

7NF-RZ / 7NF-RZ-C

AMD Athlon™/Athlon™ XP/Duron™ Socket A Processor Motherboard

User's Manual

Rev. 1002

12ME-7NFRZ-1002

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Notice

Please do not remove any labels on motherboard, this may void the warranty of this motherboard.

Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.

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.

Declaration of Conformity

190, Westfield, Troy, NY 12180
G.B.T. Technology Trading GmbH
Asseschlager Weg 4, 1F 20577 Hamburg, Germany
(reference to the apparatus, system, installation to which it refers)
Mother Board
7NF-RZ

is in conformity with
(reference to the specification under which conformity is declared)
in accordance with 89/259 EEC-EMC Directive

- EN 55011 Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) high frequency equipment
 - EN 55013 Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment
 - EN 55014-1 Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, household power tools and similar electrical apparatus
 - EN 55014-2 Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaires
 - EN 55020 Immunity from radio interference of broadcast receivers and associated equipment
 - EN 55022 Limits and methods of measurement of radio disturbance characteristics of information technology equipment
 - EN 55025 Corded telephone systems, Equipment for receiving and/or distribution from part 10
 - EN 55025-1 Corded telephone systems, Equipment for receiving and/or distribution from part 12
 - CE marking (EC conformity marking)
- The manufacturer also declares the conformity of above mentioned product with the actual required safety standards in accordance with LVD 7323 EEC
- EN 60955 Safety requirements for mains operated electronic and related apparatus for household and similar general use
 - EN 60950 Safety requirements for information technology equipment including electrical business equipment
 - EN 60335 General and safety requirements for uninterruptible power systems (UPS)
 - EN 60914-1 General and safety requirements for uninterruptible power systems (UPS)
- Manufacturer/Importer
Signature: Jimmy Huang
Name: Jimmy Huang
- Date: Jul 22, 2004

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)



Responsible Party Name: G.B.T. INC. (U.S.A.)

Address: 17358 Railroad Street

City of Industry, CA 91748

Phone/Fax Nor:(818) 854-9338/ (818) 854-9339

hereby declares that the product

Product Name: **Motherboard**

Model Number: **7NF-RZ**

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.1109

(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 interference received, including that may cause undesired operation.

Representative Person's Name: ERIC LU

Signature: Eric Lu

Date: Jul 22, 2004

Preparing Your Computer

The motherboard contains numerous delicate electronic circuits and components which can become damaged as a result of electrostatic discharge (ESD). Thus, prior to installation, please follow the instructions below:

1. Please turn off the computer and unplug its power cord.
2. When handling the motherboard, avoid touching any metal leads or connectors.
3. It is best to wear an electrostatic discharge (ESD) cuff when handling electronic components (CPU, RAM).
4. Prior to installing the electronic components, please have these items on top of an antistatic pad or within a electrostatic shielding container.
5. Please verify that you the power supply is switched off before unplugging the power supply connector from the motherboard.

Installation Notices

1. Prior to installation, please do not remove the stickers on the motherboard. These stickers are required for warranty validation.
2. Prior to the installation of the motherboard or any hardware, please first carefully read the information in the provided manual.
3. Before using the product, please verify that all cables and power connectors are connected.
4. To prevent damage to the motherboard, please do not allow screws to come in contact with the motherboard circuit or its components.
5. Please make sure there are no leftover screws or metal components placed on the motherboard or within the computer casing.
6. Please do not place the computer system on an uneven surface.
7. Turning on the computer power during the installation process can lead to damage to system components as well as physical harm to the user.
8. If you are uncertain about any installation steps or have a problem related to the use of the product, please consult a certified computer technician.

Instances of Non-Warranty

1. Damage due to natural disaster, accident or human cause.
2. Damage as a result of violating the conditions recommended in the user manual.
3. Damage due to improper installation.
4. Damage due to use of uncertified components.
5. Damage due to use exceeding the permitted parameters.
6. Product determined to be an unofficial Gigabyte product.

Table of Contents

Chapter 1 Introduction	5
Features Summary	5
7NF-RZ Series Motherboard Layout	6
Block Diagram	7
Hardware Installation Process	8
Step 1: Set System Clock (CLK_SW)	8
Step 2: Install the Central Processing Unit (CPU)	9
Step 2-1: CPU Installation	9
Step 2-2: CPU Cooling Fan Installation	9
Step 3: Install Memory Modules	10
Step 4: Install AGP Card	11
Step 5: Install I/O Peripherals Cables	11
Step 5-1: I/O Back Panel Introduction	11
Step 5-2: Connectors Introduction	12
 Chapter 2 BIOS Setup	 19
The Main Menu (For example: BIOS Ver. : E8)	19
Standard CMOS Features	21
Advanced BIOS Features	23
Advanced Chipset Features	24
Integrated Peripherals	25
Power Management Setup	27
PnP/PCI Configurations	29
PC Health Status	30
Load Fail-Safe Defaults	31
Load Optimized Defaults	31
Set Supervisor/User Password	32
Save & Exit Setup	33
Exit Without Saving	33
 Chapter 3 Install Drivers	 35

Chapter 1 Introduction

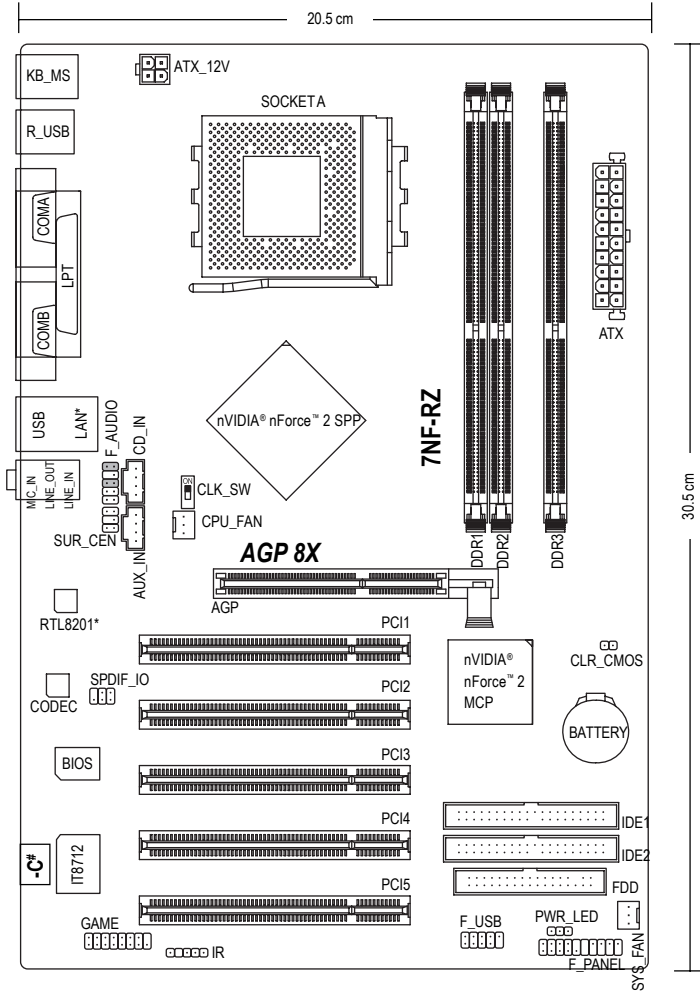
Features Summary

Motherboard	<ul style="list-style-type: none"> • 7NF-RZ or 7NF-RZ-C
CPU	<ul style="list-style-type: none"> • Socket A for AMD Athlon™ XP / Athlon™ / Duron™ processor • 200/266/333/400MHz FSB • Supports 1.4GHz and faster
Chipset	<ul style="list-style-type: none"> • Northbridge : nVIDIA® nForce™ 2 SPP • Southbridge : nVIDIA® nForce™ 2 MCP
Memory	<ul style="list-style-type: none"> • 3 184-pin DDR DIMM sockets, supports up to 3GB DRAM (Max) • Supports DDR400^(Note)/DDR333/DDR266 DIMM • Supports only 2.5V DDR SDRAM
Slots	<ul style="list-style-type: none"> • 1 AGP slot supports 8X/4X(1.5V) mode • 5 PCI slots support 33MHz & PCI 2.2 compliant
IDE Connections	<ul style="list-style-type: none"> • 2 IDE connections (Ultra DMA33/ATA66/ATA100/ATA133), allows connection of 4 IDE devices
FDD Connections	<ul style="list-style-type: none"> • 1 FDD connection, allows connection of 2 FDD devices
Peripherals	<ul style="list-style-type: none"> • 1 Parallel port supporting Normal/EPP/ECP mode • 2 Serial port (COMA, COMB) • 6 USB 2.0/1.1 ports (rear x 2, front x 4 via cable) • 1 front audio connector • 1 IR connector • 1 PS/2 keyboard port • 1 PS/2 mouse port
Onboard LAN*	<ul style="list-style-type: none"> • Onboard RTL8201 chipset (10/100Mbit)* • 1 RJ45 port*
Onboard Audio	<ul style="list-style-type: none"> • ALC655 codec • Supports 2/ 4/ 6 channel audio • Line Out/ Line In/ Mic In connection • SPDIF In/ Out • CD In/ AUX In/ Game connector
I/O Control	<ul style="list-style-type: none"> • IT8712
Hardware Monitor	<ul style="list-style-type: none"> • System voltage detection • CPU / System temperature detection • CPU / System fan speed detection • Thermal shutdown function
BIOS	<ul style="list-style-type: none"> • Use of licensed AWARD BIOS • Supports Q-Flash
Additional Features	<ul style="list-style-type: none"> • Supports @BIOS • Supports EasyTune
Form Factor	<ul style="list-style-type: none"> • ATX form factor, 20cm x 30.5cm

(Note) DDR 400 can be supported through overclocking in BIOS. (Please refer to page 24 for detail settings.)

*** For 7NF-RZ only.

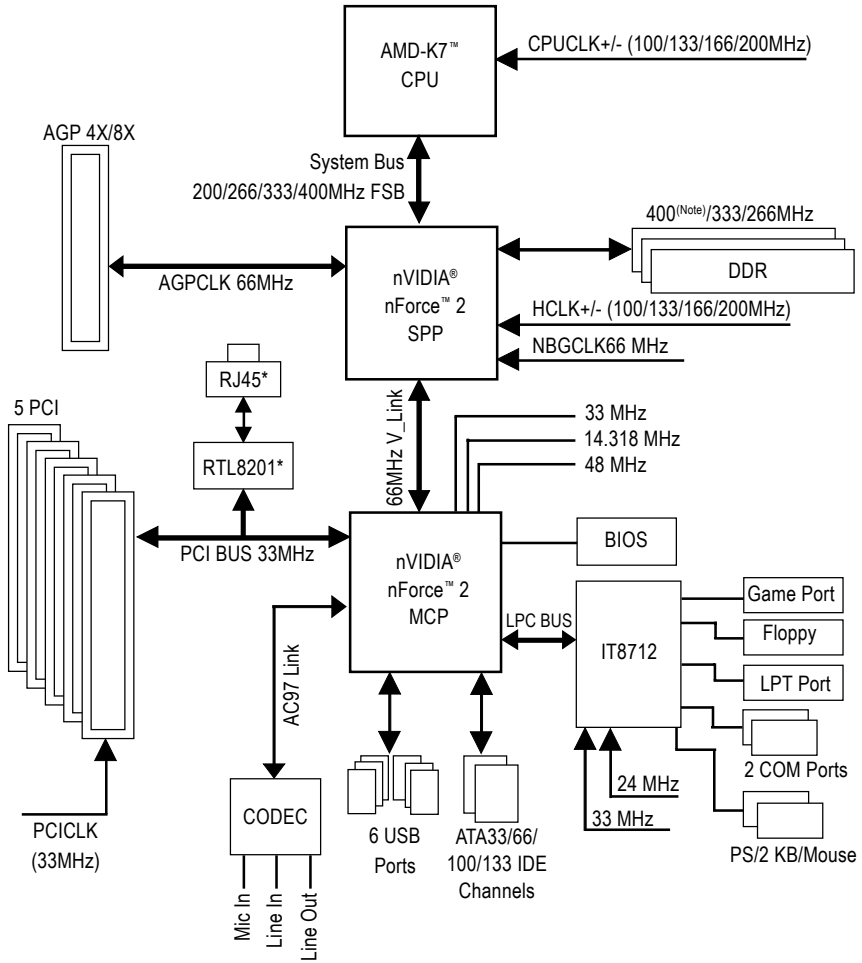
7NF-RZ Series Motherboard Layout



*** For 7NF-RZ only.

For 7NF-RZ-C only.

Block Diagram



(Note) DDR 400 can be supported through overlocking in BIOS.

*** For 7NF-RZ only.

Hardware Installation Process

To set up your computer, you must complete the following steps:

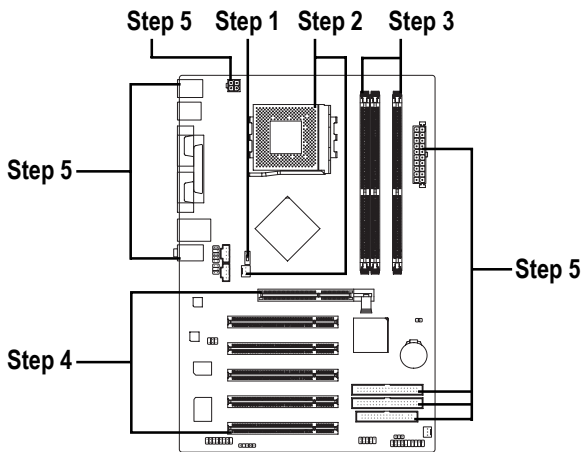
Step 1- Set System Clock (CLK_SW)

Step 2- Install the Central Processing Unit (CPU)

Step 3- Install Memory Modules

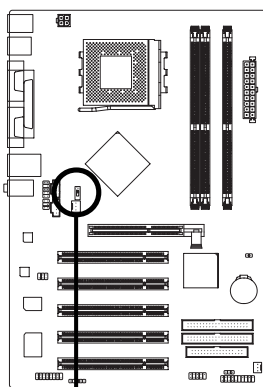
Step 4- Install Expansion Cards

Step 5- Install I/O Peripherals Cables



Step 1: Set System Clock (CLK_SW)

The system bus frequency can be switched at 100/133/166/200MHz by adjusting CLK_SW.
(The internal frequency depend on CPU.)



CLK_SW

Default setting: ON



ON: Auto (133/166/200MHz, supports FSB 266/333/400MHz CPU, Default)



OFF: 100MHz (supports FSB 200MHz CPU)



CAUTION

You must set CLK_SW to OFF (100MHz) when you used FSB 200MHz CPU.

Step 2: Install the Central Processing Unit (CPU)



Before installing the CPU, please comply with the following conditions:

1. Please make sure that the motherboard supports the CPU.
2. Please take note of the one indented corner of the CPU. If you install the CPU in the wrong direction, the CPU will not insert properly. If this occurs, please change the insert direction of the CPU.
3. Please add an even layer of heat sink paste between the CPU and heatsink.
4. Please make sure the heatsink is installed on the CPU prior to system use, otherwise overheating and permanent damage of the CPU may occur.
5. Please set the CPU host frequency in accordance with the processor specifications. It is not recommended that the system bus frequency be set beyond hardware specifications since it does not meet the required standards for the peripherals. If you wish to set the frequency beyond the proper specifications, please do so according to your hardware specifications including the CPU, graphics card, memory, hard drive, etc.

Step 2-1: CPU Installation

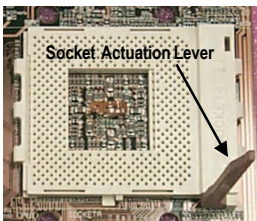


Figure 1.
Pull the rod to the 90-degree directly.

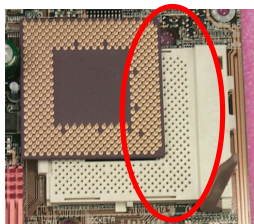


Figure 2.
Locate Pin 1 in the socket and look for a cut edge on the CPU upper corner. Insert the CPU into the socket. (Do not force the CPU into the socket.) Then move the socket lever to the locked position while holding pressure on the center of the CPU.

Step 2-2: CPU Cooling Fan Installation

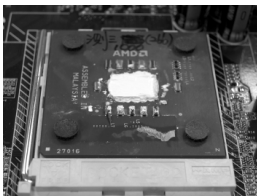


Figure 1.
Apply the thermal tape(or grease) to provide better heat conduction between your CPU and cooling fan.

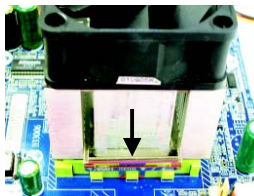


Figure 2.
Fasten the cooling fan supporting-base onto the CPU socket on the motherboard.

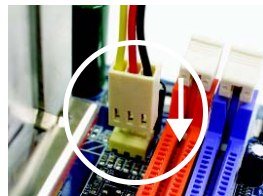


Figure 3.
Make sure the CPU fan is plugged to the CPU fan connector, than the install completely.

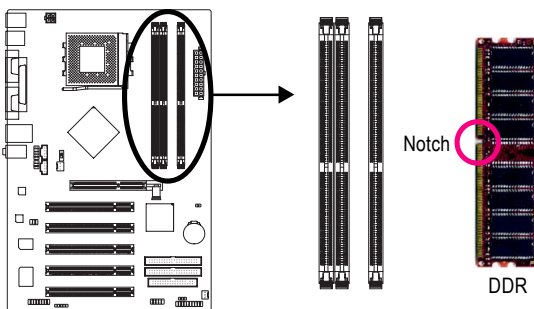
Step 3: Install Memory Modules



Before installing the memory modules, please comply with the following conditions:

1. Please make sure that the memory used is supported by the motherboard. It is recommended that memory of similar capacity, specifications and brand be used.
2. Before installing or removing memory modules, please make sure that the computer power is switched off to prevent hardware damage.
3. Memory modules have a foolproof insertion design. A memory module can be installed in only one direction. If you are unable to insert the module, please switch the direction.

The motherboard supports DDR memory modules, whereby BIOS will automatically detect memory capacity and specifications. Memory modules are designed so that they can be inserted only in one direction. The memory capacity used can differ with each slot.



1. The DIMM socket has a notch, so the DIMM memory module can only fit in one direction. Insert the DIMM memory module vertically into the DIMM socket. Then push it down.



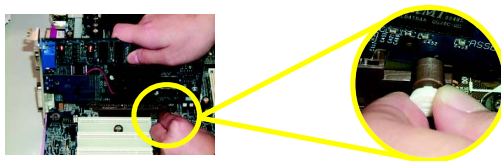
2. Close the plastic clip at both edges of the DIMM sockets to lock the DIMM module. Reverse the installation steps when you wish to remove the DIMM module.

Step 4: Install AGP Card

1. Read the relate AGP card's instruction document before install the AGP card into the computer.
2. If your AGP card has "AGP 4X/8X(1.5V) notch"(show below), please make sure your AGP card is AGP 4X/8X(1.5V).

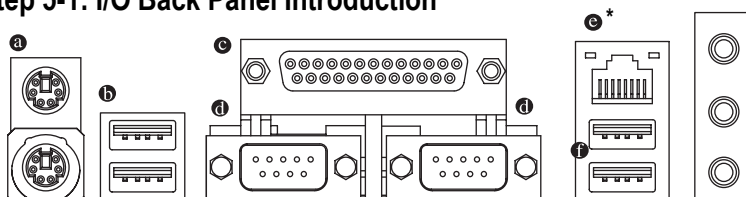


3. Please carefully pull out the small white-drawable bar at the end of the AGP slot when you try to install/uninstall the AGP card. Please align the AGP card to the onboard AGP slot and press firmly down on the slot. Make sure your AGP card is locked by the small white-drawable bar.



Step 5: Install I/O Peripherals Cables

Step 5-1: I/O Back Panel Introduction



a PS/2 Keyboard and PS/2 Mouse connector

To install a PS/2 port keyboard and mouse, plug the mouse to the upper port (green) and the keyboard to the lower port (purple).

b USB port

Before you connect your device(s) into USB connector(s), please make sure your device(s) such as USB keyboard, mouse, scanner, zip, speaker...etc. Have a standard USB interface. Also make sure your OS supports USB controller. If your OS does not support USB controller, please contact OS vendor for possible patch or driver upgrade. For more information please contact your OS or device(s) vendors.

c Parallel port (LPT)

The parallel port allows connection of a printer, scanner and other peripheral devices.

d Serial port (COMA/COMB)

Mouse and modem etc. can be connected to Serial port.

e LAN port *

The provided Internet connection is fast Ethernet, providing data transfer speeds of 10/100Mbps.

f Line In jack

Devices like CD-ROM, walkman etc. can be connected to Line In jack.

*** For 7NF-RZ only.

④ **Line Out jack**

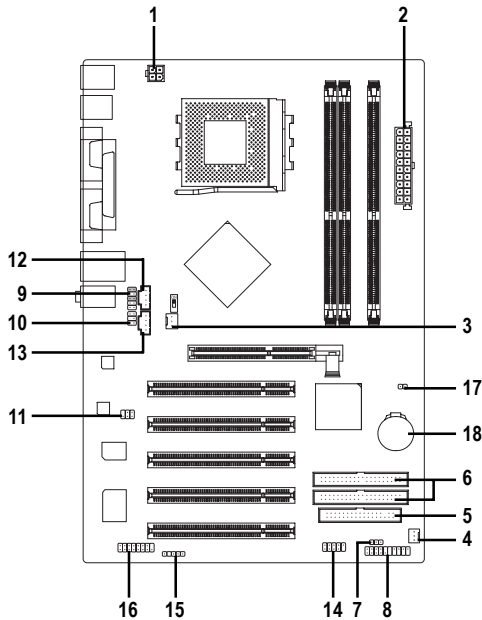
Connect the stereo speakers or earphone to this connector.

④ **MIC In jack**

Microphone can be connect to MIC In jack.

After installation of the audio driver, you are able to use 2/4/6-channel audio feature by software selection. You can connect "Front speaker" to "Line Out" jack, Connect "Rear speaker" to "Line In" jack and connect "Center/Subwoofer" to "MIC In" jack.

Step 5-2: Connectors Introduction

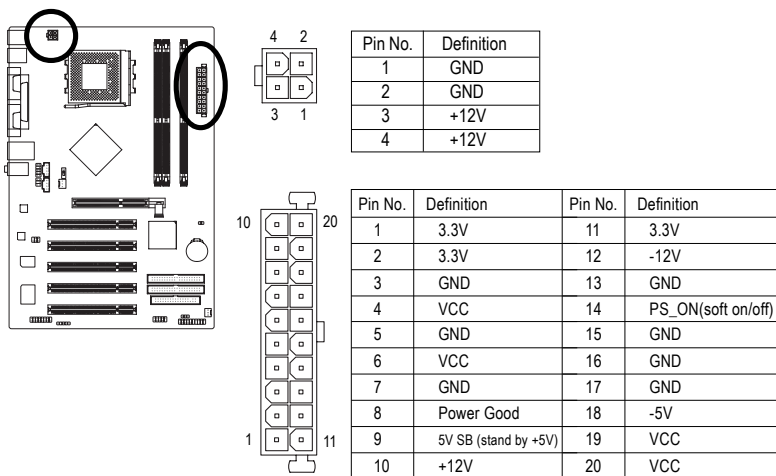


1) ATX_12V	10) SUR_CEN
2) ATX	11) SPDIF_IO
3) CPU_FAN	12) CD_IN
4) SYS_FAN	13) AUX_IN
5) FDD	14) F_USB
6) IDE1 / IDE2	15) IR
7) PWR_LED	16) GAME
8) F_PANEL	17) CLR_CMOS
9) F_AUDIO	18) BATTERY

1/2) ATX_12V / ATX (Power Connector)

With the use of the power connector, the power supply can supply enough stable power to all the components on the motherboard. Before connecting the power connector, please make sure that all components and devices are properly installed. Align the power connector with its proper location on the motherboard and connect tightly. The ATX_12V power connector mainly supplies power to the CPU. If the ATX_12V power connector is not connected, the system will not start.

Caution! Please use a power supply that is able to handle the system voltage requirements. It is recommended that a power supply that can withstand high power consumption be used (300W or greater). If a power supply is used that does not provide the required power, the result can lead to an unstable system or a system that is unable to start.

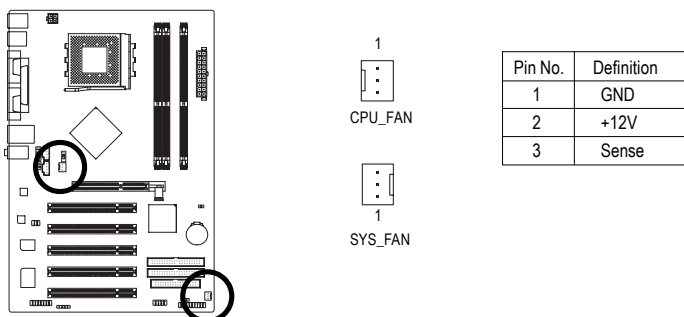


3/4) CPU_FAN / SYS_FAN (Cooler Fan Power Connector)

The cooler fan power connector supplies a +12V power voltage via a 3-pin power connector and possesses a foolproof connection design. Most coolers are designed with color-coded power connector wires. A red power connector wire indicates a positive connection and requires a +12V power voltage. The black connector wire is the ground wire (GND).

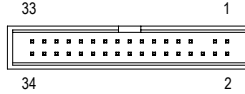
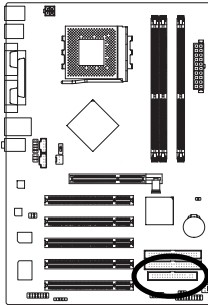
Caution!

Please remember to connect the power to the CPU fan to prevent CPU overheating and failure.



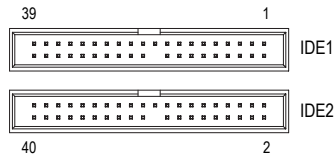
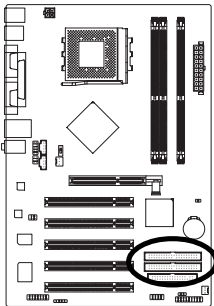
5) FDD (FDD Connector)

The FDD connector is used to connect the FDD cable while the other end of the cable connects to the FDD drive. The types of FDD drives supported are: 360KB, 720KB, 1.2MB, 1.44MB and 2.88MB. Please connect the red power connector wire to the pin1 position.



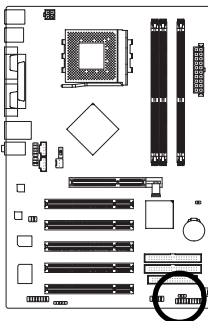
6) IDE1 / IDE2 (IDE1 / IDE2 Connector)

An IDE device connects to the computer via an IDE connector. One IDE connector can connect to one IDE cable, and the single IDE cable can then connect to two IDE devices (hard drive or optical drive). If you wish to connect two IDE devices, please set the jumper on one IDE device as Master and the other as Slave (for information on settings, please refer to the instructions located on the IDE device).



7) PWR_LED

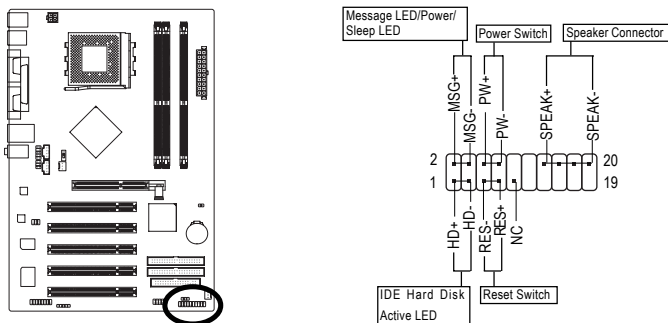
PWR_LED is connect with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode.



Pin No.	Definition
1	MPD+
2	MPD-
3	MPD-

8) F_PANEL (Front Panel Connector)

Please connect the power LED, PC speaker, reset switch and power switch etc. of your chassis front panel to the F_PANEL connector according to the pin assignment below.

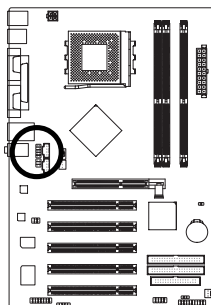


HD (IDE Hard Disk Active LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
SPK (Speaker Connector)	Pin 1: VCC(+) Pin 2- Pin 3: NC Pin 4: Data(-)
RES (Reset Switch)	Open: Normal Operation Close: Reset Hardware System
PW (Power Switch)	Open: Normal Operation Close: Power On/Off
MSG (Message LED/ Power/ Sleep LED)	Pin 1: LED anode(+) Pin 2: LED cathode(-)
NC	NC

9) F_AUDIO (Front Audio Connector)

If you want to use Front Audio connector, you must remove 5-6, 9-10 Jumper.

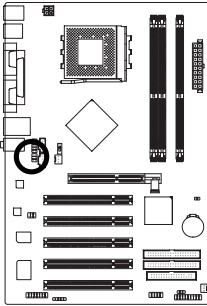
In order to utilize the front audio header, your chassis must have front audio connector. Also please make sure the pin assignment on the cable is the same as the pin assignment on the MB header. To find out if the chassis you are buying support front audio connector, please contact your dealer. Please note, you can have the alternative of using front audio connector or of using rear audio connector to play sound.



Pin No.	Definition
1	MIC
2	GND
3	MIC_BIAS
4	Power
5	Front Audio (R)
6	Rear Audio (R)
7	Reserved
8	No Pin
9	Front Audio (L)
10	Rear Audio (L)

10) SUR_CEN (Surround Center Connector)

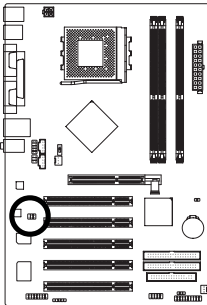
Please contact your nearest dealer for optional SUR_CEN cable.



Pin No.	Definition
1	SUR OUTL
2	SUR OUTR
3	GND
4	No Pin
5	CENTER_OUT
6	LFE_OUT

11) SPDIF_IO (SPDIF In / Out Connector)

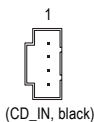
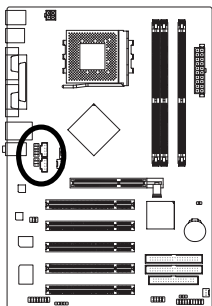
The SPDIF output is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby Digital Decoder. Use this feature only when your stereo system has digital input function. Be careful with the polarity of the SPDIF_IO connector. Check the pin assignment carefully while you connect the SPDIF cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional SPDIF cable, please contact your local dealer.



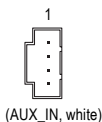
Pin No.	Definition
1	VCC
2	No Pin
3	SPDIF
4	SPDIFI
5	GND
6	GND

12/13) CD_IN (CD In Connector, black) / AUX_IN (AUX In Connector, white)

Connect CD-ROM or DVD-ROM audio out to the CD_IN connector. Connect other device(such as PCI TV Tunner audio out) to the AUX_IN connector.



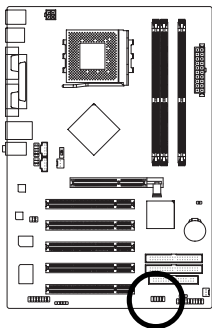
Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R



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

14) F_USB (Front USB Connector)

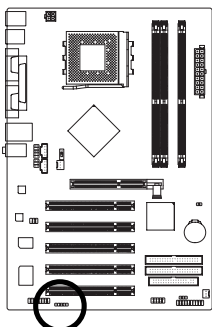
Be careful with the polarity of the front USB connector. Check the pin assignment carefully while you connect the front USB cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional front USB cable, please contact your local dealer.



Pin No.	Definition
1	Power
2	Power
3	USB Dx-
4	USB Dy-
5	USB Dx+
6	USB Dy+
7	GND
8	GND
9	No Pin
10	NC

15) IR

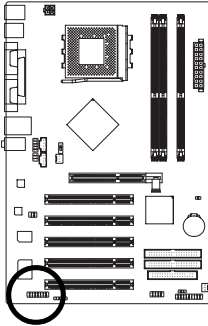
Be careful with the polarity of the IR connector while you connect the IR. Please contact your nearest dealer for optional IR device.



Pin No.	Definition
1	VCC
2	No Pin
3	IR RX
4	GND
5	IR TX

16) GAME (Game Connector)

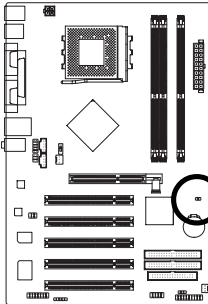
This connector supports joystick, MIDI keyboard and other relate audio devices. Check the pin assignment while you connect the game cables. Please contact your nearest dealer for optional game cables.




Pin No.	Definition	Pin No.	Definition
1	VCC	9	GPSA1
2	GRX1	10	GND
3	GND	11	GRY1
4	GPSA2	12	VCC
5	VCC	13	GPSB1
6	GRX2	14	MSO
7	GRY2	15	GPSB2
8	MSI	16	No Pin

17) CLR_CMOS (Clear CMOS)

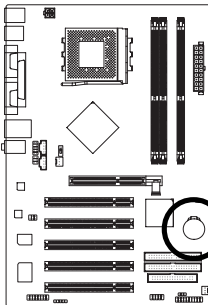
You may clear the CMOS data to its default values by this jumper. To clear CMOS, temporarily short 1-2 pin. Default doesn't include the "Shunter" to prevent from improper use this jumper.



1  Open: Normal

1  1-2 close: Clear CMOS

18) BATTERY



CAUTION

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

If you want to erase CMOS...

1. Turn OFF the computer and unplug the power cord.
2. Remove the battery, wait for 30 second.
3. Re-install the battery.
4. Plug the power cord and turn ON the computer.

Chapter 2 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

Powering ON the computer and pressing immediately will allow you to enter Setup. If you require more advanced BIOS settings, please go to "Advanced BIOS" setting menu. To enter Advanced BIOS setting menu, press "Ctrl+F1" key on the BIOS screen.

CONTROL KEYS

<↑><↓><←><→>	Move to select item
<Enter>	Select Item
<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>	Item Help
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the file-safe default CMOS value from BIOS default table
<F7>	Load the Optimized Defaults
<F8>	Q-Flash utility
<F9>	System Information
<F10>	Save all the CMOS changes, only for Main Menu

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 (For example: BIOS Ver. : E8)

Once you enter Award BIOS CMOS Setup Utility, the Main Menu (as figure below) will appear on the screen. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software

<ul style="list-style-type: none"> ▶ Standard CMOS Features ▶ Advanced BIOS Features ▶ Advanced Chipset Features ▶ Integrated Peripherals ▶ Power Management Setup ▶ PnP/PCI Configurations ▶ PC Health Status 	<ul style="list-style-type: none"> Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving
ESC: Quit	↑↓→←: Select Item
F8: Q-Flash	F10: Save & Exit Setup
Time, Date, Hard Disk Type...	



If you can't find the setting you want, please press "Ctrl+F1" to search the advanced option hidden.

- **Standard CMOS Features**

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

- **Advanced BIOS Features**

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

- **Integrated Peripherals**

This setup page includes all onboard peripherals.

- **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.

- **PC Health Status**

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

- **Load Fail-Safe Defaults**

Fail-Safe Defaults indicates the value of the system parameters which the system would be in safe configuration.

- **Load Optimized Defaults**

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

- **Set Supervisor Password**

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

- **Set User Password**

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

- **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 Features

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Standard CMOS Features

Date (mm.dd.yy)	Fri, Jun 18 2004	Item Help
Time (hh:mm:ss)	22:31:24	Menu Level▶ Change the day, month, year
▶ IDE Primary Master	[None]	<Week> Sun. to Sat.
▶ IDE Primary Slave	[None]	<Month> Jan. to Dec.
▶ IDE Secondary Master	[None]	<Day> 1 to 31 (or maximum allowed in the month)
▶ IDE Secondary Slave	[None]	<Year> 1999 to 2098
Drive A	[1.44M, 3.5"]	
Drive B	[None]	
Floppy 3 Mode Support	[Disabled]	
Holt On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	255M	
Total Memory	256M	
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Save Default F7: Optimized Defaults		

☞ 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 1999 through 2098

☞ 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.

☞ IDE Primary Master, Slave / IDE Secondary Master, Slave

- ▶▶ IDE HDD Auto-Detection Press "Enter" to select this option for automatic device detection.
- ▶▶ IDE Primary / Secondary Master, Slave IDE Device Setup. You can use one of three methods:
 - Auto Allows BIOS to automatically detect IDE devices during POST(default)
 - None Select this if no IDE devices are used and the system will skip the automatic detection step and allow for faster system start up.
 - Manual User can manually input the correct settings
- ▶▶ Access Mode Use this to set the access mode for the hard drive. The four options are: CHS/LBA/Large/Auto(default:Auto)

Hard drive information should be labeled on the outside drive casing. Enter the appropriate option based on this information.

- ▶▶ Cylinder Number of cylinders
- ▶▶ Head Number of heads
- ▶▶ Precomp Write precomp
- ▶▶ Landing Zone Landing zone
- ▶▶ Sector Number of sectors

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

☞ Drive A / 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" 5.25 inch PC-type standard drive; 360K byte capacity.
- ▶▶ 1.2M, 5.25" 5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).
- ▶▶ 720K, 3.5" 3.5 inch double-sided drive; 720K byte capacity
- ▶▶ 1.44M, 3.5" 3.5 inch double-sided drive; 1.44M byte capacity.
- ▶▶ 2.88M, 3.5" 3.5 inch double-sided drive; 2.88M byte capacity.

☞ Floppy 3 Mode Support (for Japan Area)

- ▶▶ Disabled Normal Floppy Drive. (Default value)
- ▶▶ Drive A Drive A is 3 mode Floppy Drive.
- ▶▶ Drive B Drive B is 3 mode Floppy Drive.
- ▶▶ Both Drive A & B are 3 mode Floppy Drives.

☞ Halt on

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

- ▶▶ No Errors The system boot will not stop for any error that may be detected and you will be prompted.
- ▶▶ All Errors Whenever the BIOS detects a non-fatal error the system will be stopped.
- ▶▶ All, But Keyboard The system boot will not stop for a keyboard error; it will stop for all other errors. (Default value)
- ▶▶ 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 keyboard or disk error; it will stop for all other errors.

☞ Memory

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

▶▶ Base Memory

The 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 512K for systems with 512K memory installed on the motherboard, or 640K for systems with 640K or more memory installed on the motherboard.

▶▶ 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.

▶▶ Total Memory

This item displays the memory size that used.

Advanced BIOS Features

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Advanced BIOS Features

First Boot Device	[Floppy]	Item Help
Second Boot Device	[HDD-0]	Menu Level▶
Third Boot Device	[CDROM]	Select Boot Device
Boot Up Floppy Seek	[Disabled]	priority
Password Check	[Setup]	
Init Display First	[PCI]	[Floppy] Boot from floppy
		[LS120] Boot from LS120
		[HDD-0] Boot from First HDD
		[HDD-1] Boot from Second HDD
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Save Default F7: Optimized Defaults		

First / Second / Third Boot Device

- ▶ Floppy Select your boot device priority by Floppy.
- ▶ LS120 Select your boot device priority by LS120.
- ▶ HDD-0~3 Select your boot device priority by HDD-0~3.
- ▶ SCSI Select your boot device priority by SCSI.
- ▶ CDROM Select your boot device priority by CDROM.
- ▶ ZIP Select your boot device priority by ZIP.
- ▶ USB-FDD Select your boot device priority by USB-FDD.
- ▶ USB-ZIP Select your boot device priority by USB-ZIP.
- ▶ USB-CDROM Select your boot device priority by USB-CDROM.
- ▶ USB-HDD Select your boot device priority by USB-HDD.
- ▶ LAN Select your boot device priority by LAN.
- ▶ Disabled Select your boot device priority by Disabled.

Boot Up Floppy Seek

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

- ▶ Enabled BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not tell from 720K, 1.2M or 1.44M 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 360K.
(Default value)

Password Check

- ▶ System The system can not boot and can not access to Setup page 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. (Default value)

Init Display First

This feature allows you to select the first initiation of the monitor display from which card when you install an AGP card and a PCI VGA card on board.

- ▶ PCI Set initial display first to PCI slot. (Default value)
- ▶ AGP Set initial display first to AGP.

Advanced Chipset Features

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Advanced Chipset Features

System Performance	[Normal]	Item Help
FSB Frequency	[133MHz]	Menu Level▶
x Memory Frequency	By SPD	[Normal]
Resulting Frequency	266MHz	Use the most stable settings
AGP Frequency	[Normal]	[Turbo]
		Use over clocked settings for higher performance but with higher risk of instability
		[Manual]
		Allows full customization of performance options Advanced users only
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Save Default F7: Optimized Defaults		



Incorrect using these features may cause your system broken. For power End-User use only!

System Performance

- ▶▶ Normal Set system at the most stable settings. (Default value)
- ▶▶ Turbo Use overclock settings for higher performance but with higher risk of instability.
- ▶▶ Manual Allows full customization of performance options.

FSB Frequency

- ▶▶ 100MHz Set FSB frequency at 100MHz.
- ▶▶ 133MHz Set FSB frequency at 133MHz. (Default value)
- ▶▶ 166MHz Set FSB frequency at 166MHz.
- ▶▶ 200MHz Set FSB frequency at 200MHz.

Memory Frequency

- ▶▶ By SPD Set memory frequency by SPD. (Default value)
- ▶▶ 50% ~ 200% Set memory frequency manually.
- ▶▶ Auto Set the best memory frequency for system.

Resulting Frequency

- ▶▶ The value depends on FSB/Memory Frequency settings.

AGP Frequency

- ▶▶ Normal Set the best AGP frequency for system. (Default value)
- ▶▶ 50MHz ~ 100MHz Set AGP frequency manually.

Please follow the instructions below to enable the support for DDR 400 memory modules :

(You have to set System Performance to Manual).

- 1) If you use a processor with FSB100MHz (make sure FSB Frequency is set to 100MHz), set Memory Frequency to 200%.
- 2) If you use a processor with FSB133MHz (make sure FSB Frequency is set to 133MHz), set Memory Frequency to 150%.
- 3) If you use a processor with FSB166MHz (make sure FSB Frequency is set to 166MHz), set Memory Frequency to 120%.
- 4) If you use a processor with FSB200MHz (make sure FSB Frequency is set to 200MHz), set Memory Frequency to 100%.

Integrated Peripherals

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Integrated Peripherals

On-Chip Primary PCI IDE	[Enabled]	Item Help
On-Chip Secondary PCI IDE	[Enabled]	Menu Level▶
USB Host Controller	[V1.1+V2.0]	
USB Keyboard Support	[Disabled]	
USB Mouse Support	[Disabled]	If a hard disk controller card is used, set at Disabled
AC97 Audio	[Auto]	
On-Chip LAN(nVIDIA)*	[Auto]	
Onboard Serial Port 1	[3F8/IRQ4]	[Enabled]
Onboard Serial Port 2	[2F8/IRQ3]	Enable onboard IDE Port
UART Mode Select	[Normal]	
x UR2 Duplex Mode	Half	
Onboard Parallel Port	[378/IRQ7]	[Disabled]
Parallel Port Mode	[ECP]	Disable onboard IDE Port
ECP Mode Use DMA	[3]	
Game Port Address	[201]	
Midi Port Address	[Disabled]	
x Midi Port IRQ	10	
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Save Default F7: Optimized Defaults		

On-Chip Primary PCI IDE

When set at "Enabled", it allows you to use the onboard primary IDE. If a hard disk controller card is used, please set at "Disabled".

- ▶▶ Enabled Enable onboard 1st channel IDE port. (Default value)
- ▶▶ Disabled Disable onboard 1st channel IDE port.

On-Chip Secondary PCI IDE

When set at "Enabled", it allows you to use the onboard secondary IDE. If a hard disk controller card is used, please set at "Disabled".

- ▶▶ Enabled Enable onboard 2nd channel IDE port. (Default value)
- ▶▶ Disabled Disable onboard 2nd channel IDE port.

USB Host Controller

- ▶▶ Disabled Disable USB controller.
- ▶▶ V1.1+V2.0 Set USB controller at USB1.1 and USB2.0. (Default value)
- ▶▶ V1.1 Set USB controller at USB1.1.

USB Keyboard Support

- ▶▶ Enabled Enable USB keyboard support.
- ▶▶ Disabled Disable USB keyboard support. (Default value)

USB Mouse Support

- ▶▶ Enabled Enable USB mouse support.
- ▶▶ Disabled Disable USB mouse support. (Default value)

AC97 Audio

- ▶▶ Auto Enable onboard AC'97 audio function. (Default value)
- ▶▶ Disabled Disable this function.

On-Chip LAN (nVIDIA)*

- ▶▶ Auto Auto detect on-chip LAN function. (Default value)
- ▶▶ Disabled Disable this function.

*** For 7NF-RZ only.

☞ Onboard Serial Port 1

- ▶▶ Auto BIOS will automatically setup the port 1 address.
- ▶▶ 3F8/IRQ4 Enable onboard Serial port 1 and address is 3F8. (Default value)
- ▶▶ 2F8/IRQ3 Enable onboard Serial port 1 and address is 2F8.
- ▶▶ 3E8/IRQ4 Enable onboard Serial port 1 and address is 3E8.
- ▶▶ 2E8/IRQ3 Enable onboard Serial port 1 and address is 2E8.
- ▶▶ Disabled Disable onboard Serial port 1.

☞ Onboard Serial Port 2

- ▶▶ Auto BIOS will automatically setup the port 2 address.
- ▶▶ 3F8/IRQ4 Enable onboard Serial port 2 and address is 3F8.
- ▶▶ 2F8/IRQ3 Enable onboard Serial port 2 and address is 2F8. (Default value)
- ▶▶ 3E8/IRQ4 Enable onboard Serial port 2 and address is 3E8.
- ▶▶ 2E8/IRQ3 Enable onboard Serial port 2 and address is 2E8.
- ▶▶ Disabled Disable onboard Serial port 2.

☞ UART Mode Select

This item allows you to determine which Infra Red(IR) function of onboard I/O chip.

- ▶▶ Normal Set onboard I/O chip UART to Normal mode. (Default value)
- ▶▶ IrDA Set onboard I/O chip UART to IrDA mode.
- ▶▶ ASKIR Set onboard I/O chip UART to ASKIR mode.

☞ UR2 Duplex Mode

This feature allows you to select IR mode. This function will available when "UART Mode Select" doesn't set at Normal nor SCR.

- ▶▶ Half Set IR function duplex half. (Default value)
- ▶▶ Full Set IR function duplex full.

☞ Onboard Parallel port

This feature allows you to select from a given set of parameters if the parallel port uses the onboard I/O controller.

- ▶▶ 378/IRQ7 Enable onboard LPT port and address is 378/IRQ7. (Default value)
- ▶▶ 278/IRQ5 Enable onboard LPT port and address is 278/IRQ5.
- ▶▶ Disabled Disable onboard LPT port.
- ▶▶ 3BC/IRQ7 Enable onboard LPT port and address is 3BC/IRQ7.

☞ Parallel Port Mode

- ▶▶ SPP Using Parallel port as Standard Parallel Port.
- ▶▶ EPP Using Parallel port as Enhanced Parallel Port.
- ▶▶ ECP Using Parallel port as Extended Capabilities Port. (Default value)
- ▶▶ ECP+EPP Using Parallel port as ECP & EPP mode.

☞ ECP Mode Use DMA

This feature allows you to select Direct Memory Access(DMA) channel if the ECP mode selected. This function will available when "Parallel Port Mode" set at ECP or ECP+EPP.

- ▶▶ 3 Set ECP mode use DMA to 3. (Default value)
- ▶▶ 1 Set ECP mode use DMA to 1.

Game Port Address

- ▶▶ 201 Set Game Port Address to 201. (Default value)
- ▶▶ 209 Set Game Port Address to 209.
- ▶▶ Disabled Disable this function.

Midi Port Address

- ▶▶ 300 Set Midi Port Address to 300.
- ▶▶ 330 Set Midi Port Address to 330.
- ▶▶ Disabled Disable this function. (Default value)

Midi Port IRQ

- ▶▶ 5 Set Midi Port IRQ to 5.
- ▶▶ 10 Set Midi Port IRQ to 10. (Default value)

Power Management Setup

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Power Management Setup

		Item Help
ACPI Suspend Type	[S1(POS)]	Menu Level▶
Soft-Off by PWR-BTTN	[Instant-off]	
PME Event Wake Up	[Enabled]	
ModemRingOn	[Enabled]	[S1]
S3 Resume by USB	[Disabled]	Set suspend type to
Resume by Alarm	[Disabled]	Power On Suspend under
x Date (of Month) Alarm	Everyday	ACPI OS
x Time (hh:mm:ss) Alarm	0 : 0 : 0	
Power On by Mouse	[Disabled]	[S3]
Power On by Keyboard	[Disabled]	Set suspend type to
x KB Power ON Password	Enter	Suspend to RAM under
AC BACK Function	[Soft-Off]	ACPI OS

↑↓ → ← : Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
 F5: Previous Values F6: Fail-Save Default F7: Optimized Defaults

ACPI Suspend Type

- ▶▶ S1(POS) Set ACPI suspend type to S1/POS(Power On Suspend). (Default value)
- ▶▶ S3(STR) Set ACPI suspend type to S3/STR(Suspend To RAM).

Soft-off by PWR-BTTN

- ▶▶ Instant-off Press power button then Power off instantly. (Default value)
- ▶▶ Delay 4 Sec. Press power button 4 sec. to Power off. Enter suspend if button is pressed less than 4 sec.

PME Event Wake Up

This feature requires an ATX power supply that provides at least 1A on the 5VSB lead.

- ▶▶ Disabled Disable this function.
- ▶▶ Enabled Enable PME as wake up event. (Default value)

ModemRingOn

An incoming call via modem or an input signal comes from the other client server on the LAN can awake the system from any suspend state.

- ▶▶ Disabled Disable Modem Ring on function.
- ▶▶ Enabled Enable Modem Ring on function. (Default value)

☞ **S3 Resume by USB**

This feature allows you to resume the system from USB device.

- ▶▶ Disabled Disable this function. (Default value)
- ▶▶ Enabled Enable this function.

☞ **Resume by Alarm**

You can set "Resume by Alarm" item to enabled and key in Data/time to power on system.

- ▶▶ Disabled Disable this function. (Default Value)
- ▶▶ Enabled Enable alarm function to POWER ON system.
If RTC Alarm Lead To Power On is Enabled.
Date (of Month) Alarm : Everyday, 1~31
Time (hh: mm: ss) Alarm : (0~23) : (0~59) : (0~59)

☞ **Power On by Mouse**

- ▶▶ Disabled Disabled this function. (Default value)
- ▶▶ Double Click Double click on PS/2 mouse left button to power on the system.

☞ **Power On by Keyboard**

- ▶▶ Disabled Disable this function. (Default value)
- ▶▶ Password Enter from 1 to 5 characters to set the keyboard power on password.
- ▶▶ Keyboard 98 If your keyboard has a "POWER Key" button, you can press the key to power on your system.

☞ **KB Power ON Password**

When "Power On by Keyboard" set at Password, you can set the password here.

- ▶▶ Enter Input password (from 1 to 5 characters) and press Enter to set the keyboard power on password.

☞ **AC BACK Function**

- ▶▶ Soft-Off Always in Off state when AC back to the system. (Default value)
- ▶▶ Full-On Always power on the system when AC back.
- ▶▶ Memory System power on depends on the status before AC lost.

PnP/PCI Configurations

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software
PnP/PCI Configurations

PCI 1/5 IRQ Assignment	[Auto]	Item Help
PCI 2 IRQ Assignment	[Auto]	Menu Level▶
PCI 3 IRQ Assignment	[Auto]	
PCI 4 IRQ Assignment	[Auto]	
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Save Default F7: Optimized Defaults		

PCI 1/5 IRQ Assignment

- ▶▶ Auto Auto assign IRQ to PCI 1 / PCI 5. (Default value)
- ▶▶ 3,4,5,7,9,10,11,12,14,15 Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 1 / PCI 5.

PCI 2 IRQ Assignment

- ▶▶ Auto Auto assign IRQ to PCI 2. (Default value)
- ▶▶ 3,4,5,7,9,10,11,12,14,15 Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 2.

PCI 3 IRQ Assignment

- ▶▶ Auto Auto assign IRQ to PCI 3. (Default value)
- ▶▶ 3,4,5,7,9,10,11,12,14,15 Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 3.

PCI 4 IRQ Assignment

- ▶▶ Auto Auto assign IRQ to PCI 4. (Default value)
- ▶▶ 3,4,5,7,9,10,11,12,14,15 Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 4.

PC Health Status

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PC Health Status

Vcore	OK	Item Help
DDR25V	OK	Menu Level▶
+3.3V	OK	
+12V	OK	
Current System Temperature	32°C	
Current CPU Temperature	45°C	
Current CPU FAN Speed	4687 RPM	
Current SYSTEM FAN Speed	0 RPM	
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Save Default F7: Optimized Defaults		

☞ **Current Voltage (V) Vcore / DDR25V / +3.3V / +12V**

▶▶ Detect system's voltage status automatically.

☞ **Current System/CPU Temperature**

▶▶ Detect system/CPU temperature automatically.

☞ **Current CPU/SYSTEM FAN Speed (RPM)**

▶▶ Detect CPU/system Fan speed status automatically.

Load Fail-Safe Defaults

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<ul style="list-style-type: none"> ▶ Standard CMOS Features ▶ Advanced BIOS Features ▶ Advanced Chipset Features ▶ Integrated Peripherals ▶ Power Management ▶ PnP/PCI Configurations ▶ PC Health Status 	<ul style="list-style-type: none"> Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password Set User Password Exit Without Saving
Load Fail-Safe Defaults (Y/N)? N	
ESC: Quit	↑↓→←: Select Item
F8: Q-Flash	F10: Save & Exit Setup
Load Fail-Safe Defaults	

Fail-Safe defaults contain the most appropriate values of the system parameters that allow minimum system performance.

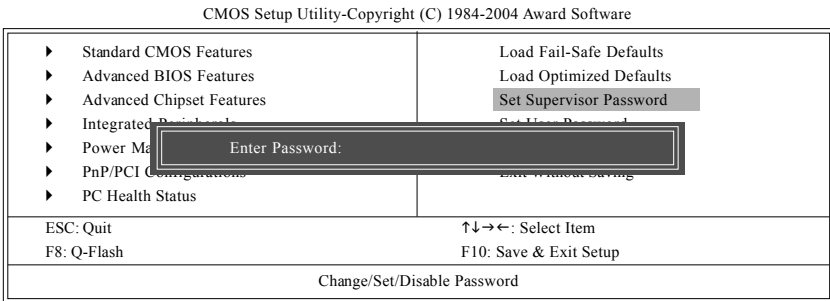
Load Optimized Defaults

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software

<ul style="list-style-type: none"> ▶ Standard CMOS Features ▶ Advanced BIOS Features ▶ Advanced Chipset Features ▶ Integrated Peripherals ▶ Power Management ▶ PnP/PCI Configurations ▶ PC Health Status 	<ul style="list-style-type: none"> Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password Set User Password Exit Without Saving
Load Optimized Defaults (Y/N)? N	
ESC: Quit	↑↓→←: Select Item
F8: Q-Flash	F10: Save & Exit Setup
Load Optimized Defaults	

Selecting this field loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

Set 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.

Type the password, up to eight characters, and press <Enter>. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

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.

The BIOS Setup program allows you to specify two separate passwords:

SUPERVISOR PASSWORD and a USER PASSWORD. When disabled, anyone may access all BIOS Setup program function. When enabled, the Supervisor password is required for entering the BIOS Setup program and having full configuration fields, the User password is required to access only basic items.

If you select "System" at "Password Check" in Advance BIOS Features 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 Advance BIOS Features Menu, you will be prompted only when you try to enter Setup.

Save & Exit Setup

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software

▶ Standard CMOS Features	Load Fail-Safe Defaults
▶ Advanced BIOS Features	Load Optimized Defaults
▶ Advanced Chipset Features	Set Supervisor Password
▶ Integrated Peripherals	Set User Password
▶ Power Management	Exit Without Saving
▶ PnP/PCI Configurations	Save to CMOS and EXIT (Y/N)? Y
▶ PC Health Status	
ESC: Quit	↑↓→←: Select Item
F8: Q-Flash	F10: Save & Exit Setup
Save Data to CMOS	

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

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▶ Standard CMOS Features	Load Fail-Safe Defaults
▶ Advanced BIOS Features	Load Optimized Defaults
▶ Advanced Chipset Features	Set Supervisor Password
▶ Integrated Peripherals	Set User Password
▶ Power Management	Exit Without Saving
▶ PnP/PCI Configurations	Quit Without Saving (Y/N)? N
▶ PC Health Status	
ESC: Quit	↑↓→←: Select Item
F8: Q-Flash	F10: Save & Exit Setup
Abandon all Data	

Type "Y" will quit the Setup Utility without saving to RTC CMOS.
Type "N" will return to Setup Utility.

Chapter 3 Install Drivers


Install Drivers

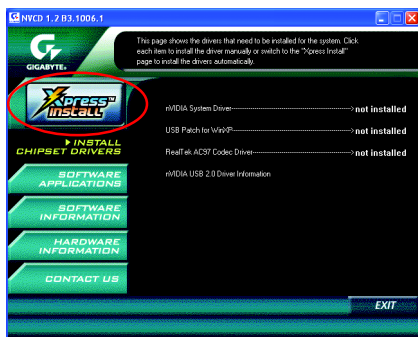



Pictures below are shown in Windows XP

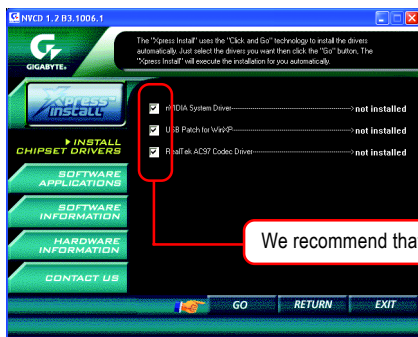
Insert the driver CD-title that came with your motherboard into your CD-ROM drive, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

Install Chipset Drivers

This page shows the drivers that need to be installed for the system. Click each item to install the driver manually or switch to the  to install the drivers automatically.

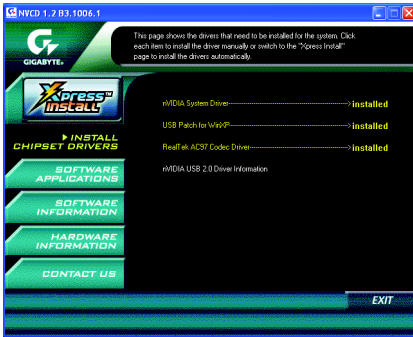


The "Xpress Install" uses the "Click and Go" technology to install the drivers automatically. Just select the drivers you want then click the "GO" button. The  will execute the installation for you automatically.



Message: Some device drivers will restart your system automatically. After restarting your system the "Xpress Install" will continue to install other drivers.

We recommend that you install all components in the list.



Driver install finished !
You have to reboot system !

Item Description

- nVIDIA System Driver
For nVIDIA chipset driver.
- USB Patch for WinXP
This patch driver can help you to resolve the USB device wake up S3 hang up issue in XP.
- RealTek AC97 Codec Driver
Audio driver for RealTek codec chipset.
- nVIDIA USB 2.0 Driver Information
USB 2.0 driver information for XP.



For USB2.0 driver support under Windows XP operating system, please use Windows Service Pack. After install Windows Service Pack, it will show a question mark "?" in "Universal Serial Bus controller" under "Device Manager". Please remove the question mark and restart the system (System will auto-detect the right USB2.0 driver).



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