

# Chapter 1



## Introduction

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K7N2S series of mainboards utilize nForce2 Ultra 400+RAID MCP chipset, providing a fully compatible, high performance and cost-effective ATX platform. The new integrated technologies, together with AC'97 audio(2/6-channel), 8 USB 2.0, 2 SATA, and ATA133/100/66/33, give customers an advanced, multimedia solution at reasonable price. It provides 266/333/400MHz host bus speed to support AMD Athlon XP/Duron socket A processors and the DDR266/333/400 memory. Suspending to RAM(optional), the optimal implementation of the Advanced Configuration and Power Interface (ACPI) specification, makes the PC's power consumption drop to the lowest possible level and enable quick wakeup.

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### **Form factor**

- ATX form factor of 295mm x 220mm

### **Microprocessor**

- Supports AMD Athlon XP/Duron socket A processors of 266/333/400MHz host bus speed
- Supports 266/333/400MHz host bus speed

### **System memory**

- Supports DDR266/333/400 SDRAM
- Supports 64/128/256/512Mb technology up to 3GB
- Provides three 184-pin DDR SDRAM interfaces

### **Onboard IDE**

- Supports Independent timing of up to 4 drives
- Supports Ultra ATA 33/66/100/133, PIO mode
- Two fast IDE interfaces supporting four IDE devices including IDE hard disks and CD ROM drives

### **Onboard LAN(optional)**

- 10/100 Mbit/sec Ethernet support
- 10/100M LAN interface built-in on board

### **USB 2.0**

- USB 2.0 compliant, operates at 480Mbps, about 40X times faster than USB 1.1 which currently works at a snails pace of just 12Mbps
- Provides 8 USB 2.0 ports

### **Onboard I/O**

- One floppy port supporting up to one 3.5" or 5.25" floppy drives with 360K/720K/1.2M/1.44M/2.88M format
- One high speed 16550 compatible COMs with 16 byte send/receive FIFO
- One parallel port supports SPP/EPP/ECP mode
- Supports PS/2 mouse and PS/2 keyboard
- Provides one IrDA connector(optional)
- All I/O ports can be enabled/disabled in the BIOS setup

### **Onboard Audio**

- AC'97 2.3 Specification Compliant
- Provides onboard Line-in Jack, Microphone-in Jack and Speaker-out Jack

### **6-channel Onboard Audio**

- AC'97 2.3 Specification Compliant
- Provides Front left&right, Rear left&right/Line-in Jack and Center&SubWoofers/Microphone-in Jack, which can be specified by software

### **AGP Interface**

- Provides one integrated AGP unit
- AGP connector supports AGP 3.0 including AGP 8X data transfers and AGP 2.0 including AGP 4X data transfers



## Advanced features

- Supports CPU overlocking function, please refer to the J1, J2, J3 jumpers configuration.
- Supports voltage adjustment function, it can adjust the voltage of CPU, AGP and DIMM to fit in with CPU over speeding.

**Warning:** Be sure your selection is right. CPU over speeding and voltage adjustment are dangerous! We will not be responsible for any damages caused.

- Supports thermal shutdown function (optional) to protect CPU damages for overheat.
- Supports RAID0, RAID1, RAID0+1, JBOD for RAID function.

**Note:** please first copy the RAID driver files in the QDI utility CD onto a empty floppy disk to create a installation diskette, then you can get more detailed information from the web-site: [www.qdigrp.com](http://www.qdigrp.com)

- PCI 2.2 Specification Compliant
- Supports Windows 98/2000/ME/XP soft-off

## Onboard SATA

- Two SATA devices including SATA HDD and CDROM/DVD ROM devices
- Supports 150Mbps transfer rate.

## BIOS

- Licensed advanced AMI BIOS, supports flash ROM, plug and play ready
- Supports IDE CDROM/USB boot up.

## Green function(optional)

- Supports ACPI (Advanced Configuration and Power Interface) and ODPM (OS Directed Power Management)
- Supports ACPI power status: S0 (full-on), S1 (power on suspend), S3 (suspend to RAM), S4 (suspend to Disk, depends on OS) and S5 (soft-off)

## Main Expansion Slots and Connectors

Slot/Port (Quantity)	Description
PCI(5)	PCI slots
IDE(2)	IDE ports
FLOPPY(1)	Floppy Drive port
DDR(3)	DIMM socket
USB(8)	USB connectors
AGP(1)	AGP slot
LAN(1)(option)	LAN connector
COM(1)	COM connector
PARALLEL(1)	Parallel connector
IEEE 1394(2)(option)	IEEE 1394 connectors
SATA(2)	SATA connectors



## **Chapter 2**



# **Installation Instructions**

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This section covers External Connectors and Jumper Settings. Refer to the mainboard layout chart for locations of all jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pin assignments for your reference. The particular state of the jumpers, connectors and ports are illustrated in the following figures. Before setting the jumpers or inserting these connectors, please pay attention to the direction.

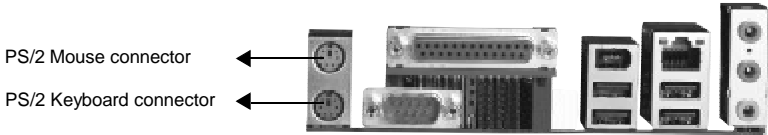
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## External Connectors

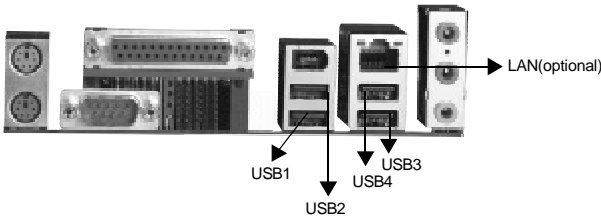
### PS/2 Keyboard/Mouse Connector

PS/2 keyboard connector is for the usage of PS/2 keyboard. If using a standard AT size keyboard, an adapter should be used to fit this connector. PS/2 mouse connector is for the usage of PS/2 mouse.



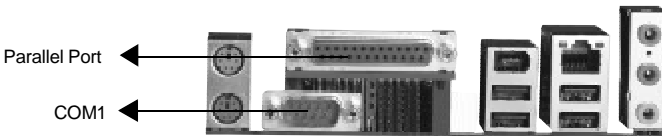
### USB1, USB2; USB3, USB4 and LAN Connectors(optional)

Four USB ports are for connecting USB devices. The RJ-45 connector is for onboard LAN.



### Parallel Port, Serial Port Connector (COM1)

The parallel port connector can be connected to a parallel device such as a printer. The serial port COM1 connector can be connected to a serial port device such as a serial port mouse.



**Warning:**

Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, otherwise your mainboard and expansion cards might be seriously damaged.

### Line-in jack, Microphone-in jack and Speaker-out jack

The Line-in jack can be connected to devices such as a cassette or minidisc player to playback or record. The Microphone-in jack can be connected to a microphone for voice input. The Speaker-out jack allows you to connect speakers or headphones for audio output from the internal amplifier.



### 6-Channel Audio

This mainboard utilizes ALC655 chip providing 6-channel Audio, which consists of Front Left, Front Right, Rear Left, Rear Right, Center and SubWoofer for a complete surround sound effect. When 6-Channel audio is available, the front Left&Right jack can be connected to the Front speakers, the Back Left&Right jack can be connected to the rear speakers and the Center&SubWoofer jack can be connected to the center speaker and woofer.

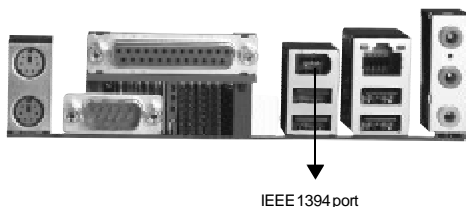
Microphone function is offered by F\_AUDIO Connector on the mainboard now.

If set 2-Channel Audio mode on -6A or -6AL mainboard, you can connect two speakers to the Front Left&Right jack, at the same time use the Rear Left&Right jack as Line in jack, and use the Center&SubWoofer jack as Microphone in jack.



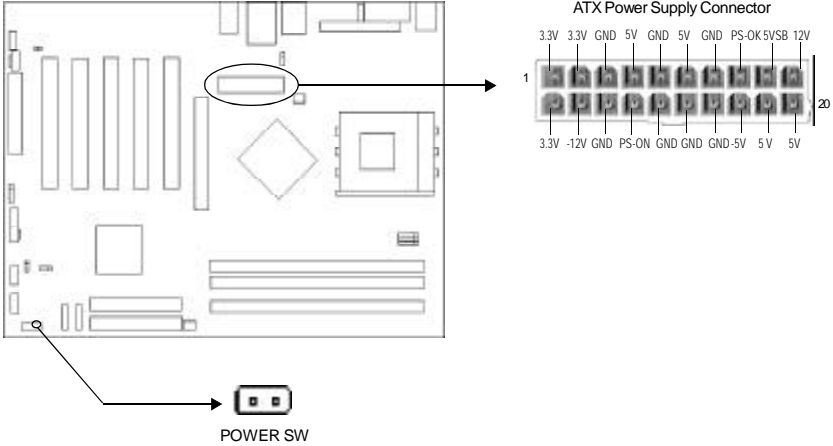
### IEEE 1394 Port (optional)

The IEEE 1394 port is for connecting IEEE 1394 device.



### ATX Power Supply Connector & Power Switch (POWER SW)

The power switch (POWER SW) should be connected to a momentary switch. When powering up your system, first turn on the mechanical switch of the power supply (if one is provided), then push once the power switch. When powering off the system, you needn't turn off the mechanical switch, just push once the power switch.



### Hard Disk LED Connector (HD\_LED)

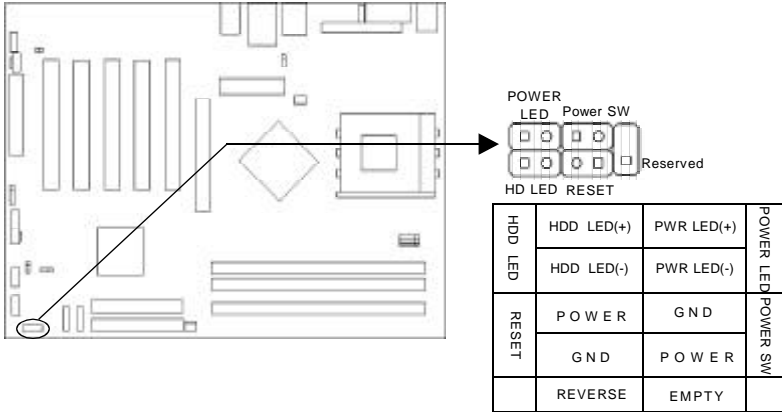
The connector connects to the case's IDE indicator LED indicating the activity status of IDE hard disk. The connector has an orientation. If one way doesn't work, try the other way.

### Reset Switch (RESET)

The connector connects to the case's reset switch. Press the switch once, the system resets.

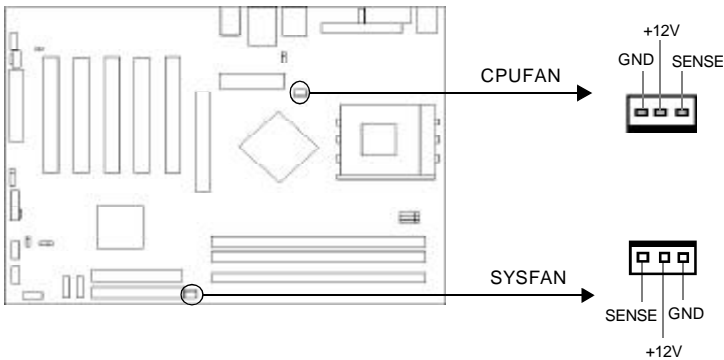
## Power LED Connector (PWR\_LED)

When the system is in S0 status, the LED is on. When the system is in S1 status, the LED is on; When the system is in S3,S4, S5 status, the LED is off. The connector has an orientation.



## Fan Connectors (CPUFAN, SYSFAN)

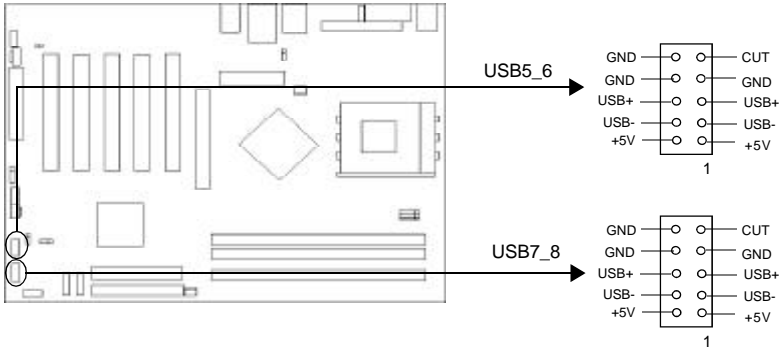
The fan speed of these three fans can be detected and viewed in the CMOS SETUP.





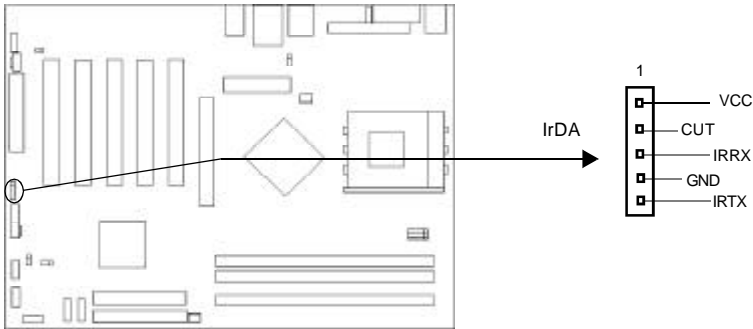
### USB5,6; USB7,8

Besides USB1,2,3,4 on the back panel, K7N2S series of mainboards also have 10-pin headers on board which can connect to front panel USB cable( optional ) to provide additional four USB ports.



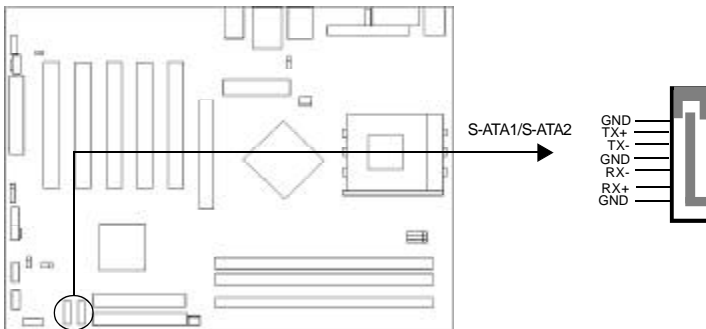
### Infrared Header (IrDA)

This connector supports wireless transmitting and receiving device.



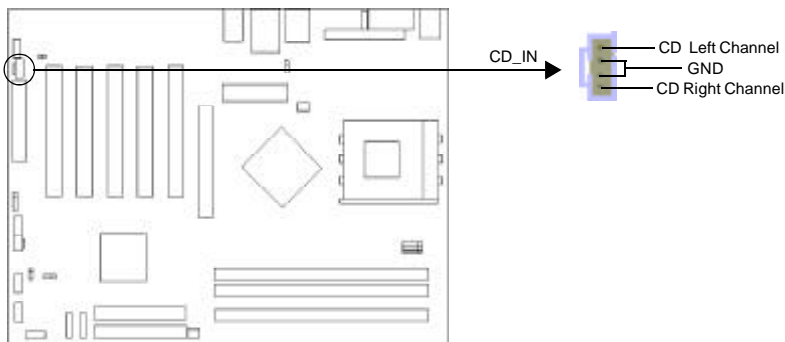
### Onboard SATA

The mainboard provides two Serial ATA connectors, SATA is a storage interface that is compliant with SATA 1.0 Specification. With speed of up to 150Mbps. you can connect Serial ATA cable to Serial ATA hard disk.



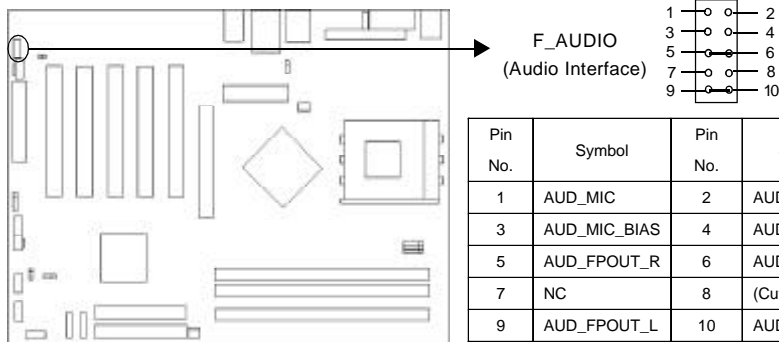
## Audio Connectors (CD\_IN)(optional)

CD\_IN is Sony standard CD audio connector, it can be connected to a CD-ROM drive through a CD audio cable.



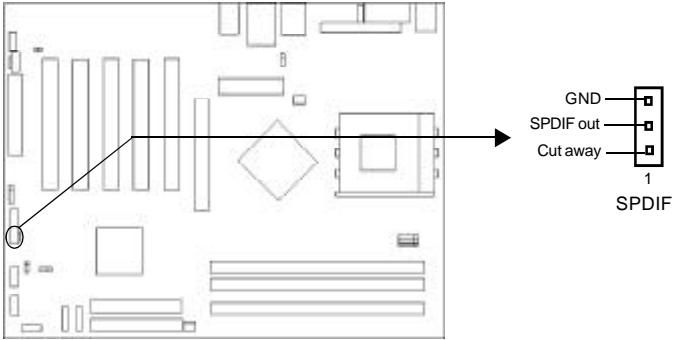
## Audio Interface(F\_AUDIO)(Optional)

The audio interface provides two kinds of audio output choices: the FrontAudio and the RearAudio. Their priority level is as sequence. When the FrontAudio is available, the RearAudio will be cut off. An onboard amplifier is provided for the earphone. When the FrontAudio is absent, Pin5 and Pin6, Pin9 and Pin10 must be short connected.



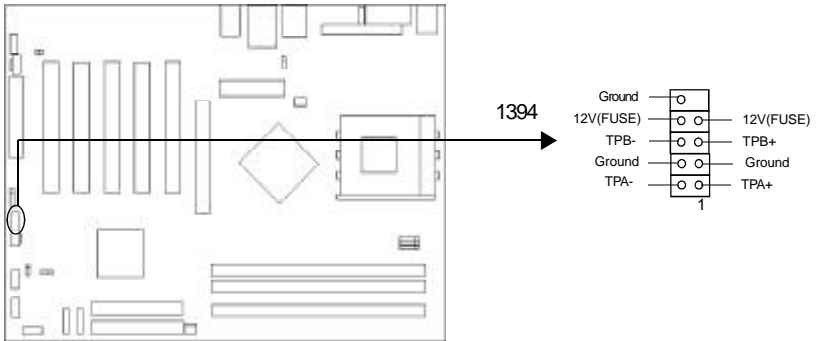
### SPDIF OUT Connector(optional)

The SPDIF output allow your digital audio input from digital audio devices.












### Front IEEE 1394 port(1394)(optional)

Besides one 1394 port on the back panel, the mainboard also have one 10-pin headers on board to provide additional IEEE 1394 port.



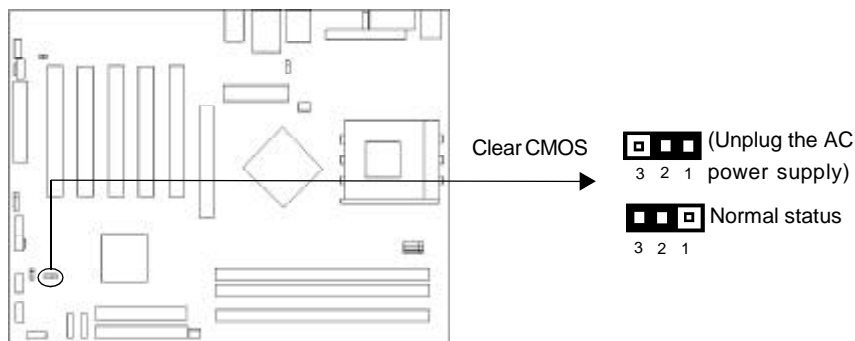
## Jumper Settings

Jumpers are located on the mainboard, the clear CMOS jumper JCC, enable keyboard password power-on function jumper JKB etc. Pin 1 for all jumpers are located on the side with a thick white line (Pin1→ ), referring to the mainboard's silkscreen. Jumpers with three pins will be shown as  to represent pin1 & pin2 ("1-2") closed and  to represent pin2 & pin3 ("2-3") closed.

Jumper	Symbol	Description	Represent
		1-2	set pin1 and pin2 closed
		2-3	set pin2 and pin3 closed
		close	set the pins closed
		open	set the pins opened

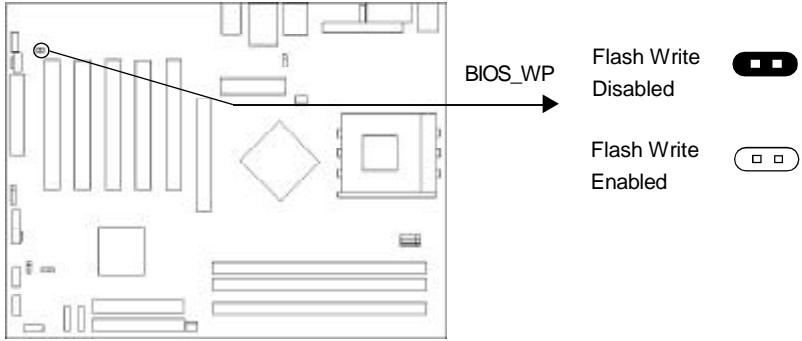
## Clear CMOS (CLR\_CMOS)

If you want to clear CMOS, unplug the AC power supply first, close CLR\_CMOS (pin2 & pin1) once, set CLR\_CMOS back to the normal status with pin3 & pin2 connected, then power on the system.



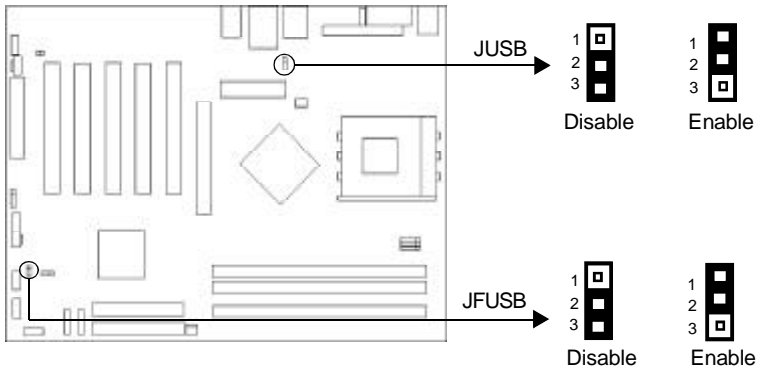
### BIOS-Protection Jumper (BIOS\_WP)

The BIOS of the mainboard is inside the FWH. If the jumper BIOS\_WP is set as closed, the system BIOS is protected from being attacked by serious virus such as CIH virus, you will be unable to flash the BIOS to the mainboard in this status.



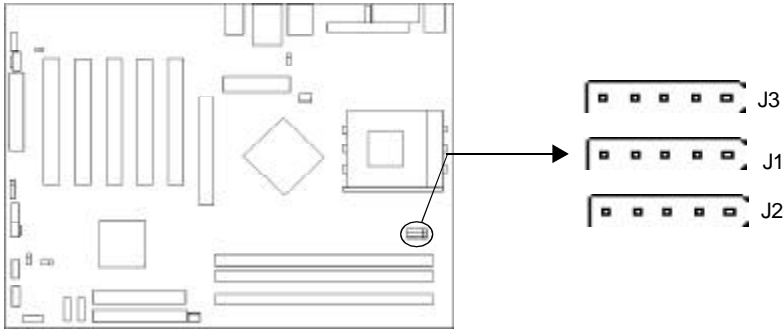
### Enable Front/Back Panel USB Device Wake-up Function (JUSB/JFUSB) (optional)

The mainboard provides the advanced USB device wake-up function. The system can be waked up from its power saving status including ACPI S3 by activating USB device. Before using this function, set JUSB/JFUSB with pin1 & pin2 closed. Otherwise, set JUSB/JFUSB with pin2 & pin3 closed for disabling.



## J1, J2, J3 Jumpers

**Warning:** Be sure your selection is right. CPU over speeding is dangerous! We will not be responsible for any damages caused.



J3	J3	J3	J3
J1  x 5.0	J1  x 5.5	J1  x 6.0	J1  x 6.5
J2	J2	J2	J2
J3	J3	J3	J3
J1  x 7.0	J1  x 7.5	J1  x 8.0	J1  x 8.5
J2	J2	J2	J2
J3	J3	J3	J3
J1  x 9.0	J1  x 9.5	J1  x 10.0	J1  x 10.5
J2	J2	J2	J2
J3	J3	J3	J3
J1  x 11.0	J1  x 11.5	J1  x 12.0	J1  x 12.5
J2	J2	J2	J2
J3	J3	J3	J3
J1  x 13.0	J1  x 13.5	J1  x 14.0	J1  x 21.0
J2	J2	J2	J2
J3	J3	J3	J3
J1  x 15.0	J1  x 22.0	J1  x 16.0	J1  x 16.5
J2	J2	J2	J2
J3	J3	J3	J3
J1  x 17.0	J1  x 18.0	J1  x 23.0	J1  x 24.0
J2	J2	J2	J2
J3	J3	J3	J3
J1  x 3.0	J1  x 19.0	J1  x 4.0	J1  x 20.0
J2	J2	J2	J2



## Chapter 3



# BIOS Description

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The mainboard uses AMI BIOS Setup program that provides a Setup utility for users to modify the basic system configuration. The information is stored in CMOS RAM so it retains the Setup information even if the power is turned off. This chapter provides you with the overview of the BIOS Setup.

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# AMIBIOS Flash Upgrade Method

## NVFLASHS

NVFLASHS is a package of utilities used to update the system BIOS, NVFLASHS works in DOS environment.

Before upgrading your BIOS, please note:

- **We strongly recommend you only upgrade BIOS when encounter problems.**
- **Before upgrading your BIOS, review the description below to avoid making mistakes, destroying the BIOS and resulting in a non-working system.**

When you encounter problems, for example, you find your system does not support the latest CPU released after our current mainboard, you may therefore upgrade the BIOS, please don't forget to set BIOS\_WP as open and disable the "BIOS Write Protect" item in AMI BIOS CMOS Setup first .

Below is the option for this program:

-f <filename>	Flash the ROM using <filename>
-v or -va	Verify the file matches the ROM (the entire ROM)
-vm:ESCD	Verify the file matches the ROM but mask the ESCD range
-vm:03000-03fff	Verify the file matches the ROM but mask 03000-03fff
-vr:00100-00200	Verify the range in the file from 00100-00200
-u	UpdateUUID
-igp64 -igp128	Force ramwidth in NB ROM tables to 64 or 128
-i	Ignore errors in file (flash BIOS regardless)
-c	ClearCMOS
-l	Set RomTable LOCKOUT bit
-QuickFlash	Reflashes sectors only if they differ from new image
-mb <motherboard>	Motherboard specific

Follow the steps exactly for a successful upgrade.

1. Create a bootable system floppy diskette by typing Format A:/s from the DOS prompt under DOS6.xx or Windows 9x environment.
2. Copy NVFLASHS.EXE from the directory \Utility located on QDI Utility CD to new bootable diskette.
3. Download the updated BIOS file from the Website (<http://www.qdigrp.com>). Please be sure to download the suitable BIOS file for your motherboard.
4. Decompress the file download, copy the BIOS file (xxx.ROM) to the bootable diskette.
5. Reboot the system from the bootable diskette created.
6. Then run the NVFLASHS utility at the A:\ prompt as shown below:

```
A:\NVFLASHS -f xxx.ROM
```

Follow the instruction through the process. Don't turn off power or reset the system until the BIOS upgrade has been completed.



### Note:

Because the BIOS Software will be updated constantly, the following BIOS screen and descriptions are for reference purposes only and may not reflect your BIOS screens exactly.





## AMI BIOS Description Entering Setup

Power on the computer, when the following message briefly appears at the bottom of the screen during the POST (Power On Self Test), press <Del> key to enter the BIOS CMOS Setup Utility.

**Press <Del> to enter SETUP**

When you have entered, the Main Menu appears on the screen. Use the arrow keys to select among the items and press the <Enter> key to accept or enter the sub-menu.



Main Menu

### Main Setup

The main settings configure BIOS information such as version, ID, build date and system Date, Time, processor Types and speed etc. Use the arrow keys to highlight the item, then use the <PgUp> or <PgDn> keys to select the value desired in each item.

### Advanced BIOS Setup

This section configure CPU options, IDE device, Floppy drive, boot settings, superIO chipset, hardware health, ACPI, USB support etc.

### PCI PnP Setup

This section describes how to configure the PCI bus system. This section covers some very technical items and it is recommended that only experienced users should make any changes to the default setting.

### Boot Settings

The section allow you to configure settings during system boot.

### Security Settings

Changes, sets, or disables password. It allows you to configure boot sector virus protection.

### Chipset Setup

The chipset features setup is used to change the values of the chipset registers. The registers control most of the system options in the computer.

### Power Management Setup

The power management setup menu allows you to configure APM.

### Exit Setup

The section allow you to configure exit options, load Optimal Defaults and load failsafe defaults etc.

**Note: if you need detailed information about BIOS, please view them in the CD.**



# Appendix

## QDI Utility CD

A QDI Utility CD is supplied with this mainboard, the contents contained in it are showed as below:

### 1. Driver Install

Using this choice, you can install all the drivers for your mainboard . You should install the drivers in order, and you need to restart your computer until all the drivers are installed.

- A. DirecrX
- B. Chipset Software
- C. USB2.0 (optional)
- D. Audio Driver(optional)

### 2. Browse CD

You could read all the contents contained in this CD, including Utility and Documents.

The files included in Utility are:

- A. nvflashes.exe

The files included in Documents are:

- A. Adobe Acrobat Reader V5.0
- B. BIOSmanual\_ch
- C. BIOSmanual\_en



## Instalación de la placa base QDI K7N2S(Spanish):

1. Asegúrese que se incluyen los siguientes artículos: Placa base QDI K7N2S, 1 cable de datos para el puerto IDE y 1 cable de datos para el Floppy, jumpers, 1 manual de usuario QDI K7N2S y un disco compacto con los controladores de la placa base QDI K7N2S.
2. Asegúrese de que el cable de la fuente de alimentación esta desconectado y asegúrese de estar en contacto a masa utilizando una pulsera antiestática. Si no dispone de dicha pulsera, toque un objeto directamente conectado a masa o una parte metálica de su equipo como puede ser la caja de este.
3. Fije la placa base en la caja de su equipo con los tornillos especiales que acompañan a su caja.
4. Los jumpers están localizados en la placa base, con ellos se configuran, por ejemplo: Clear CMOS CLR\_CMOS, Habilitar BIOS ProtectEasy BIOS\_WP etc..., el PIN1 para todos los jumpers esta marcado con una línea más gruesa (Consulte el apartado "Jumper Settings" en el manual de usuario de su placa QDI K7N2S en el capítulo 2).
5. Inserte el procesador en el socket y conecte el ventilador del procesador en el conector de su placa base QDI K7N2S marcado como "CPUFAN".
6. Inserte los módulos de memoria en los bancos de memoria DIMM de su placa base QDI K7N2S.
7. Inserte las tarjetas PCI y/o la tarjeta AGP en las bahías de expansión de su placa base QDI K7N2S.
8. Conecte los periféricos internos IDE y las disqueteras mediante los cables de datos específicos a su placa base QDI K7N2S. Asegúrese que la orientación de los cables sea la correcta. (El cable rojo se corresponde con el pin 1).
9. Conecte los cables de la caja del ordenador a su placa base QDI K7N2S, como el conector de la fuente de alimentación, los testigos de corriente, y lectura de disco duro, interruptores de inicio y reset (consulte el apartado "External Connectors" del manual de usuario de su placa base QDI K7N2S).
10. Conecte los diferentes periféricos externos como el teclado PS/2, ratón PS/2, serie o USB, los dispositivos USB, el monitor y la impresora a la placa base QDI K7N2S (consulte el apartado "External Connectors" en el manual de su placa base QDI K7N2S, en el capítulo 2).
11. Cuando haya finalizado de realizar todas las conexiones, conecte el cable de alimentación a la fuente de alimentación y encienda su PC:



### **Instalación del sistema:**

1. Encienda su equipo mediante el interruptor de encendido de la caja.
2. Presione la tecla « Supr » para entrar en el menú de configuración de la BIOS.
3. Seleccione los valores de la Bios en concordancia con la configuración de su sistema (Nosotros le recomendamos que deje los valores establecidos por la Bios por defecto, para evitar posibles fallos que ocasionen que su sistema no funcione correctamente). Para más información las funciones de la Bios, consulte el apartado “BIOS Description” en el manual de usuario de la placa base QDI K7N2S). Presione la tecla « F10 » y seleccione la opción “Save & Exit Setup” en el menú de configuración de la Bios para guardar los cambios y reiniciar el sistema.
4. Instale el sistema operativo en el disco duro, no se olvide de seleccionar la secuencia de inicio correcta para que el sistema operativo pueda iniciarse.
5. Después de la instalación del sistema operativo, asegúrese que no hay conflictos con ningún dispositivo de su sistema.
6. Entonces, después del último paso, proceda a la instalación de los controladores de los diferentes dispositivos.

**Un disco compacto con controladores de QDI esta incluido en el paquete de la placa base QDI K7N2S.**

#### **1. Instalación de los controladores**

Usted puede instalar todos los controladores para su placa base fácilmente. Tiene que instalar los controladores en el siguiente orden para un correcto funcionamiento del sistema, y es necesario reiniciar el equipo antes de finalizar la instalación de los controladores.

- |                      |                           |
|----------------------|---------------------------|
| A. DirecrX           | B. Chipset software       |
| C. USB2.0 (optional) | D. Audio Driver(optional) |

#### **2. Navegue por el CD**

Usted puede leer todos los documentos incluidos en este CD, incluidos Utility and Documents.

Los ficheros incluidos en **Utility** son:

- A. nvflashes.exe



## Manuel d'installation des cartes mères de la série QDI K7N2S (French):

### Intégration du système :

1. Vérifier la présence de chaque élément dans la boîte de la carte mère de la série QDI K7N2S :
  - Une carte mère de la série QDI K7N2S.
  - Un CD-ROM d'installation QDI.
  - Un manuel d'utilisation de la carte mère QDI K7N2S.
  - Un sachet de cavaliers.
  - Une nappe IDE compatible avec la norme ATA/66 destinée au lecteur de disque dur.
  - Une nappe destinée au lecteur de disquette.
  - Un fond de panier métallique destiné à l'unité centrale de l'ordinateur (Caractéristique technique optionnelle).
  - Un câble d'extension destiné à permettre l'exploitation des ports USB 3 et USB 4 ou USB 5 et USB 6 (Caractéristique technique optionnelle).
2. Vérifier que le câble électrique relié au boîtier d'alimentation de l'unité centrale de l'ordinateur est déconnecté. Se relier à la terre grâce à un bracelet lié au poignet. A défaut de disposer d'un bracelet, maintenir un contact physique avec un objet lui-même relié à la terre, ou à une partie métallique du système comme la structure de l'unité centrale de l'ordinateur.
3. Fixer la carte mère dans l'unité centrale de l'ordinateur grâce aux vis fournies avec cette dernière lors de son achat.
4. S'assurer que la carte mère de la série QDI K7N2S est matériellement correctement configurée, pour cela vérifier que les cavaliers insérés sur les broches intégrées de cette dernière sont correctement positionnés. Dans ce but il est important de se référer à la section nommée « Configuration des cavaliers » du chapitre numéro 2 nommé « Instructions d'installation » contenu dans le manuel d'utilisation livré avec la carte mère de la série QDI K7N2S lors de son achat.
5. Connecter le processeur dans le socket intégré à la carte mère de la série QDI K7N2S et prévus à cet effet. Fixer le système de refroidissement de ce dernier et connecter son ventilateur sur les broches nommées « CPUFAN » intégrées à la carte mère de la série QDI K7N2S et prévus à cet effet.
6. Connecter les éventuelles barrettes de mémoire dans les slots intégrés à la carte mère de la série QDI K7N2S et prévus à cet effet.
7. Connecter les éventuelles cartes d'extension au format AGP, PCI dans les slots intégrés à la carte mère de la série QDI K7N2S et prévus à cet effet
8. Connecter les éventuels périphériques IDE ainsi que le lecteur de disquette à la carte mère de la série QDI K7N2S grâce aux nappes fournies avec cette dernière lors de son achat. S'assurer que l'orientation des nappes connectées est correcte en vérifiant

que le liseré rouge de ces dernières correspond à l'emplacement de la broche numéro 1 du connecteur.

9. Connecter les câbles de l'unité centrale de l'ordinateur sur les broches intégrées à la carte mère de la série QDI K7N2S et prévues à cet effet. Dans ce but il est important de se référer à la section nommée « Connecteurs externes » du chapitre numéro 2 nommé « Instructions d'installation » contenu dans le manuel d'utilisation livré avec la carte mère de la série QDI K7N2S lors de son achat.
10. Raccorder les périphériques externes sur les connecteurs de fond de panier intégrés à la carte mère de la série QDI K7N2S. Dans ce but il est important de se référer à la section nommée « Connecteurs externes » du chapitre numéro 2 nommé « Instructions d'installation » contenu dans le manuel d'utilisation livré avec la carte mère de la série QDI K7N2S lors de son achat.
11. Lorsque tous les éléments du système sont correctement intégrés, il est possible de reconnecter le câble électrique au boîtier d'alimentation de l'unité centrale de l'ordinateur.

### **Installation du système :**

1. Démarrer le système en pressant l'interrupteur de fonctionnement de l'unité centrale de l'ordinateur.
2. Presser la touche "Suppr" du clavier afin d'entrer dans le menu de BIOS.
3. Dans le menu de BIOS nommé "QDI Innovation features", ajuster la fréquence de fonctionnement du processeur. Attention, il est fortement recommandé de charger les réglages de sûreté par défaut afin d'éviter un éventuel dysfonctionnement du système. Dans ce but il est important de se référer à la section nommée « Description du BIOS Award » du chapitre numéro 3 nommé « Description du BIOS » contenu dans le manuel d'utilisation livré avec la carte mère de la série QDI K7N2S lors de son achat.
4. Procéder à l'installation du système d'exploitation sur le lecteur de disque dur intégré au système. Dans ce but il est important de vérifier que la séquence de démarrage du système paramétrable à partir du menu de BIOS permet à la procédure d'installation du système d'exploitation de s'initialiser.
5. Une fois l'installation du système d'exploitation achevée, vérifier qu'il ne subsiste aucun conflit ou périphérique inconnu au sein du système.
6. Après cette étape, procéder à l'installation des pilotes de chaque périphérique détecté par la carte mère de la série QDI K7N2S.

**Lors de son achat un CD-ROM d'installation QDI est livré avec la carte mère de la série QDI K7N2S.**

### **1. Driver Install :**

Avec cette option, il est possible d'installer les pilotes de la carte mère de la série QDI K7N2S aisément. Il est important d'installer les pilotes en respectant l'ordre prédéfini et de redémarrer le système après avoir effectué l'installation de tous les pilotes.

Applications contenues dans le dossier :

- |                      |                           |
|----------------------|---------------------------|
| A. DirectX           | B. Chipset software       |
| C. USB2.0 (optional) | D. Audio Driver(optional) |

### **2. Browse CD :**

Avec cette option, il est possible de consulter l'ensemble des données contenues sur le CD-ROM d'installation QDI

Applications contenues dans le dossier :

- A. nvflashes.exe.



## QDI K7N2S installazione mainboard (Italian):

1. Assicurarsi che la scatola sia completa: QDI K7N2Smainboard, cavo IDE e Floppy, jumpers, manuale dell'utente della mainboard QDI K7N2S e cd-rom drivers.
2. Controllare che il cavo alimentazione proveniente dal computer-case sia sconnesso assicurarsi inoltre di aver indossato correttamente il bracciale da polso collegato a massa. In mancanza di questo toccare un punto a massa o una parte metallica del case
3. Fissare la mainboard nel case con le speciali viti fornite con il computer-case
4. I jumper locati sulla mainboard rappresentano: CLR\_CMOS azzeratore BIOS, BIOS\_WP abilitatore/disabilitatore in BIOS della funzione protectEasy; per tutti i jumper il PIN 1 e' contrassegnato da un spessa linea bianca (consultare il manuale al capitolo 2 "JUMPER ANDSETTINGS")
5. Inserire il processore nell'apposito slot ; la ventola del processore deve essere collegato nello speciale connettore targato "CPUFAN".
6. Inserire il modulo/i di memoria nell'apposito memory slots
7. Inserire le periferiche Pci negli appositi Pci slots
8. Collegare le periferiche IDE e il FLOPPY con l'apposito cavo fornito con la mainboard negli specifici connettori marcati. Assicurarsi che l'orientamento del cavo sia corretto. (La linea rossa sul cavo deve essere inserita nell'apposito connettore in corrispondenza del pin 1)
9. Conettere la mainboard con: il cavo di alimentazione proveniente dall'alimentatore, il connettore dell'interuttore di stand by, il connettore del led di segnalazione "acceso", il connettore led di funzionalita' HARD DISK, il connettore dello speaker interno al CASE..... (consultare il manuale capitolo 2. "EXTERNAL CONNECTORS". Dopo chiudere il CASE)
10. Connettere le differenti periferiche esterne come il PS/2 mouse, la PS/2 tastiera, le prese USB, il monitor e la stampante con gli specifici connettori posizionati sulla faccia esterna della mainboard.
11. Quando la vostra configurazione sara' tutta connessa, aggangiare il cavo di alimentazione.

## Installazione di sistema

1. Portare in posizione di acceso l'interuttore di ACCESO
2. Usare il tasto DEL per entrare nel software di configurazione del BIOS
3. Regolare le funzioni del BIOS in accordo con la configurazione di sistema (Noi ti raccomandiamo di usare l'impostazione di default per evitare rischi di anomalie di funzionalita'). Per maggiori informazioni controllare il capitolo 3, sezione "BIOS DESCRIPTION". Premere F10 sulla tastiera o scegliere "SAVE and EXIT" dal menu di BIOS per salvare le impostazioni scelte ed uscire dal BIOS program.
4. Installare il sistema operativo , non dimenticando di mettere nelle giuste condizioni di partenza la sequenza di boot.
5. Dopo una giusta installazione accertarsi che non vi siano conflitti tra le periferiche in





uso

6. Dopo questo ultimo passo procedere all'installazione dei driver delle varie periferiche

### **IL CD CONTENENTE I DRIVER DELLA VOSTRA MAINBOARD QDI E' CONTENUTO NELLA SCATOLA**

#### **1. Installazione driver**

E' possibile installare tutti i driver della Vs. mainboard in modo facile e veloce.

Dovreste installare i driver nella seguente successione, finito cio' bisogna far ripartire il personal computer.

- |                      |                           |
|----------------------|---------------------------|
| A. DirectX           | B. Chipset software       |
| C. USB2.0 (optional) | D. Audio Driver(optional) |

#### **2. Guardando il CD**

Questo manuale di installazione e' disponibile anche nella sua versione elettronica all'interno del cd accompagnativo, insieme anche diverse utili quali:

- A. nvflashes.exe



## Using 4-/6-Channel Audio(4-/6- Channel Audio Interface)

The motherboard is equipped with Realtek ALC655 chip, which provides support for 6-channel audio output, including 2 Front, 2 Rear, 1 Center and 1 Subwoofer channel. ALC655 allows the board to attach 4 or 6 speakers for better surround sound effect. The section will tell you how to install and use 4/6-channel audio function on the board.

### Installing the Audio Driver

The Realtek ALC655 chipset driver has to be installed before the 4-/6-Channel audio function can be used.

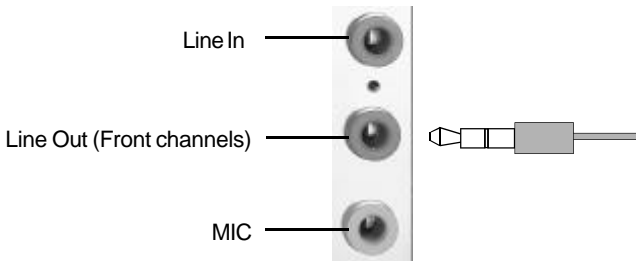
### Using 4-/6-channel Audio Function

You can start to use the 4-/6-channel audio function After the driver is installed completely. The first, you can connect 4 or 6 speakers to the audio output connector. Then open utility to set the work parameter.

### **Attaching speakers**

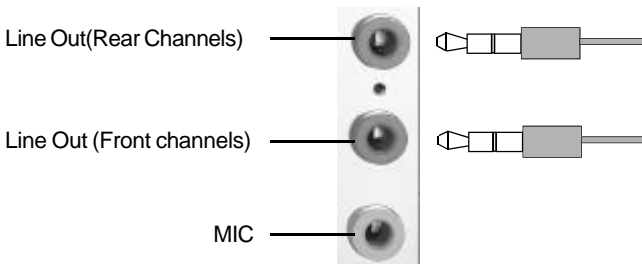
To perform multichannel audio operation, connect multiple speakers to the system. You should connect the same number of speakers as the audio channels you will select in the software utility.

## 2-Channel Analog Audio Output



**Description:** Line Out, Line In and MIC functions all exist under 2-channel configuration.

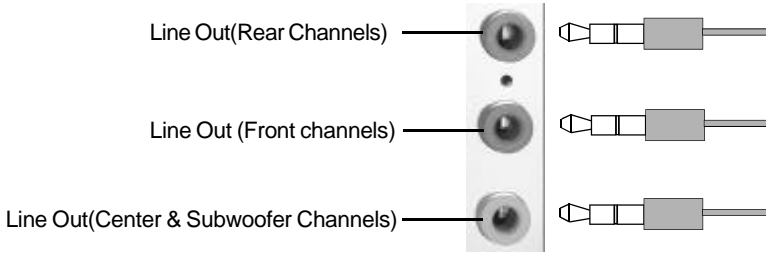
## 4-Channel Analog Audio Output



**Description:** Line In is converted to Line Out function under 4-channel configuration.




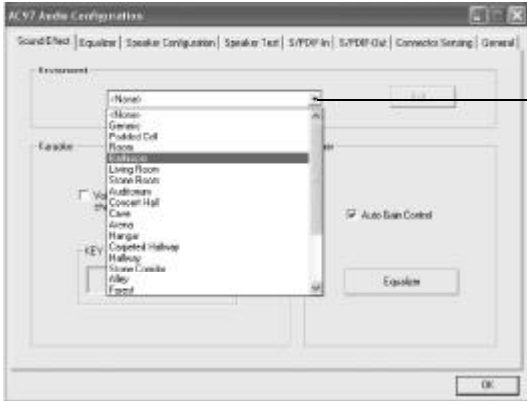
## 6-Channel Analog Audio Output



**Description:** Both Line In and MIC are converted to Line Out function under 6-channel configuration.

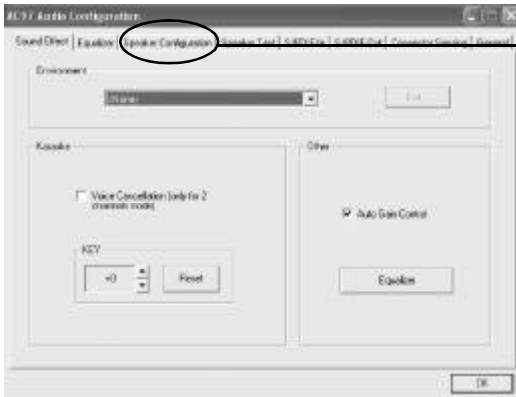
## Selecting 4- or 6-Channel Setting

1. Click the audio icon  from the window tray at the bottom of the screen.
2. Select any surround sound effect you prefer from the “Environment” pull-down menu under the Sound Effect tab.



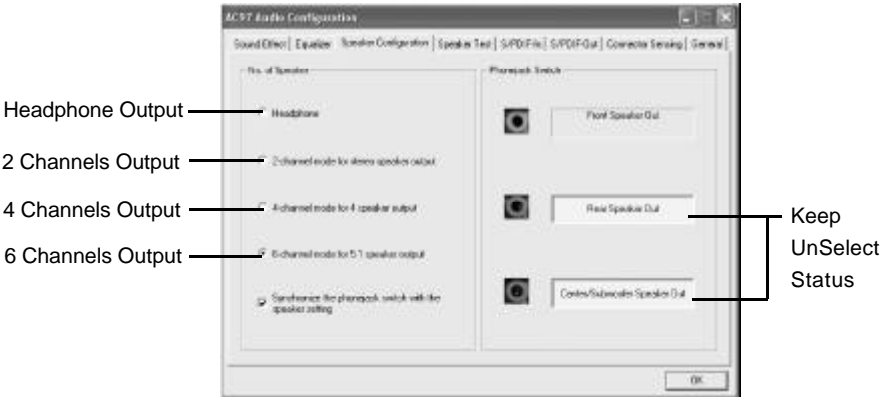
Click here and the pull-down menu will appear

3. Click the Speaker Configuration tab.



Click here

4. The following window appears.



5. Select the multi-channel operation you prefer from No. of Speakers.


6. Click OK

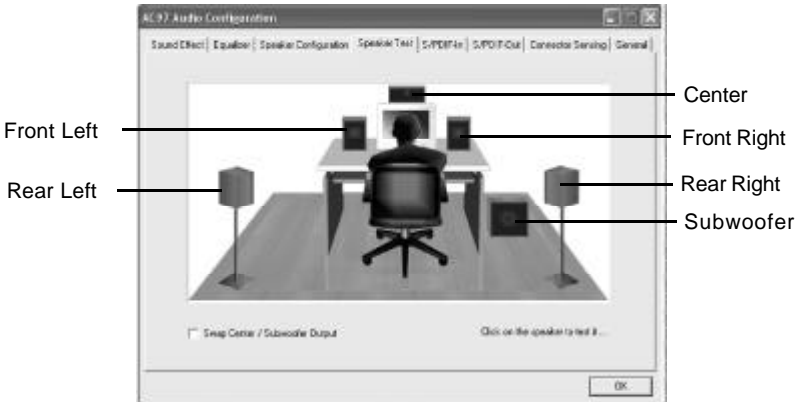
### Testing the Connected Speakers

To ensure 4- or 6-channel audio operation works properly, you may need to test each connected speaker to make sure every speaker work properly. If any speaker fails to sound, then check whether the cable is inserted firmly to the connector or replace the bad speakers with good ones.

### Testing Each Speaker

The following window appears.

1. Click the audio icon  from the window tray at the bottom of the screen.
2. Click the Speaker Test tab.
3. The following window appears.




4. Select the speaker which you want to test by clicking on it.



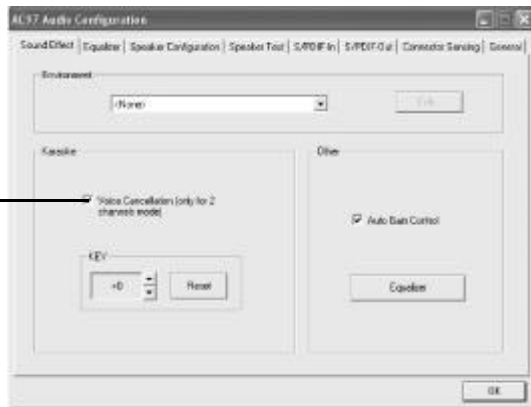
## Playing KaraOK

The KaraOK function will automatically remove human voice (lyrics) and leave me-loidy for you to sing the song. **The function is applied only for 2-channel audio operation**, so make sure channel mode is selected in the “No. of Speakers” column before playing KaraOK.

### Playing KaraOK

1. Click the audio icon  from the window tray at the bottom of the screen.
2. Make sure the Sound Effect tab is selected.
3. Select Voice Cancellation in the “Karaoke” column.

Click This



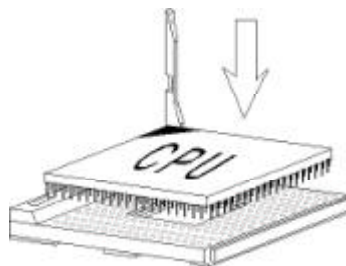
4. Click OK.

## CPU Installation Procedures

1. Pull the lever sideways away from the socket. Then, raise the lever up to a 90-degree angle.



2. Look for the cut edge. The cut edge should point towards the lever pivot. The CPU will only fit in the correct orientation. If the CPU is correctly installed, the pins should be completely embedded into the socket and can not be seen.



3. Hold the CPU down firmly, and then close the lever to complete installation.



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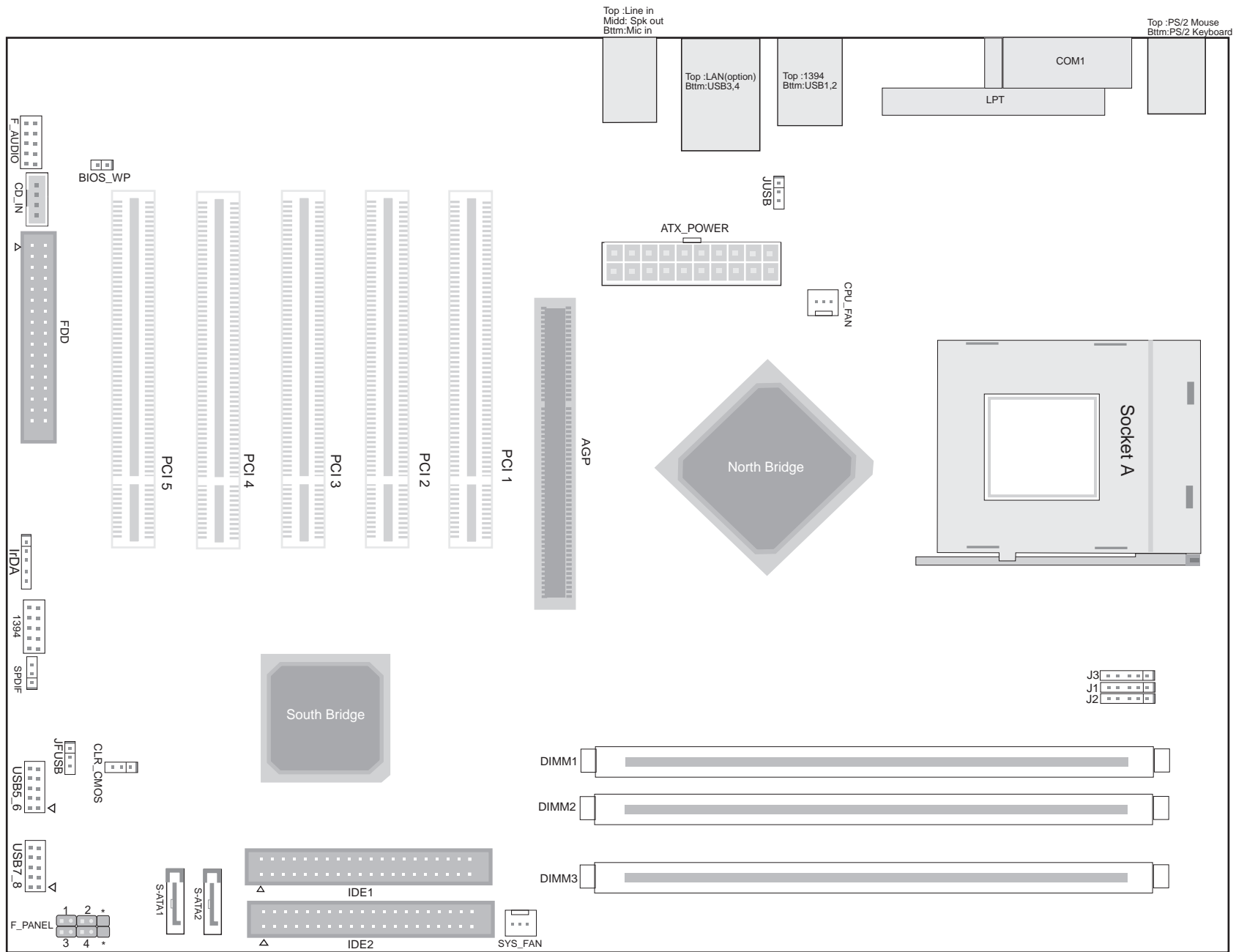
**Warning:** *Overheating will seriously damage the CPU and system, always make sure the cooling fan can work properly to protect the CPU from overheating.*

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# **Board Layout of K7N2S**

Note:  
The layout includes all options.  
It is for your reference only.





Note: pin1 for a jumpers are located on the side with black line.  
 1. PWR\_LED 2. PWR\_SW \* EMPTY 3. HDD\_LED 4. RESET \* REVERSE