE MONITOR SETUP
               ( C ) 1999 American Megatrends, Inc. All Rights Reserved
ACPI Shut Down Temp.        75°C/167°F    +5V SB            4.824V
CPU Temp. Alarm             70°C/158°F
CPU Fan Fail Alarm          No
Power Fan Fail Alarm        No
System Fan Fail Alarm       No
Reset Case Open Status      No
Case Status                 Closed
Current CPU1 Temp.          35°C/ 95°F
Current CPU2 Temp.          33°C/ 91°F
Current System Temp.        33°C/ 91°F
Current CPU1 Fan Speed      5273 RPM
Current CPU2 Fan Speed      0 RPM
Current Power Fan Speed     0 RPM
CPU1 Vcore                  2.016 V
CPU2 Vcore                  2.064V
VCC3                        3.216V
+5.000V                     5.508V        ESC: Quit      ↑↓→←: Select Item
+12.000V                    12.167V       F1  : Help     PU/PD+/-/ : Modify
-12.000V                    -12.235V      F5  :Old Values (Shift)F2:Color
-5.000V                     -5.177V       F6  : Load BIOS Defaults
Battery                     3.344V        F7  : Load Setup Defaults
```

Figure 10: Hardware Monitor Setup

- **ACPI Shutdown Temp**.

    (This function will be effective only for the operating systems that support ACPI Function.)

Disabled	Normal Operation.
60°C / 140°F	Monitor CPU Temp. at 60°C / 140°F, if Temp. > 60°C / 140°F system will automatically power off .
65°C / 149°F	Monitor CPU Temp. at 65°C / 149°F, if Temp. > 65°C / 149°F system will automatically power off .
70°C / 158°F	Monitor CPU Temp. at 70°C / 158°F, if Temp. > 70°C / 158°F system will automatically power off .
75°C / 167°F	Monitor CPU Temp. at 75°C / 167°F, if Temp. > 75°C / 167°F system will automatically power off. **(Default Value)**

- **CPU Temp. Alarm**

60°C / 140°F	Monitor CPU Temp. at 60°C / 140°F.
65°C / 149°F	Monitor CPU Temp. at 65°C / 149°F.
70°C / 158°F	Monitor CPU Temp. at 70°C / 158°F. **(Default Value)**
75°C / 167°F	Monitor CPU Temp. at 75°C / 167°F.
Disabled	Disabled this function.

- **Fan Fail Alarm**

  CPU / Power / System

No	Fan Fail Alarm Function Disabled. **(Default Value)**
Yes	Fan Fail Alarm Function Enabled.

- **Reset Case Open Status**

- **Case Status**

  If the case is closed, "Case Status" will show "No".
  If the case have been opened, "Case Status" will show "Yes" .
  If you want to reset "Case Status" value, set "Reset Case Open Status"
  to "Yes" and save CMOS, your computer will restart.

- **Current CPU1/CPU2 Tempe.**

  Detect CPU Temp. automatically.

- **Current System Tempe.**

  Detect System Temp. automatically.

- **Current CPU1 Fan / CPU2 Fan / Power Fan Speed (RPM)**

  Detect Fan speed status automatically.

- **Current CPU1 Vcore / CPU2 Vcore / VCC3 / ±12V / ±5V /Battery / +5VSB**

  Detect system's voltage status automatically.

Supervisor / User Password

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.
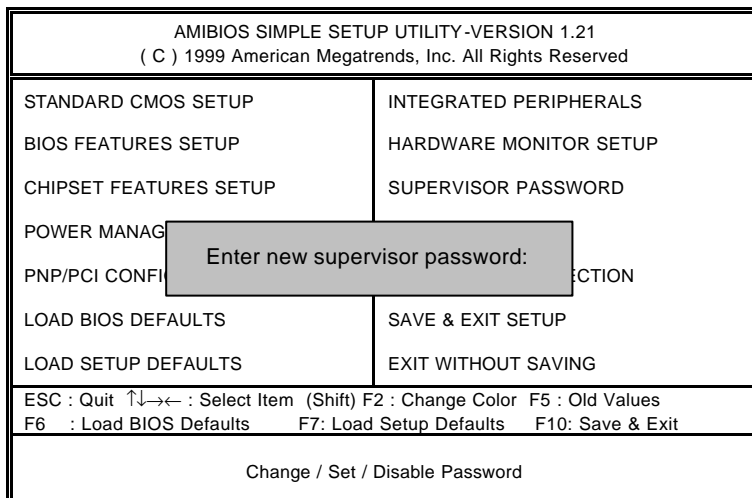
```
AMIBIOS SIMPLE SETUP UTILITY-VERSION 1.21
( C ) 1999 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP                 INTEGRATED PERIPHERALS

BIOS FEATURES SETUP                 HARDWARE MONITOR SETUP

CHIPSET FEATURES SETUP              SUPERVISOR PASSWORD

POWER MANAG
                  Enter new supervisor password:
PNP/PCI CONFIG                                         ECTION

LOAD BIOS DEFAULTS                  SAVE & EXIT SETUP

LOAD SETUP DEFAULTS                 EXIT WITHOUT SAVING

ESC : Quit  ↑↓→← : Select Item  (Shift) F2 : Change Color  F5 : Old Values
F6   : Load BIOS Defaults      F7: Load Setup Defaults     F10: Save & Exit

                    Change / Set / Disable Password
```

Figure 11: Password Setting

Type the password, up to eight characters, and press <Enter>. The password typed now will clear the previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>.

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

If you select "Always" at "Password Check" in BIOS Features Setup Menu, you will be prompted for the password every time the system is rebooted or any time you try to enter Setup Menu. If you select "Setup" at "Password Check" in BIOS Features Setup Menu, you will be prompted only when you try to enter Setup.

IDE HDD Auto Detection

```
┌─────────────────────────────────────────────────────────────────────┐
│                AMIBIOS SETUP – STANDARD CMOS SETUP                    │
│         ( C ) 1999 American Megatrends, Inc. All Rights Reserved      │
├─────────────────────────────────────────────────────────────────────┤
│ Date (mm/dd/yyyy) : Tue Jan 18, 2000                                 │
│ Time (hh/mm/ss)    : 10:36:24                                        │
│              TYPE   SIZE  CYLS  HEAD  PRECOMP  LANDZ SECTOR  MODE      │
├─────────────────────────────────────────────────────────────────────┤
│ Pri Master  : Auto                                                    │
│ Pri Slave   : Auto                                                    │
│ Sec Master: Auto                                                      │
│ Sec Slave  : Auto                                                     │
│ Floppy Drive  A: 1.44 MB 3 ½          │ Base Memory : 640 Kb          │
│ Floppy Driver B:  Not Installed       │ Other Memory: 384 Kb          │
│                                       │ Extended Memory: 63Mb         │
│ Boot Sector Virus Protection : Disabled │ Total Memory: 64Mb          │
├─────────────────────────────────────────────────────────────────────┤
│ Month:   Jan – Dec                    │ ESC : Exit                    │
│   Day:    01  – 31                    │  ↑↓   : Select Item           │
│  Year :  1990– 2099                   │ PU/PD/+/−  : Modify           │
│                                       │    (Shift)F2    : Color       │
└─────────────────────────────────────────────────────────────────────┘
```

Figure 12: IDE HDD Auto Detection

Type "Y" will accept the H.D.D. parameter reported by BIOS.

Type "N" will keep the old H.D.D. parameter setup. If the hard disk cylinder number is over 1024, then the user can select LBA mode or LARGER mode for DOS partition larger than 528 MB.
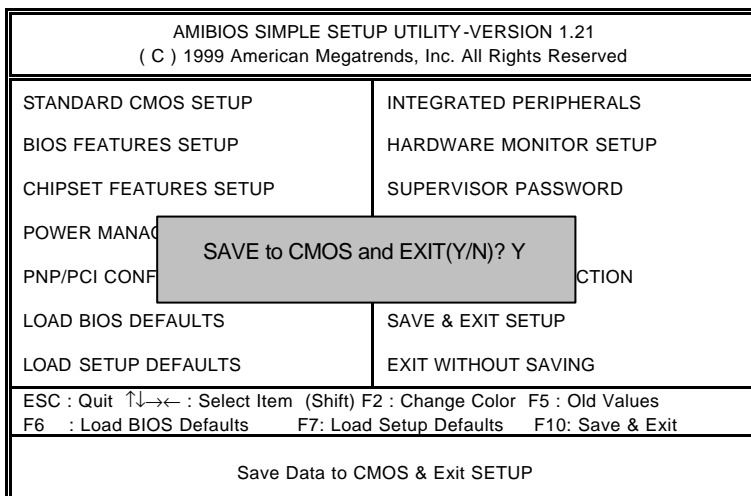
Save & Exit Setup

```
┌─────────────────────────────────────────────────────────────────┐
│         AMIBIOS SIMPLE SETUP UTILITY-VERSION 1.21                 │
│         ( C ) 1999 American Megatrends, Inc. All Rights Reserved  │
├──────────────────────────────┬──────────────────────────────────┤
│  STANDARD CMOS SETUP          │  INTEGRATED PERIPHERALS           │
│                               │                                   │
│  BIOS FEATURES SETUP          │  HARDWARE MONITOR SETUP           │
│                               │                                   │
│  CHIPSET FEATURES SETUP       │  SUPERVISOR PASSWORD              │
│                               │                                   │
│  POWER MANAG┌─────────────────────────────┐                      │
│             │  SAVE to CMOS and EXIT(Y/N)? Y│                     │
│  PNP/PCI CONF└─────────────────────────────┘CTION                │
│                                                                   │
│  LOAD BIOS DEFAULTS           │  SAVE & EXIT SETUP                │
│                               │                                   │
│  LOAD SETUP DEFAULTS          │  EXIT WITHOUT SAVING              │
├──────────────────────────────┴──────────────────────────────────┤
│  ESC : Quit  ↑↓→← : Select Item  (Shift) F2 : Change Color  F5 : Old Values │
│  F6    : Load BIOS Defaults     F7: Load Setup Defaults   F10: Save & Exit  │
├───────────────────────────────────────────────────────────────────┤
│                Save Data to CMOS & Exit SETUP                     │
└─────────────────────────────────────────────────────────────────┘
```

Figure 13: Save & Exit Setup

Type "Y" will quit the Setup Utility and save the user setup value to RTC CMOS.

Type "N" will return to Setup Utility.

Exit Without Saving

```
AMIBIOS SIMPLE SETUP UTILITY-VERSION 1.21
( C ) 1999 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP              INTEGRATED PERIPHERALS

BIOS FEATURES SETUP              HARDWARE MONITOR SETUP

CHIPSET FEATURES SETUP           SUPERVISOR PASSWORD

POWER MANAG
                  Quit without saving (Y/N)? N
PNP/PCI CONFI                                       CTION

LOAD BIOS DEFAULTS               SAVE & EXIT SETUP

LOAD SETUP DEFAULTS              EXIT WITHOUT SAVING

ESC : Quit  ↑↓→← : Select Item  (Shift) F2 : Change Color  F5 : Old Values
F6   : Load BIOS Defaults       F7: Load Setup Defaults    F10: Save & Exit

                  Abandon all Datas & Exit SETUP
```

Figure 14: Exit Without Saving

Type "Y" will quit the Setup Utility and save the user setup value to RTC CMOS.

Type "N" will return to Setup Utility.

Appendix

Appendix A: Intel 820 Chipset Driver Installation

A. Windows 9x INF Update Utility

Insert the support CD that came with your motherboard into your CD-ROM drive or double-click the CD drive icon in **My Computer** to bring up the setup screen.
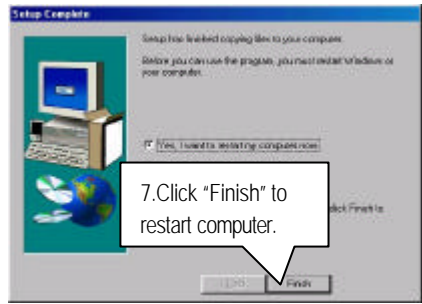

(1)

1.Click "Windows 9x INF Update Utility" item.

(2)

2.Click "Next".

(3)

3.Click "Yes".

(4)

4.Click "Next".
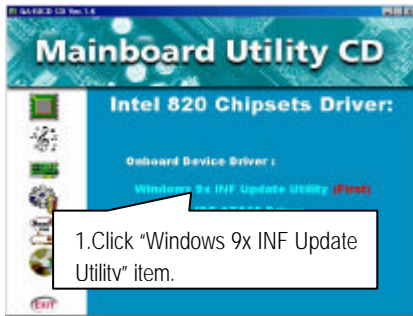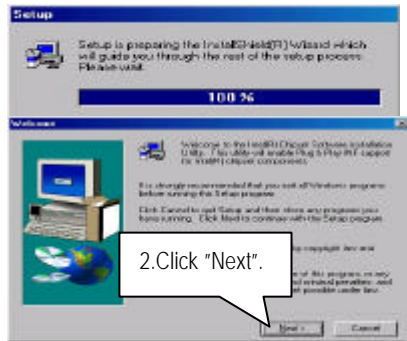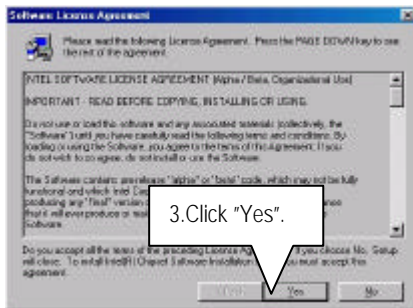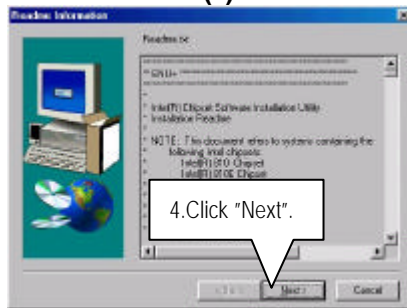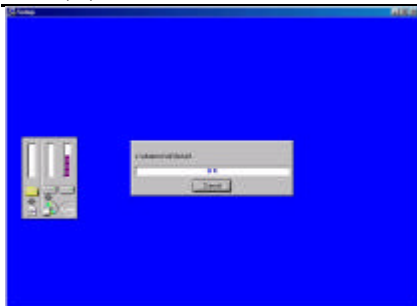
6CXD(W) Motherboard

(5)

B. Intel ICH IDE ATA66 Driver Installation

Insert the support CD that came with your motherboard into your CD-ROM drive or double-click the CD drive icon in **My Computer** to bring up the setup screen.
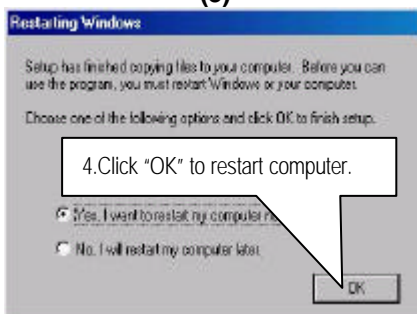

1.Click "Intel ICH IDE ATA66 Driver" item.

(1)

2.Click "Continue".

(2)

3.Click "Next".

(3)

4.Click "Yes".

(4)

5.Click "Next".

(5)

6.Click "Next".

(6)

(7)

7.Click "Finish" to restart computer.
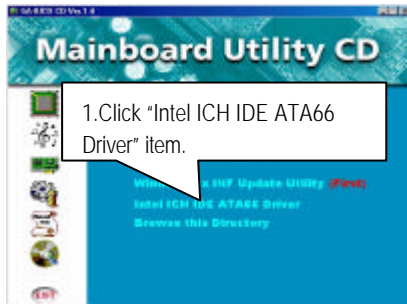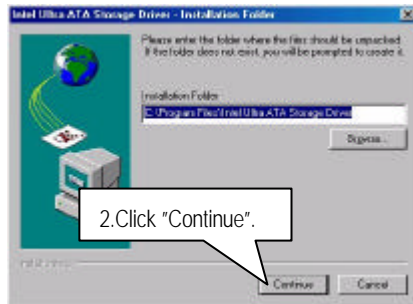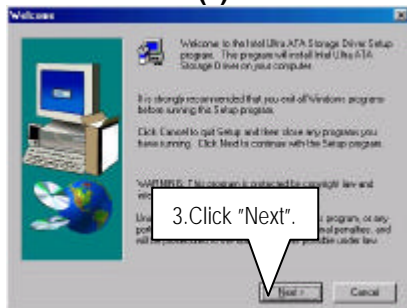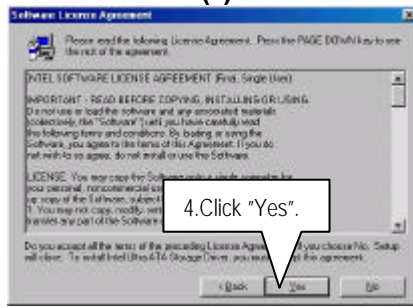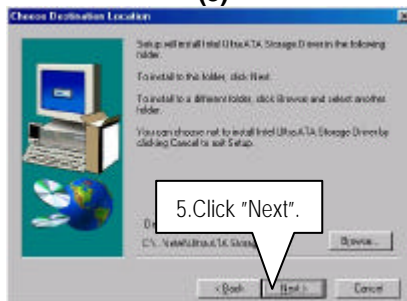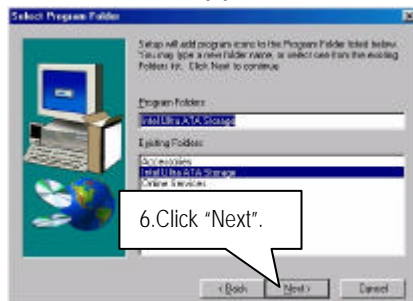
(8)

Appendix B: ADI1881 Sound Driver Installation

Insert the support CD that came with your motherboard into your CD-ROM drive or double-click the CD drive icon in **My Computer** to bring up the setup screen.
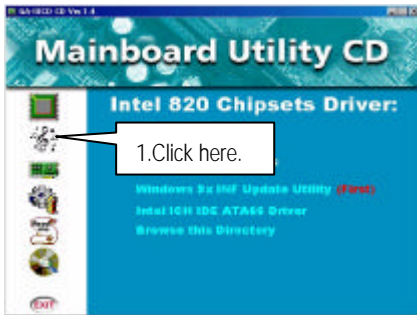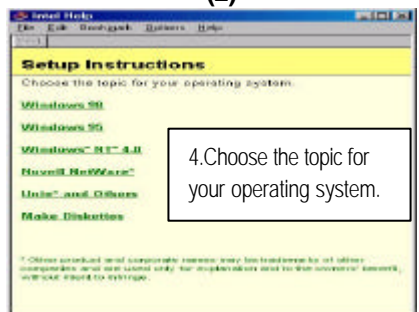

(1)
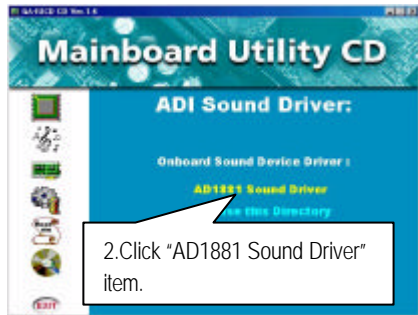
(2)
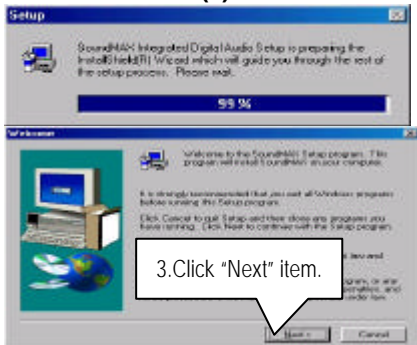
(3)
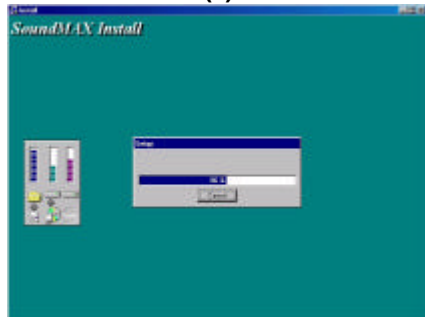
(4)

(5)

Appendix C: Intel 8255x Lan Driver Installation

Insert the support CD that came with your motherboard into your CD-ROM drive or double-click the CD drive icon in **My Computer** to bring up the setup screen.
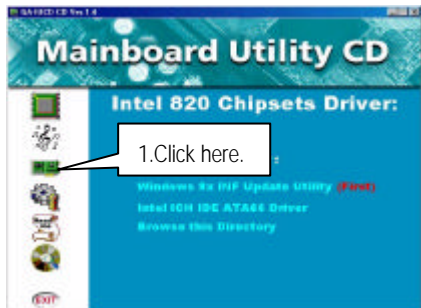
(1)

(2)

(3)

(4)

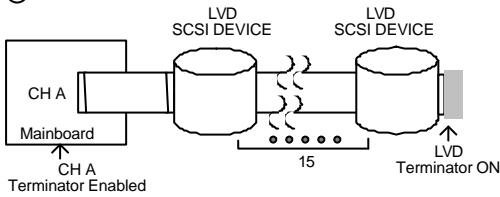# Appendix D: SCSI Device Installation

Terminator ON/OFF rules
State 1. SCSI Devices connecting to the Channel A:
CASE 1: Channel A Termination: Enabled
Channel B Termination: Both

①

LVD SCSI DEVICE

LVD SCSI DEVICE

CH A

Mainboard

CH A
Terminator Enabled

15

LVD Terminator ON

②

16 bit SCSI DEVICE

16 bit SCSI DEVICE

CH A

Mainboard

CH A
Terminator Enabled

Terminator OFF

15

Terminator ON

③ **EXT LVD SCSI Port**

EXT. LVD SCSI Terminator

EXT.
LVD SCSI or
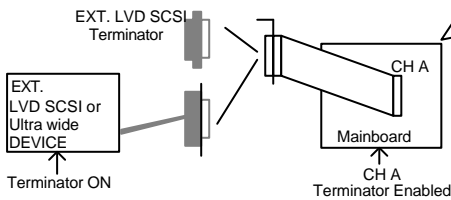Ultra wide
DEVICE

Terminator ON

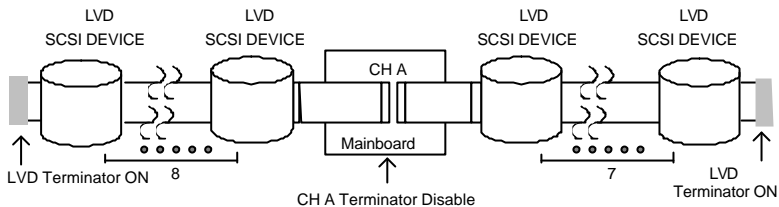CH A

Mainboard

CH A
Terminator Enabled
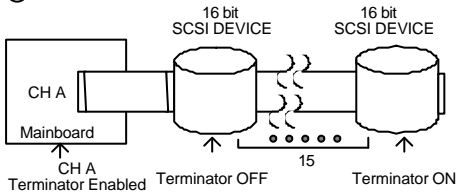
To boot from EXT.SCSI device, please press <Ctrl> <A> for SCSISelect Utility and set the **Advanced configuration option/ Support Removable Disks Under BIOS as Fixed Disks** to "**All Disks**"
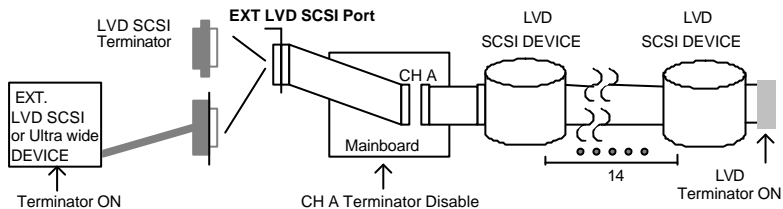
CASE 2: Channel A : Disabled

Channel B : Both

①

LVD SCSI DEVICE   LVD SCSI DEVICE   CH A   Mainboard   LVD SCSI DEVICE   LVD SCSI DEVICE

LVD Terminator ON   8   CH A Terminator Disable   7   LVD Terminator ON

②

LVD SCSI Terminator   **EXT LVD SCSI Port**   CH A   LVD SCSI DEVICE   LVD SCSI DEVICE

EXT. LVD SCSI or Ultra wide DEVICE   Mainboard

Terminator ON   CH A Terminator Disable   14   LVD Terminator ON

③

16 bit SCSI DEVICE   16 bit SCSI DEVICE   CH A   Mainboard   16 bit SCSI DEVICE   16 bit SCSI DEVICE

Terminator ON   8   Terminator OFF   CH A Terminator Disable   Terminator OFF   7   Terminator ON

④

16 bit SCSI DEVICE   16 bit SCSI DEVICE   CH A   Mainboard   LVD SCSI DEVICE   LVD SCSI DEVICE

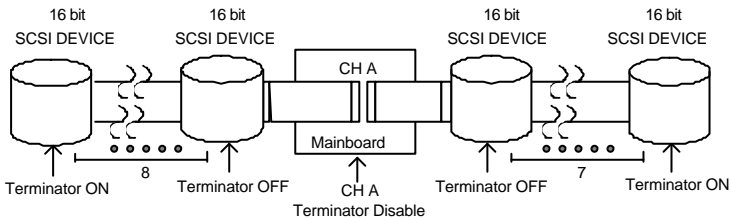Terminator ON   8   Terminator OFF   CH A Terminator Disable   Terminator OFF   7   Terminator ON
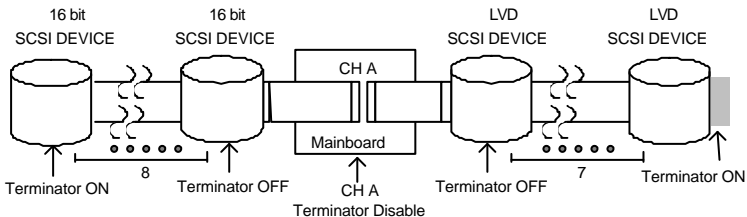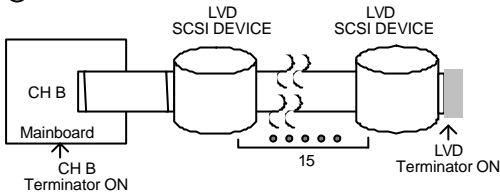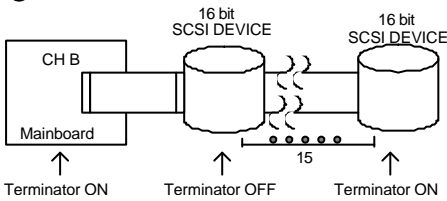
State 2. SCSI Devices connecting to the Channel B:
CASE 1: Channel A: Enabled
       Channel B: Both

①

LVD SCSI DEVICE   LVD SCSI DEVICE

CH B

Mainboard

CH B
Terminator ON

15

LVD
Terminator ON

②

16 bit SCSI DEVICE   16 bit SCSI DEVICE

CH B

Mainboard

Terminator ON   Terminator OFF   Terminator ON
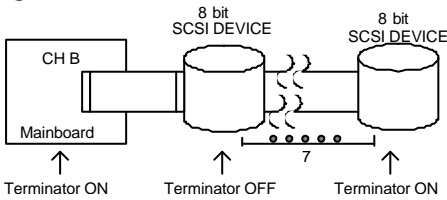
15

③

8 bit SCSI DEVICE   8 bit SCSI DEVICE

CH B

Mainboard

Terminator ON   Terminator OFF   Terminator ON

7

④ **EXT LVD SCSI Port**

EXT. LVD SCSI
Terminator

EXT.
LVD SCSI or
Ultra wide
DEVICE

CH B

Mainboard

Terminator ON

CH B
Terminator ON

⑤ **EXT SCSI Port**

EXT. SCSI
Terminator

CH B

EXT. 8bit
SCSI
DEVICE

Mainboard

Terminator ON

CH B
Terminator ON

CASE 2: Channel A: Enabled
Channel B: High Byte

① LVD
SCSI DEVICE

LVD
SCSI DEVICE

8 bit
SCSI DEVICE

8 bit
SCSI DEVICE

CH B

Mainboard

8

7

LVD
Terminator ON

Terminator OFF

Terminator ON

CH B
High byte Terminator ON

② 16 bit
SCSI DEVICE

16 bit
SCSI DEVICE

8 bit
SCSI DEVICE

8 bit
SCSI DEVICE

CH B

Mainboard

8

7

Terminator ON

Terminator OFF

Terminator OFF

Terminator ON

CH B
High byte Terminator ON

③

EXT LVD SCSI Port

LVD SCSI
Terminator

8 bit
SCSI DEVICE

8 bit
SCSI DEVICE

CH B

EXT.
LVD SCSI or
Ultra wide
DEVICE

Mainboard

7

Terminator ON

CH B High Byte Terminator ON

Terminator OFF

Terminator ON

④

EXT SCSI
Terminator

EXT SCSI Port

CH B

Mainboard

16 bit
SCSI DEVICE

16 bit
SCSI DEVICE

EXT.
8bit SCSI
DEVICE

Terminator ON

CH B High Byte Terminator ON

Terminator OFF

14

Terminator ON

⑤

EXT SCSI
Terminator

EXT SCSI Port

CH B

Mainboard

LVD
SCSI DEVICE

LVD
SCSI DEVICE

EXT.
8bit SCSI
DEVICE

Terminator ON

CH B High Byte Terminator ON

14

Terminator ON

Appendix E: Adaptec Ultra160 Family Driver Installation for Windows NT CDROM Boot

Installing Windows NT V4.0

The following instructions explain how to install the Adaptec Ultra160 Family Manager, while installing Windows NT V4.0 from CDROM Boot.

1. Start your system with the Windows NT Boot CD in the CDROM drive.

2. During the initial stages of the boot process as soon as you see blue screen of "Windows NT Setup" then press F6.

3. Press S again to specify an additional device.

4. Select "Other" and feed it the Adaptec Ultra160 Family Manager diskette for WinNT 3.5x, 4.0/d3.4 then press Enter.

5. For Ultra160/rnhost adapters (AIC-789x), Select Adaptec Ultra160/rn Family PCI SCSI Controller (NT4.0).

6. Then follow the normal Windows NT installation procedure to complete the setup processor.

Appendix F: Acronyms

Acor.	Meaning
ACPI	Advanced Configuration and Power Interface
POST	Power-On Self Test
LAN	Local Area Network
ECP	Extended Capabilities Port
APM	Advanced Power Management
DMA	Direct Memory Access
MHz	Megahertz
ESCD	Extended System Configuration Data
CPU	Central Processing Unit
SMP	Symmetric Multi-Processing
USB	Universal Serial Bus
OS	Operating System
ECC	Error Checking and Correcting
IDE	Integrated Dual Channel Enhanced
SCI	Special Circumstance Instructions
LBA	Logical Block Addressing
EMC	Electromagnetic Compatibility
BIOS	Basic Input / Output System
SMI	System Management Interrupt
IRQ	Interrupt Request
NIC	Network Interface Card
A.G.P.	Accelerated Graphics Port
S.E.C.C.	Single Edge Contact Cartridge
LED	Light Emitting Diode
EPP	Enhanced Parallel Port
CMOS	Complementary Metal Oxide Semiconductor
I/O	Input / Output
ESD	Electrostatic Discharge
OEM	Original Equipment Manufacturer
SRAM	Static Random Access Memory
VID	Voltage ID
DMI	Desktop Management Interface
MIDI	Musical Interface Digital Interface
IOAPIC	Input Output Advanced Programmable Input Controller

DIMM	Dual Inline Memory Module
DRAM	Dynamic Random Access Memory
PAC	PCI A.G.P. Controller
AMR	Audio Modem Riser

To be

continued…

Acor.	Meaning
PCI	Peripheral Component Interconnect
RIMM	Rambus in-line Memory Module
DRM	Dual Retention Mechanism
ISA	Industry Standard Architecture
MTH	Memory Translator Hub
CRIMM	Continuity RIMM