

M7NCG 400

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Motherboard Description

English

M7NCG 400 Features

CPU

- Supports the AMD® Socket462 processor up to XP 3200+.
- Running at 200/266/333/400MHz Front Side Bus.

Chipset

- North Bridge: nFORCE2 Crush 18G IGP Chipset.
- South Bridge: ①MCP Chipset.
②High Speed 800Mb/s Hyper-Transport interface to the MCP.

Main Memory

- Supports up to 3 DDR devices.
- Supports 200/266/333 MHz (without ECC) DDR devices.
- High performance 128-bit DDR333 Twin Bank Memory Architecture.
- The largest memory capacity is 3GB.

Slots

- Three 32-bit PCI bus master slots.
- One CNR slot.
- One AGP slot: ①AGP3.0 8X interface at 533Mb/s.
②Supports AGP 4X, 8X.

On Board IDE

- Supports four IDE disk drives.
- Supports PIO Mode 4, Master Mode and Ultra DMA 33/66/100/133 Bus Master Mode.

On Board VGA

- GeForce 4MX Series graphics processing unit(GPU).

1394 Chip (optional)

- Realtek 8801BL.
- Support 2 ports with transfer rate up to 400Mbps.

Audio

- AC97 2.2 interface.
- PC99 complaint.
- Supports 6 channels.
- S/PDIF Out.

TV Out (optional)

- Support s-video output mode
 - Display resolution up to 1024 x 768 (including all DOS modes)
-

Motherboard Description

- Support TV formats: NTSC-M (North America and Taiwan)
NTSC-J (Japan)
PAL (Europe and Asia)

On Board Peripherals

- Supports 360K, 720K, 1.2MB, 1.44MB and 2.88MB floppy disk drivers.
- Supports 2 serial ports.
- Supports 1 multi-mode parallel port. (SPP/EPP/ECP mode)
- Supports PS/2 mouse and PS/2 keyboard.
- Supports 2 back USB2.0 ports and 4 front USB2.0 ports.
- Supports S/PDIF Out connector.

BIOS

- AWARD legal Bios.
- Supports APM1.2.
- Supports ACPI.
- Supports USB Function.

Operating System

- Offers the highest performance for MS-DOS, Windows 2000, Windows Me, Windows XP, SCO UNIX etc.

Dimensions

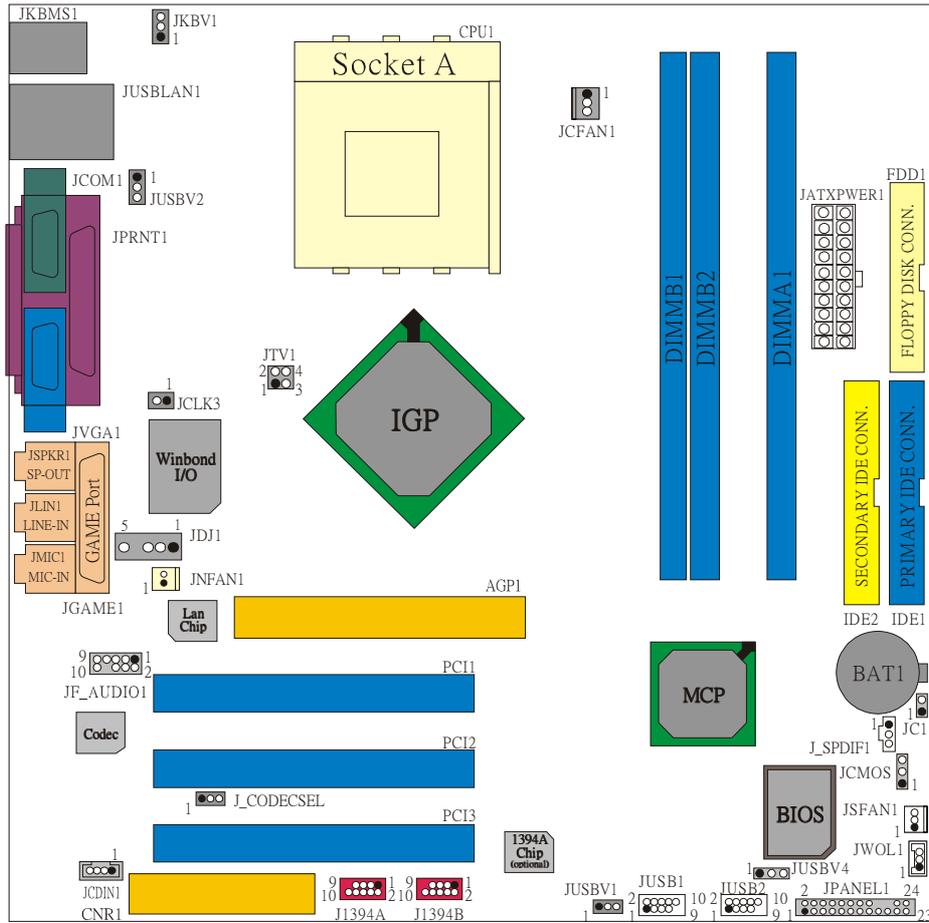
- Micro ATX Form Factor: 24.4cm X 24.4cm (W X L)

Package contents

- HDD Cable X 1
- FDD Cable X 1
- Fully Setup Driver CD X 1
- User Manual X 1
- USB Cable X 2 (optional)
- SPDIF OUT Cable X1 (optional)
- IEEE 1394 Cable X1 (optional)

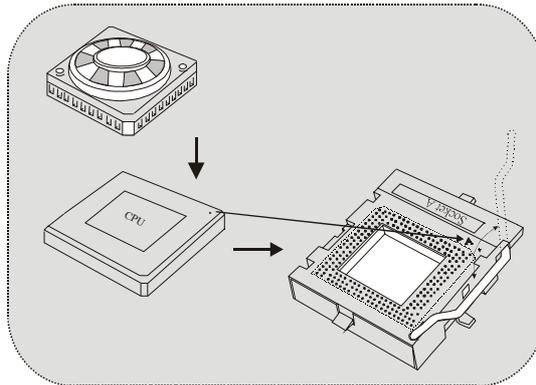
Motherboard Description

Layout of M7NCG 400



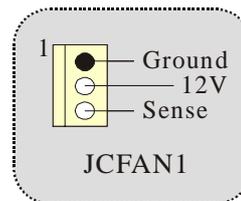
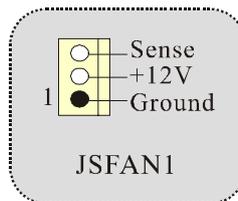
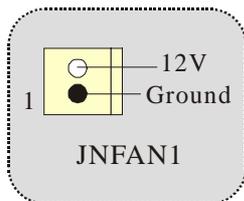
Motherboard Description

CPU Installation



1. Pull the lever sideways away from the socket then raise the lever up to 90-degree angle.
2. Locate Pin A in the socket and lock for the white dot or cut edge in the CPU. Match Pin A with the white dot/cut edge then insert the CPU.
3. Press the lever down. Then Put the fan on the CPU and buckle it and put the fan's power port into the JCFAN1, then to complete the installation.

CPU/ System Fan Headers: JCFAN1/ JSFAN1/ JNFAN1



Motherboard Description

DDR DIMM Modules: DIMMB1/DIMMB2/ DIMMA1

For Dual-channel DDR (128-bit) high performance, at least 2 or more DIMM modules must be installed. (It has to be the combination of DIMMA and DIMMB.) With only one DIMM installed, the memory performs only at 64-bit.

DRAM Access Time: 2.5V Unbuffered DDR 200/266/333 MHz Type required.
DRAM Type: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM Module (184 pin)

DIMM Socket Location	DDR Module	Total Memory Size (MB)
DIMMB1	64MB/128MB/256MB/512MB/1GB *1	Max is 3GB
DIMMB2	64MB/128MB/256MB/512MB/1GB *1	
DIMMA1	64MB/128MB/256MB/512MB/1GB *1	

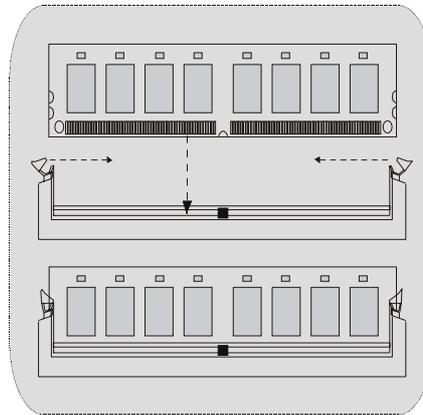
~~~only for reference~~~

### How to install a DIMM Module

1. The DIMM socket has a "Plastic Safety Tab", and the DIMM memory module has an "Asymmetrical notch", so the DIMM memory module can only fit into the slot in one direction.

2. Push the tabs out. Insert the DIMM memory modules into the socket at a 90-degree angle, then push down vertically so that it will fit into the place.

3. The Mounting Holes and plastic tabs should fit over the edge and hold the DIMM memory modules in place.



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## Motherboard Description

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### Jumpers, Headers, Connectors & Slots

#### Hard Disk Connectors: IDE1/ IDE2

The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0–4, Bus Master, and Ultra DMA / 33/ 66/ 100/ 133 functionality. It has two HDD connectors IDE1 (primary) and IDE2 (secondary).

The IDE connectors can connect a master and a slave drive, so you can connect up to four hard disk drives. The first hard drive should always be connected to IDE1.

#### Floppy Disk Connector: FDD1

The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.

#### Communication Network Riser Slot: CNR1

The CNR specification is an open Industry Standard Architecture, and it defines a hardware scalable riser card interface, which supports audio, network and modem only.

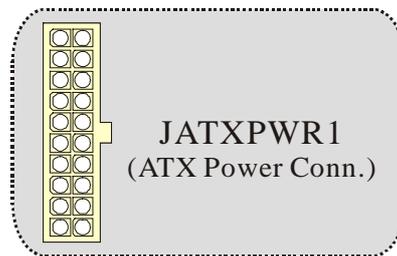
#### Peripheral Component Interconnect Slots: PCI 1-3

This motherboard is equipped with 3 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards, which has supplanted the older ISA bus standard in most ports. This PCI slot is designated as 32 bits.

#### AGP (Accelerated Graphics Port) Slot: AGP1

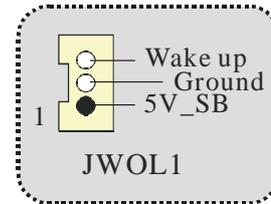
Your monitor will attach directly to that video card. This motherboard supports video cards for PCI slots, but it is also equipped with an Accelerated Graphics Port (AGP). An AGP card will take advantage of AGP technology for improved video efficiency and performance, especially with 3D graphics.

#### Power Connectors: JATXPWER1

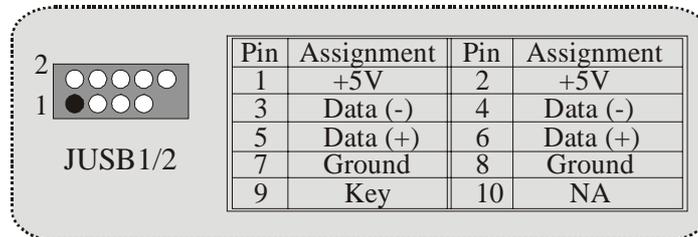


## Motherboard Description

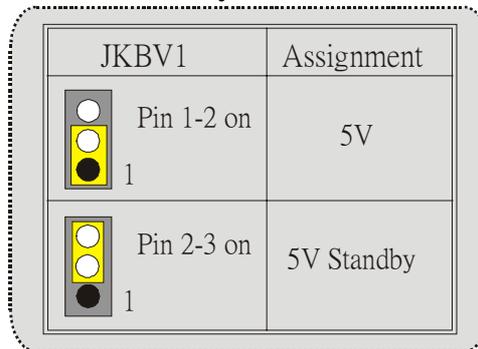
### Wake On LAN Header: JWOL1



### Front USB Header: JUSB1/ JUSB2

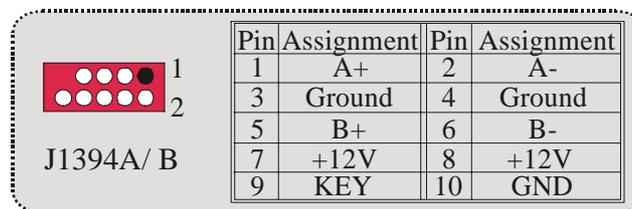


### 5V/ 5V\_SB Selection for Keyboard and Mouse: JKBV1



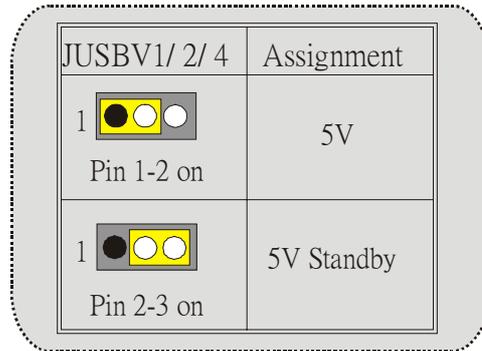
*Note: 5V Standby only use for S3 Mode.*

### Front 1394 Header: J1394A/ J1394B (optional)



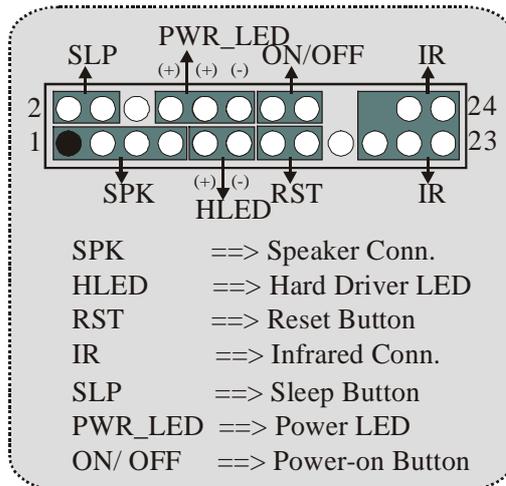
## Motherboard Description

### 5V/ 5V\_SB Selection for USB: JUSBV1/JUSBV2/ (JUSBV4=>optional)

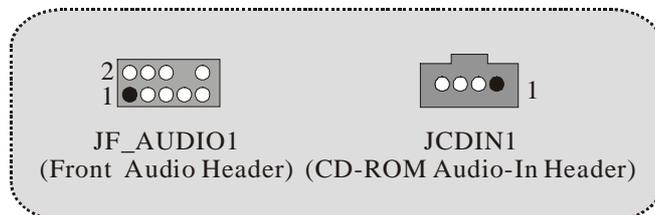


*Note: 5V Standby only use for S3 Mode.*

### Front Panel Connector: JPANEL1



### Audio Subsystem: JF\_AUDIO1/ JCDIN1



## Motherboard Description

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**JF\_AUDIO1**

| Pin | Assignment   | Pin | Assignment   |
|-----|--------------|-----|--------------|
| 1   | Mic In       | 2   | Ground       |
| 3   | Mic Power    | 4   | Audio Power  |
| 5   | RT Line Out  | 6   | RT Line Out  |
| 7   | Reserved     | 8   | Key          |
| 9   | LFT Line Out | 10  | LFT Line Out |

☞ JF\_AUDIO1 only support 2CH.

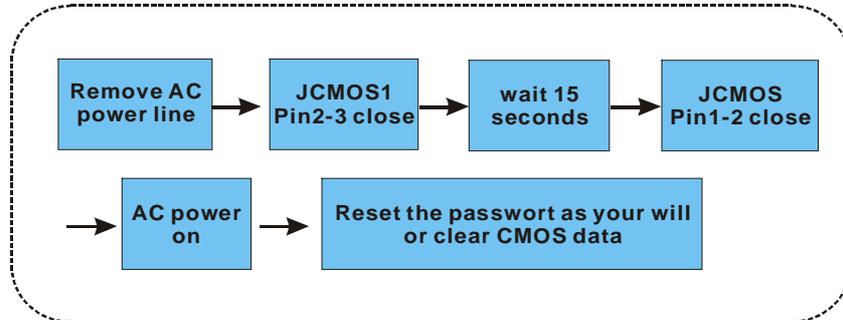
*Front Panel Audio Connector/ Jumper Block*

| <i>Jumper Setting</i>                                          | <i>Configuration</i>                                                              |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <p style="margin-left: 20px;">Pin 5 and 6<br/>Pin 9 and 10</p> | Audio line out signals are routed to the back panel audio line out connector.     |
| <p style="margin-left: 20px;">No jumpers installed</p>         | Audio line out and mic in signals are available for front panel audio connectors. |

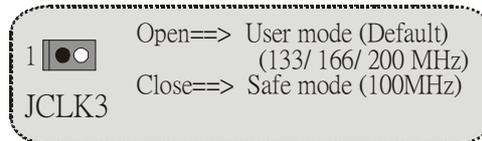
### Clear CMOS Jumper: JCMOS

| JCMOS                                        | Assignment                 |
|----------------------------------------------|----------------------------|
| <p style="margin-left: 20px;">Pin 1-2 on</p> | Normal Operation (default) |
| <p style="margin-left: 20px;">Pin 2-3 on</p> | Clear CMOS Data            |

## Motherboard Description



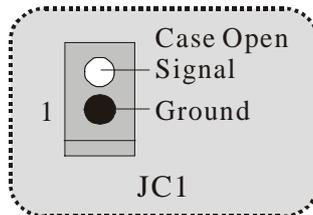
### Frequency Selection: JCLK3



**Note:** When overclock function failed and system is unable to boot-up, please follow the instruction below:

1. Turn off the system.
2. Closed the JCLK3 jumper.
3. Turn on the system.
4. Enter CMOS setup menu and load defaults settings.
5. Turn off the system.
6. Open the JCLK3 jumper.
7. Turn on the system.

### Case Open Connector: JC1



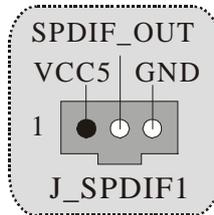
## **Motherboard Description**

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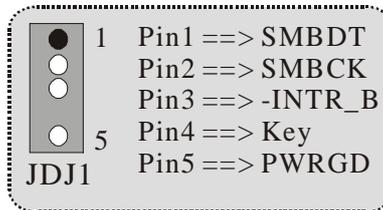
### **CNR Codec Primary/Secondary Selection: J\_CODECSSEL**

| J_CODECSSEL                                                                                    | Assignment              |
|------------------------------------------------------------------------------------------------|-------------------------|
|  Pin 1-2<br>1 | On-board Primary Codec. |
|  Pin 2-3<br>1 | CNR Primary Codec.      |

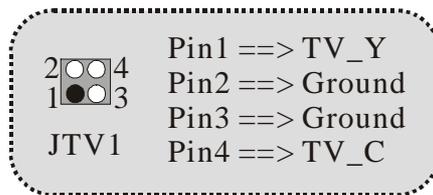
### **Digital Audio Connector: J\_SPDIF1**



### **Audio DJ Header: JDJ1 (optional)**

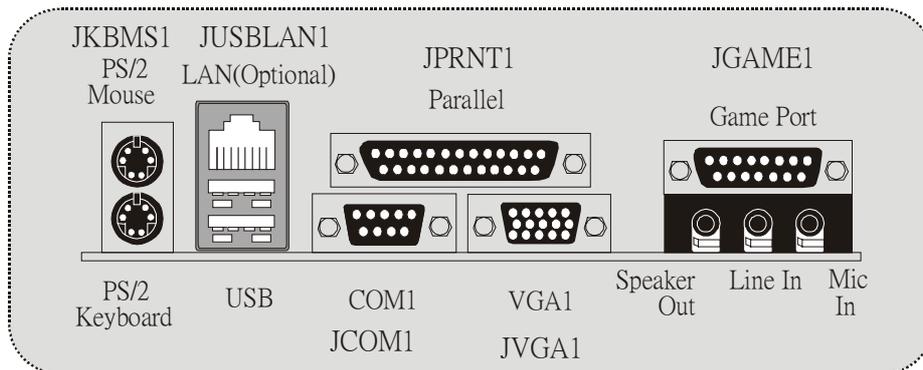
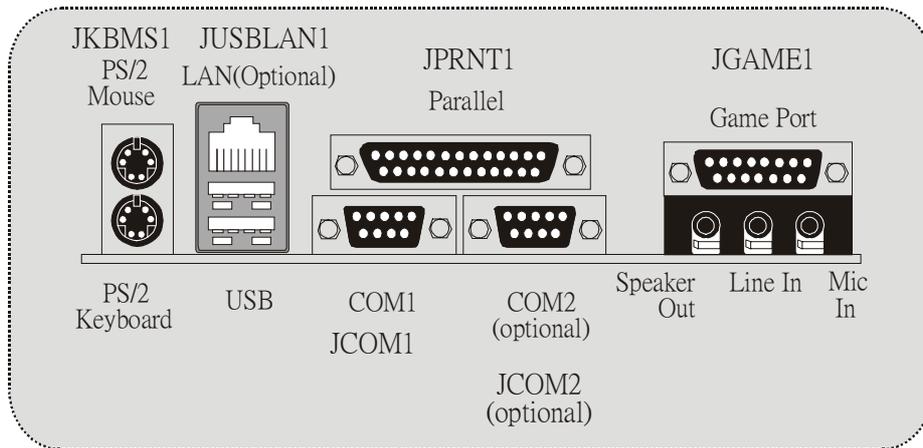


### **TV Out Header: JTV1 (optional)**



## Motherboard Description

### Back Panel Connectors



### The LED indicator for Lan port status:

| Speed \ Status | Normal                                   | Download                             |
|----------------|------------------------------------------|--------------------------------------|
|                | 10Mbps                                   | Right light: green<br>Left light: no |
| 100Mbps        | Right light: green<br>Left light: orange | Light: blink                         |

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## Motherboard Description

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# Español

## Características del M7NCG 400

### CPU

- Soporta procesador AMD® Zócalo 462 de hasta XP 3200+.
- Corriendo a 200/266/333/400MHz FSB.

### Chipset

- North Bridge: nFORCE2 Crush18G IGP Chipset.
- South Bridge: ①MCP Chipset.  
②High Speed 800Mb/s Hyper-Transport interface para el MCP.

### Memoria Principal

- Soporta hasta 3 dispositivos DDR.
- Soporto 200/266/333MHz (sin ECC) dispositivos DDR.
- High performance 128-bit DDR333 Twin Bank Memory Architecture.
- Capacidad máxima de memoria es 3GB.

### Ranuras

- Tres ranuras de 32-bit PCI bus master.
- Una ranura CNR.
- Una ranura AGP: ①AGP3.0 8X interface a 533Mb/s.  
②Soporta AGP 4X, 8X.

### On Board IDE

- Soporta cuatro discos IDE.
- Soporta Modo 4 PIO, Modo Master y Ultra DMA 33/66/100/133 Bus Modo Master.

### On Board VGA

- GeForce 4MX Series Unidad Gráficos de Proceso (GPU).

### Chip 1394 (opcional)

- Realtek 8801BL.
- Soporta 2 puertos con transferencia de hasta 400Mbps.

### Audio

- Interface AC97 2.2.
- PC99 complaint.
- Soports 6 canales.
- S/PDIF Out.

### TV Out (opcional)

- Soporta modo s-video output.
-

## **Motherboard Description**

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- Resolución de pantalla de hasta 1024 x 768 (incluyendo todos los modos DOS)
- Soporta formatos de TV: NTSC-M (América del Norte y Taiwan)  
NTSC-J (Japón)  
PAL (Europa y Asia)

### **Periféricos On Board**

- Soporta 360K, 720K, 1.2MB, 1.44MB y 2.88MB unidad de disquete
- Soporta 2 puertos serie.
- Soporta 1 multi-modo del puerto paralelo (modos SPP/EPP/ECP)
- Soporta ratón PS/2 y teclado PS/2.
- Soporta 2 puertos USB2.0 traseros y 4 puertos USB2.0 delanteros.
- Soporta conector S/PDIF Out.

### **BIOS**

- AWARD legal Bios.
- Soporta APM1.2.
- Soporta ACPI.
- Soporta función USB.

### **Sistemas Operativos**

- Ofrece alto rendimiento en MS-DOS, Windows 2000, Windows Me, Windows XP, SCO UNIX etc.

### **Dimensión**

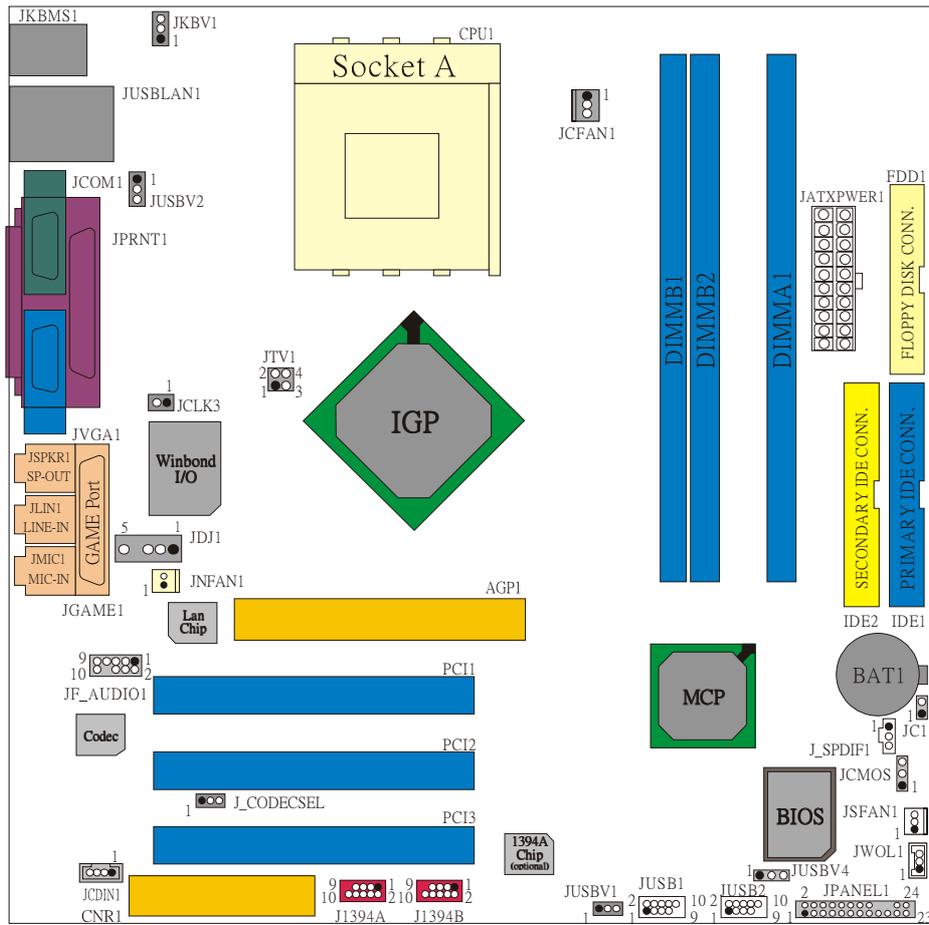
- Factor de Forma Micro ATX: 24.4cm X 24.4cm (W X L)

## **Contenido del Paquete**

- Cable HDD X 1
- Cable FDD X 1
- Configuración Completa del Driver CD X 1
- Manual del Usuario X 1
- Cable USB X 2 (opcional)
- Cable SPDIF OUT X1 (opcional)
- Cable IEEE 1394 X1 (opcional)

## Motherboard Description

### Disposición del M7NCG 400

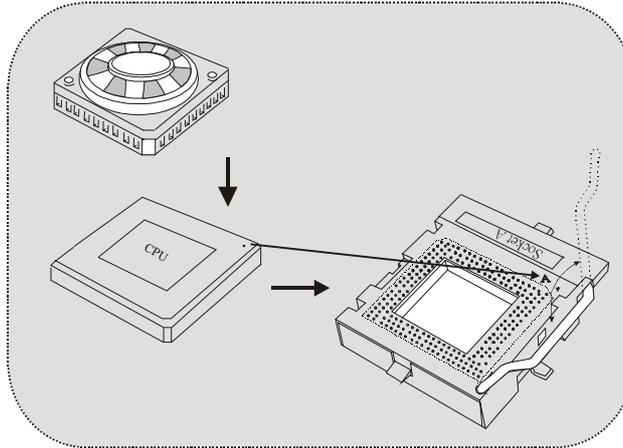


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## Motherboard Description

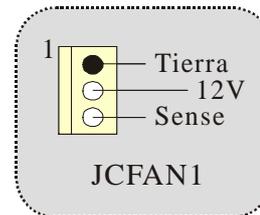
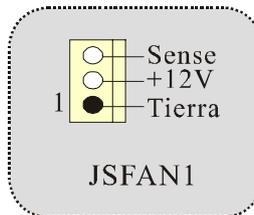
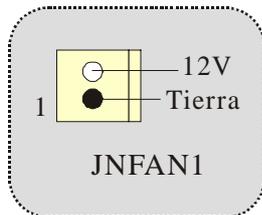
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### Instalación de la CPU



1. Tire de la palanca del lado del zócalo, luego levante la palanca hasta un ángulo de 90 grados.
2. Sitúe el contacto A del zócalo y busque el punto blanco o corte el borde en la CPU. Empareje el contacto A con el punto blanco/ corte del borde, luego inserte la CPU.
3. Presione la palanca para abajo. Ponga el ventilador en la CPU y abróchelo. Luego ponga el puerto de corriente del ventilador en el JCFAN1. Y ya habrá completado su instalación.

### CPU/ Cabezal del Sistema de Ventilación: JCFAN1/ JSFAN1/ JNFAN1



## Motherboard Description

### Módulos DDR DIMM: DIMMB1/DIMMB2/ DIMMA1

**Para un alto funcionamiento, Dual-channel DDR (128-bit), por lo menos 2 o más módulos DIMM debe ser instalado. (Tiene que ser la combinación del DIMMA y DIMMB.) Con solamente un DIMM instalado, la memoria funciona solamente a 64-bit.**

DRAM Tiempo de Acceso: 2.5V Unbuffered DDR 200/266/333 MHz Tipo requerido.

DRAM Tipo: 64MB/ 128MB/ 256MB/ 512MB/ 1GB Módulos DIMM (184 contactos)

| Localización del Zócalo DIMM | Módulo DDR                       | Total del Tamaño de Memoria (MB) |
|------------------------------|----------------------------------|----------------------------------|
| DIMMB1                       | 64MB/128MB/256MB/512MB/1GB<br>*1 | Máximo 3GB                       |
| DIMMB2                       | 64MB/128MB/256MB/512MB/1GB<br>*1 |                                  |

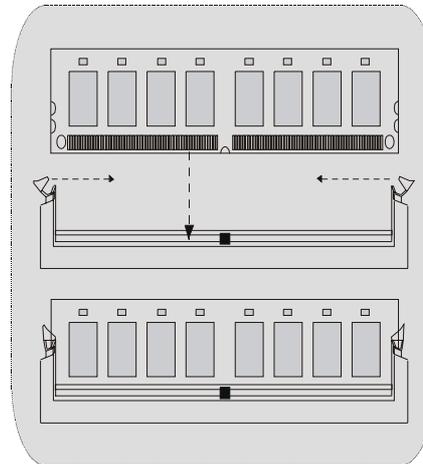
~~~solamente para referencia~~~

Cómo instalar un módulo DIMM

1. El zócalo DIMM tiene una lengüeta plástica de seguridad y el módulo de memoria DIMM tiene una muesca asimétrica, así el módulo de memoria DIMM puede caer solamente en la ranura de una sola dirección.

2. Tire la lengüeta hacia afuera. Inserte los módulos de memoria DIMM en el zócalo a los 90 grados, luego empuje hacia abajo verticalmente de modo que encaje en el lugar.

3. Los agujeros de montaje y las lengüetas plásticas deben caer por sobre el borde y sostenga los módulos de memoria DIMM en el lugar.



Motherboard Description

Conectores, Cabezales, Puentes y Ranuras

Conectores del Disco Duro: IDE1/ IDE2

La placa madre tiene un controlador de 32-bit PCI IDE que proporciona Modo PIO 0~4, Bus Master, y funcionalidad Ultra DMA / 33/ 66/ 100. Tiene dos conectores HDD IDE1 (primario) y IDE2 (secundario).

El conector IDE puede conectar a un master y un drive esclavo, así puede conectar hasta cuatro discos rígidos. El primer disco duro debe estar siempre conectado al IDE1.

Conector para el Disquete: FDD1

La placa madre proporciona un conector estándar del disquete (FDC) que soporta 360K, 720K, 1.2M, 1.44M y 2.88M tipos de disquete. Este conector utiliza los cables de cinta proporcionados por el disquete.

Ranura de Banda de Suspensión de Comunicación y Red: CNR1

La especificación CNR es una abierta Industria Estándar de Arquitectura, y define una tarjeta hardware escalable de interface en el que soporta audio, red y módem.

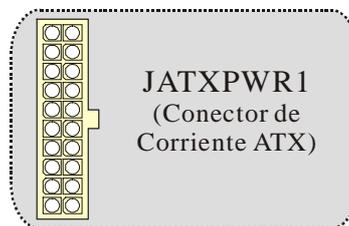
Ranura de Interconexión del Componente Periférico: PCI 1-3

Esta placa madre está equipada con 3 ranuras PCI. PCI es la sigla para Interconexión del Componente Periférico, y es un estándar bus para la tarjeta de expansión en el que reemplaza, en su mayoría de las partes, al antiguo estándar ISA bus. Las ranuras de PCI están diseñados con 32 bits.

Ranura del Puerto Acelerado para Gráficos: AGP1

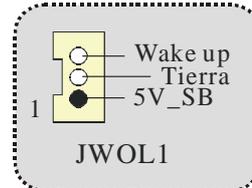
Su monitor se fijará directamente a la tarjeta de video. Esta placa madre soporta tarjetas de video para ranuras PCI, y también está equipado con un Puerto Acelerado para Gráficos (AGP/ solamente soporta 1.5V y 4X tarjeta AGP). Esta tarjeta AGP tomará ventaja de la tecnología del AGP para el mejoramiento de la eficiencia y funcionamiento del video, especialmente con gráficos 3D.

Conector de Corriente: JATXPWR1



Motherboard Description

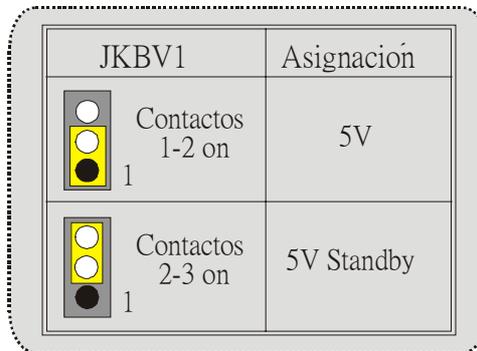
Cabezal Wake On LAN: JWOL1



Cabezal Frontal USB: JUSB1/ JUSB2

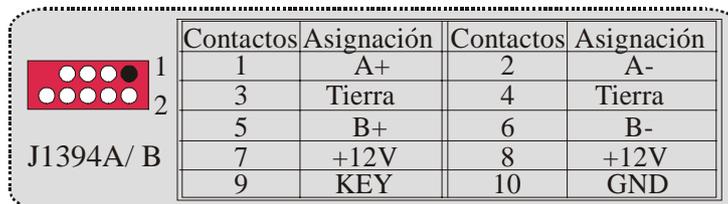


5V/ 5V_SB Selección para Teclado y Ratón: JKBV1



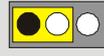
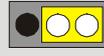
Nota: 5V Standby solamente para el modo S3.

Cabezal Frontal 1394: J1394A/ J1394B (opcional)



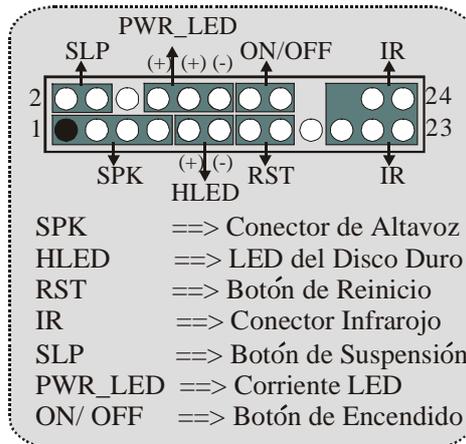
Motherboard Description

5V/ 5V_SB Selección para USB: JUSBV1/JUSBV2/ (JUSBV4=>opcional)

| JUSBV1/ 2/ 4 | Asignación |
|--|------------|
| 1 
Contactos
1-2 on | 5V |
| 1 
Contactos
2-3 on | 5V Standby |

Nota: 5V Standby solamente para el modo S3.

Conector del Panel Frontal: JPANEL1



Subsistema de Audio: JF_AUDIO1/ JCDIN1



Motherboard Description

| Contactos | Asignación | Contactos | Asignación |
|-----------|---------------------|-----------|---------------------|
| 1 | Entrada del MIC | 2 | Tierra |
| 3 | Corriente del MIC | 4 | Corriente de Audio |
| 5 | RT Salida de Línea | 6 | RT Salida de Línea |
| 7 | Reservado | 8 | Key |
| 9 | LFT Salida de Línea | 10 | LFT Salida de Línea |

☞ JF_AUDIO1 only support 2CH.

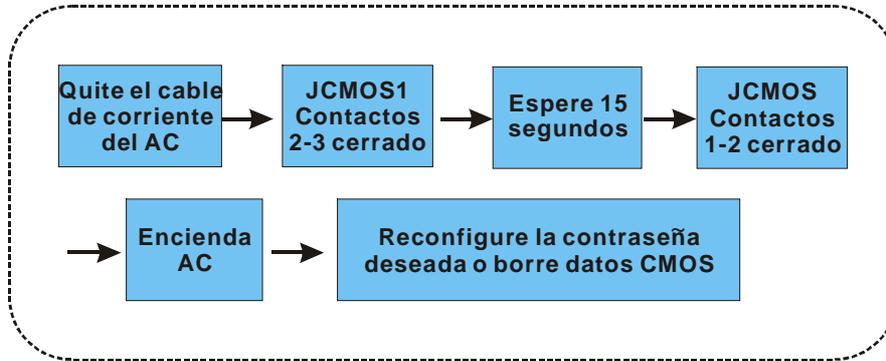
Conector del Panel Frontal de Audio/ Jumper Block

| <i>Jumper Setting</i> | <i>Configuración</i> |
|--|---|
| <p style="margin-left: 20px;">Contacto 5 & 6
Contacto 9 & 10</p> | <p>La señal de salida de línea del Audio encamina al conector de la salida de línea del Audio ubicado en el panel trasero.</p> |
| <p style="margin-left: 20px;">No jumpers installed</p> | <p>La señal de salida de línea del Audio y la señal del entrada del mic estan disponibles desde el conector de Audio del panel frontal.</p> |

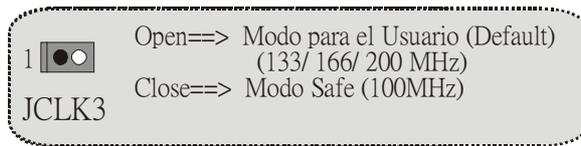
Clear CMOS Jumper: JCMOS

| JCMOS | Asignación |
|---|-----------------------------------|
| <p style="margin-left: 20px;">Contacto 1-2 on</p> | <p>Operación Normal (default)</p> |
| <p style="margin-left: 20px;">Contacto 2-3 on</p> | <p>Borrar Datos CMOS</p> |

Motherboard Description



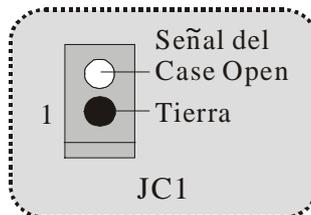
Selección de Frecuencia: JCLK3



Nota: Cuando la función del overclock falla y el sistema no pueda encenderse, por favor siga las siguientes instrucciones:

1. Apague el sistema.
2. Inserte el puente JCLK3 en cerrado.
3. Prenda el sistema.
4. Entre al menú de la configuración del CMOS y cargue las configuraciones defaults.
5. Apague el sistema.
6. Inserte el puente JCLK3 en abierto.
7. Prenda el sistema.

Conector de la Carcasa Abierta: JC1

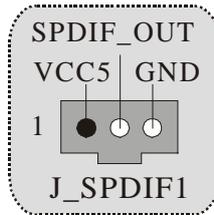


Motherboard Description

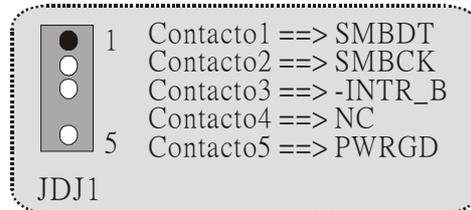
Selección CNR Codec Primario/ Secundario: J_CODECSEL

| J_CODECSEL | Asignacion |
|---|---|
| 
Contacto 1-2 | Codec Primario integrado en la placa madre. |
| 
Contacto 2-3 | CNR Codec Primario. |

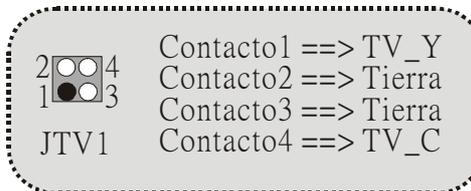
Conector Digital de Audio: J_SPDIF1



Cabezal de Audio DJ: JDJ1 (opcional)



Cabezal TV Out: JTV1 (opcional)



Motherboard Description

Deutsch

M7NCG 400 Features

CPU

- Unterstützung für AMD Prozessor(Sockel462) bis zu XP 3200+.
- FSB mit 200/266/333/400MHz..

Chipsatz

- Northbridge: nFORCE2 Crush 18G IGP Chipsatz.
- Southbridge: ①MCP.
 - ② 800Mb/s Hohe Geschwindigkeit : Hyper-Transport
 - Interface zu den MCP Chipsatz.

Hauptspeicher

- Unterstützung für 3 DDR Geräte.
- Unterstützung für 200/266/333MHz (ohne ECC) DDR Geräte.
- 128-bit High-Performance DDR333 mit der Twin- Bank Architektur.
- Die maximale Speichergröße ist 3GB.

Slots

- Drei 32-Bit PCI -Bus-Slots.
- Ein CNR-Slot.
- Ein AGP-Slot: ①AGP3.0 8X Interface mit 533Mb/s.
 - ② Unterstützung für AGP 4X, 8X.

On Board IDE

- Unterstützung für vier IDE Diskettenlaufwerke.
- Unterstützung für PIO Modus 4, Master Modus und Ultra DMA 33/66/100/133 Bus Master Modus.

On Board VGA

- GeForce 4MX Series graphics processing unit(GPU).

1394 Chip (optional)

- Realtek 8801BI mit drei 1394 Anschlüssen unterstützt bis zu 400Mbit/s Transferrate.

Audio

- AC97-2.2-Interface.
- PC99 kompatibel.
- Unterstützung für 6-Kanal.
- S/PDIF Ausgabe.

TV-Ausgabe (optional)

- Unterstützung für S-Video Ausgabe Modus.
-

Motherboard Description

- Anzeige Auflösung bis zu 1024 x 768 (enthält alle DOS-Modi)
- Unterstützung für die TV Formate: NTSC-M (Norden Amerika und Taiwan)
NTSL-J (Japan)
PAL (Europa und Asien)

On Board Peripherals

- 1 Floppy-Port mit Unterstützung für 2 Diskettenlaufwerke.(360KB, 720KB, 1.2MB, 1.44MB und 2.88MB)
- 2 serielle Schnittstellen.
- 1 parallele Schnittstelle mit Unterstützung für SPP/EPP/ECP-Modus.
- Unterstützung für PS/2-Maus und PS/2 -Tastatur.
- Unterstützung für sechs USB2.0-Ports. (hintenX4, vornX2)
- Unterstützung für S/PDIF Ausgabe Anschluss.

BIOS

- Unterstützung für AWARD legal Bios.
- Unterstützung für APM1.2.
- Unterstützung für ACPI.
- Unterstützung für USB Function.

Operating System

- Unterstützung für die am meisten verbreiteten Betriebssysteme wie Windows 2000, Windows ME, Windows XP, LINUX and SCO UNIX.

Dimensions

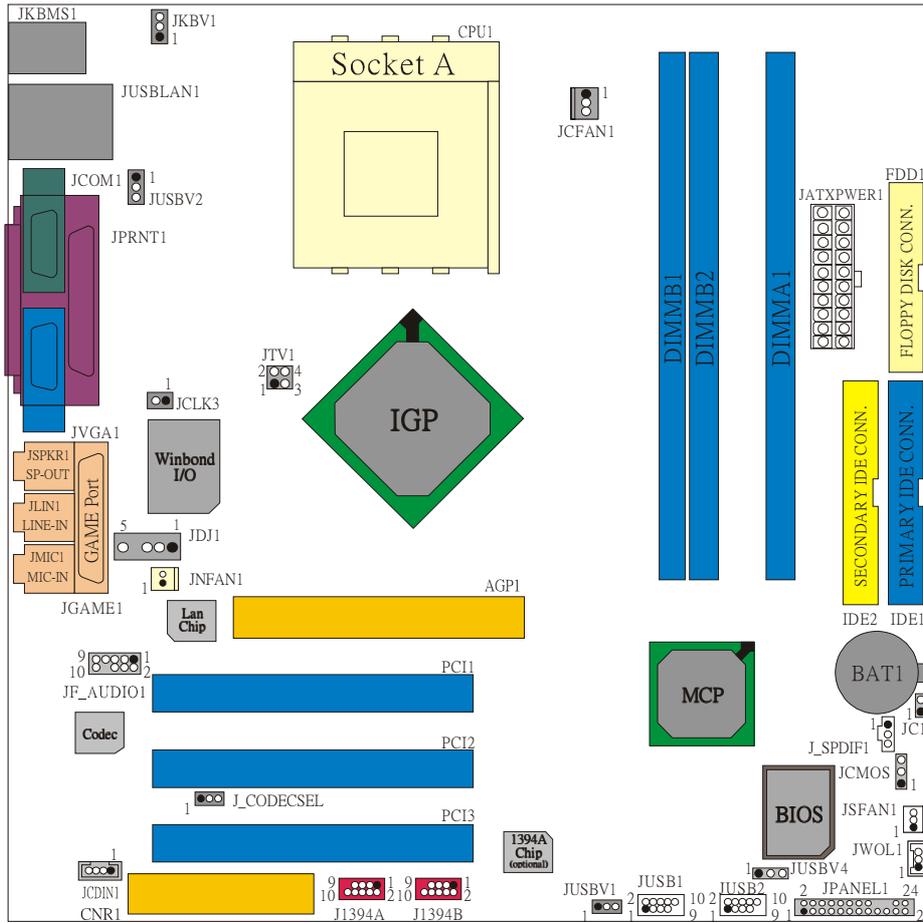
- Micro ATX Form-Factor: 24.4cm X 24.4cm (W X L)

Verpackungsinhalt

- HDD Kable X 1
- FDD Kable X 1
- Treiber CD für InstallationX 1
- Benutzer Handbuch X 1
- USB Kable X 2 (optional)
- I/O-Rückwand für ATX Gehäuse X 1 (optional)
- SPDIF-Ausgang-Kable X1 (optional)
- IEEE 1394 Kable X1 (optional)

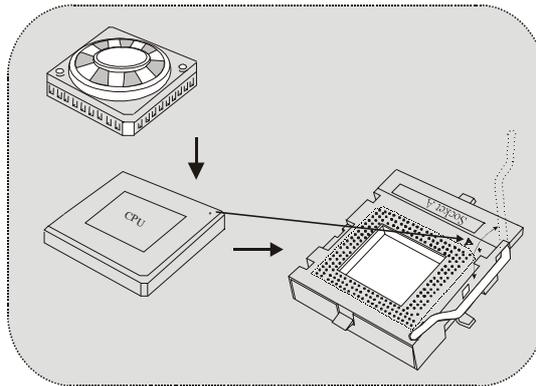
Motherboard Description

Layout des M7NCG 400



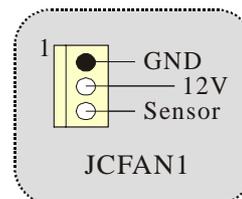
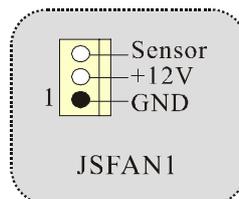
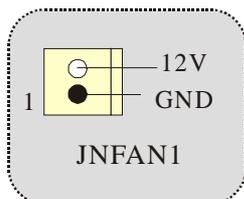
Motherboard Description

Installation der CPU



1. Ziehen Sie den Hebel seitwärts von der Sockel und neigen Sie ihn um 90-Grad nach oben.
2. Suchen Sie Pin A im Sockel und den weißen Punkt oder die Abschnittkante in der CPU. Passen Sie Pin A mit dem weißen Punkt/der Abschnittkante zusammen und legen Sie danach die CPU ein.
3. Drücken Sie den Hebel nach unten. Befestigen Sie danach den Lüfter auf die CPU und schließen Sie die Stromschnittstelle des Lüfters an JCFAN1 an und beenden Sie die Installation.

CPU/ System Fan Headers: JCFAN1/ JSFAN1/ JNFAN1



Motherboard Description

DDR-DIMM-Modules: DIMMB1/DIMMB2/ DIMMA1

Für Dual-Kanal DDR(128bit) High-Performance muß man mindestens zwei oder mehr DIMM-Modules installieren. (Der Speicher muß in der Kombination von DIMMA und DIMMB installiert werden.)

DRAM Zugriffszeit: 2.5V unbuffered DDR 200/266/333 MHz Typen erfordert.
DRAM Typen: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM-Module (184 pin)

| DIMM-Sockel Standort | DDR-Module | Speichergroße (MB) |
|----------------------|----------------------------------|--------------------|
| DIMMB1 | 64MB/128MB/256MB/512MB/1GB
*1 | maximal
3GB |
| DIMMB2 | 64MB/128MB/256MB/512MB/1GB
*1 | |
| DIMMA1 | 64MB/128MB/256MB/512MB/1GB
*1 | |

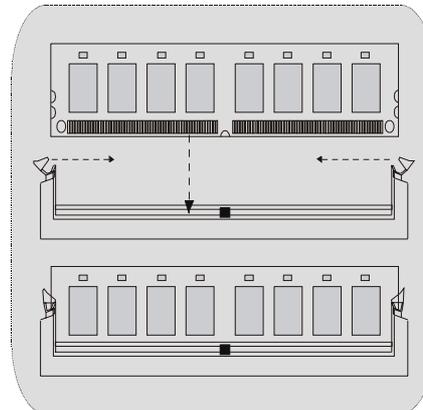
~~~DRAM-Konfiguration wird als Referenz~~~

### Installation von DIMM-Modulen

1. DDR DIMM hat nur eine Passkerbe in der Mitte des Moduls. Das Modul passt nur in einer Richtung.

2. Ziehen Sie die Plastikklammer an beiden Enden der DIMM-Steckplätze aus, dann setzen Sie das DIMM-Modul im 90-Grad-Winkel in den DIMM-Steckplatz und drücken es nach unten.

3. Schließen Sie die Plastikklammer, um das DIMM-Modul zu verriegeln.



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## Motherboard Description

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### Jumper, Header, Anschlüsse & Slots

#### Festplattenanschlüsse: IDE1 und IDE2

Das Mainboard hat einen 32-Bit Enhanced PCI IDE-Controller, der die Modi PIO0~4, Bus Master sowie die Ultra DMA/33/66/100/133- Funktion zur Verfügung stellt. Dieser ist mit zwei HDD-Anschlüssen versehen IDE1 (primär) und IDE2 (sekundär).

Die IDE-Anschlüsse können eine Master- und eine Slave-Festplatte verbinden, so dass bis zu 4 Festplatten angeschlossen werden können. Die erste Festplatte sollte immer an IDE1 angeschlossen werden.

#### Diskettenanschluss: FDD1

Das Motherboard enthält einen standardmäßigen Diskettenanschluss, der 360K-, 720K-, 1.2M-, 1.44M- und 2.88M-Disketten unterstützt. Dieser Anschluss unterstützt die mitgelieferte Bandkabel des Diskettenlaufwerks.

#### Communication Network Riser Slot: CNR1

Die CNR-Angaben entsprechen einer offenen Industry Standard Architecture, und sie definieren eine Hardware-skalierbare Riser-Card-Schnittstelle, welche nur Audio, Netzwerk und Modem unterstützt.

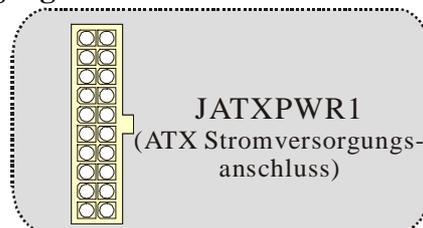
#### Peripheral Component Interconnect Slots: PCI 1-3

Dieses Motherboard ist mit 3 standardmäßigen PCI-Slots ausgestattet. PCI steht für Peripheral Component Interconnect und bezieht sich auf einem Busstandard für Erweiterungskarten, der den älteren ISA-Busstandard in den meisten Schnittstellen ersetzt hat. Dieser PCI-Slot ist für 32 bits vorgesehen.

#### Accelerated Graphics Port Slot: AGP1

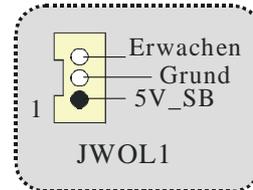
Ihr Monitor wird direkt an die Grafikkarte angeschlossen. Dieses Motherboard unterstützt Grafikkarten für PCI-Slots, aber es ist auch mit einem Accelerated Graphics Port ausgestattet. AGP-Karten verwenden die AGP-Technologie, um die Wirksamkeit und Leistung von Videosignalen zu verbessern, besonders wenn es sich um 3D-Grafiken handelt.

#### Stromversorgungsanschluss: JATXPWR1

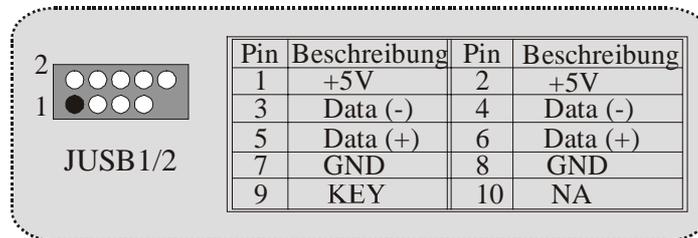


## Motherboard Description

### Wake On LAN Header: JWOL1



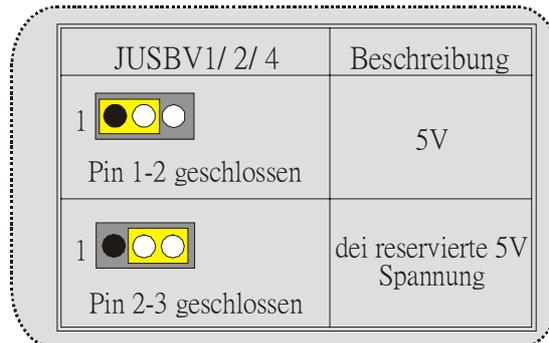
### Front USB Header: JUSB1/ JUSB2



### Front 1394 Header: J1394A/ J1394B (optional)



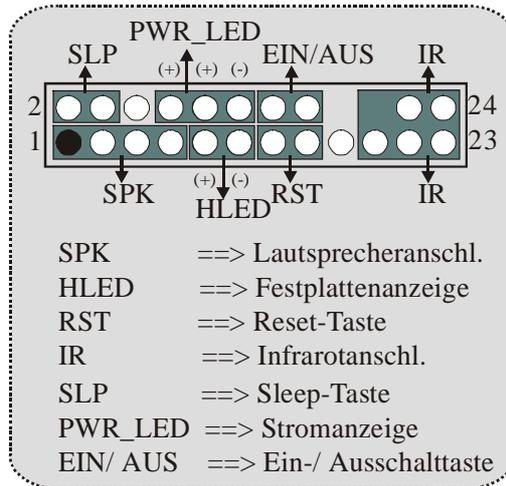
### 5V/ 5V\_SB Auswahl für USB: JUSBV1/JUSBV2/ (JUSBV4=>optional)



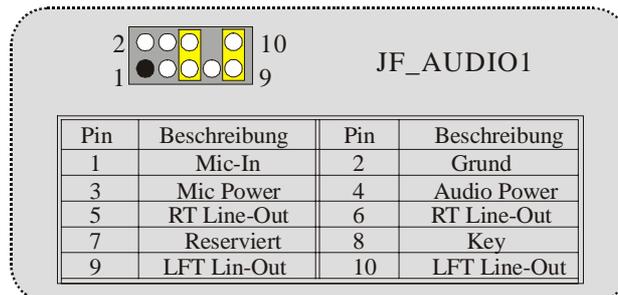
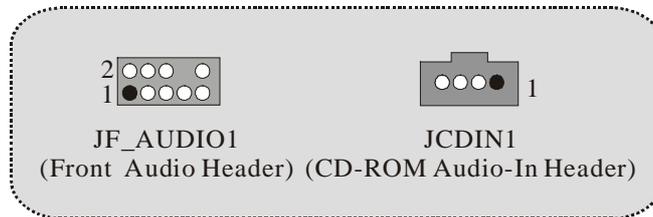
Anmerkung: Die 5V reservierte Spannung für S3 Modus.

## Motherboard Description

### Anschlüsse auf der Vorderseite: JPANEL1

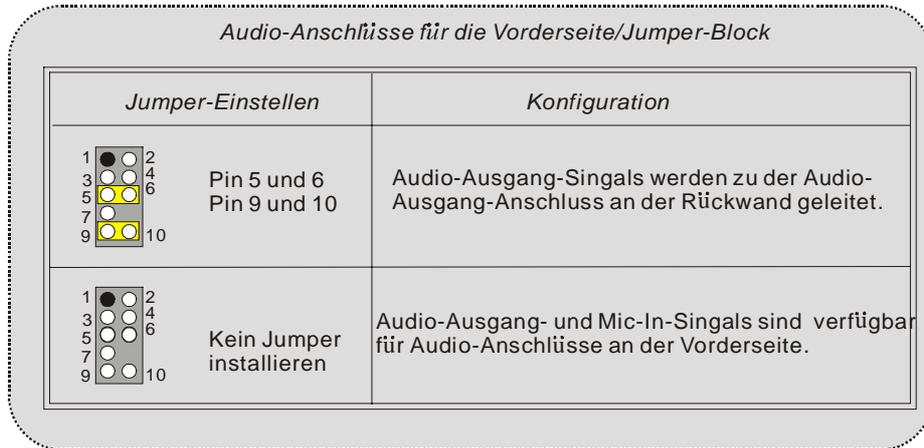


### Audio Subsystem: JF\_AUDIO1/ JCDIN1

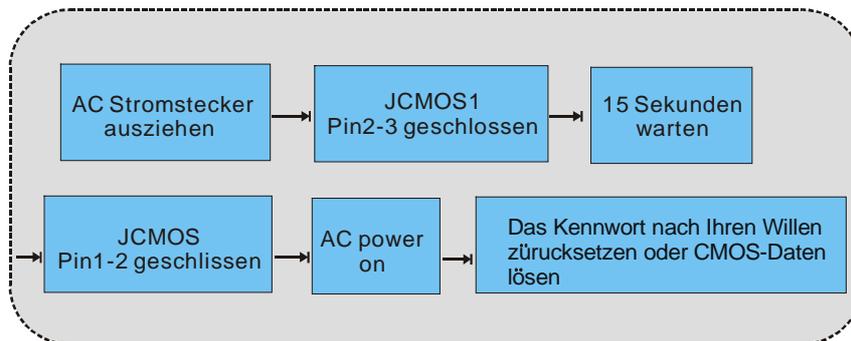
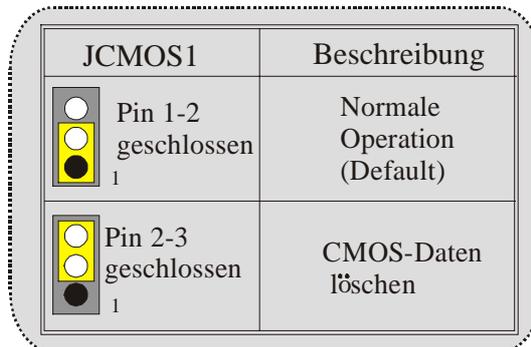


☞ JF\_AUDIO1 unterstützt nur 2-Kanal.

## Motherboard Description

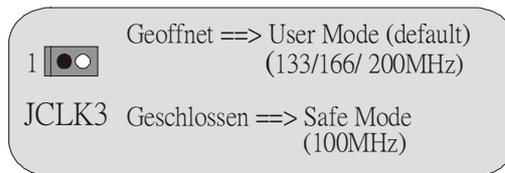


### Clear CMOS Jumper: JCMOS



## Motherboard Description

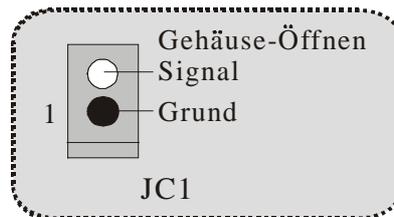
### Frequenz Auswahl: JCLK3



**Anmerkung:** Wenn "Überspannung Funktion" nicht gelungen ist folgen Sie bitte die Instruktion darunter:

1. Bitte vausschalten Sie den AC-Netzstecker.
2. Lassen Sie Pin 1-2 von JCLK3 geschlossen sein.
3. Schließen Sie den AC-Netzstecker an.
4. Betreten Sie "CMOS Setup Menü" und wählen sie Default-Setting.
5. Ausschalten Sie den AC-Netzstecker wieder.
6. Lassen Sie Pin 1-2 von JCLK3 geöffnet sein.

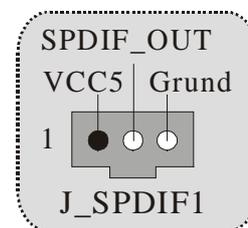
### Case Open Connector: JC1



### Auswahl für Primär/Sekundär CNR-Codec: J\_CODECSEL

| J_CODECSEL       | Beschreibung         |
|------------------|----------------------|
| <br>Pin 1-2<br>1 | Onboard-Primär-Codec |
| <br>Pin 2-3<br>1 | CNR-Primär-Codec     |

### Digital-Audio-Anschluss: J\_SPDIF1



## Motherboard Description

### 5V/ 5V\_SB Auswahl für Tastatur: JKBV1

| JKBV1                                                                                                         | Beschreibung                   |
|---------------------------------------------------------------------------------------------------------------|--------------------------------|
| <br>1<br>Pin 1-2 geschlossen | 5V                             |
| <br>1<br>Pin 2-3 geschlossen | die reservierte 5V<br>Spannung |

*Anmerkung: Die 5V reservierte Spannung für S3 Modus.*

### Audio DJ Header: JDJ1 (optional)

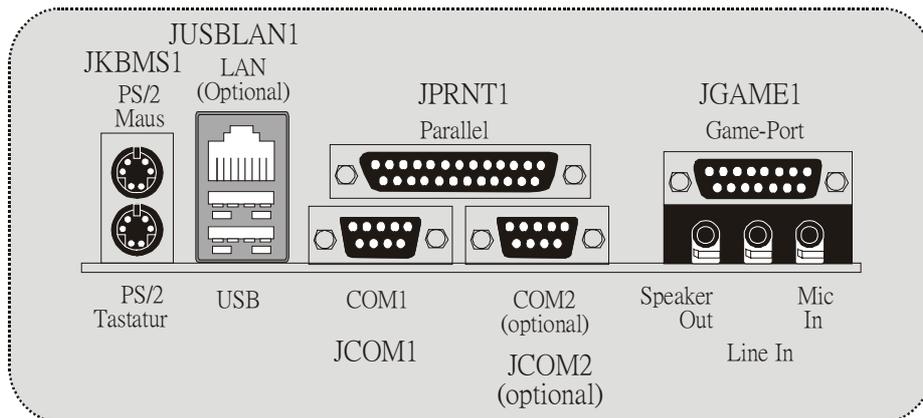
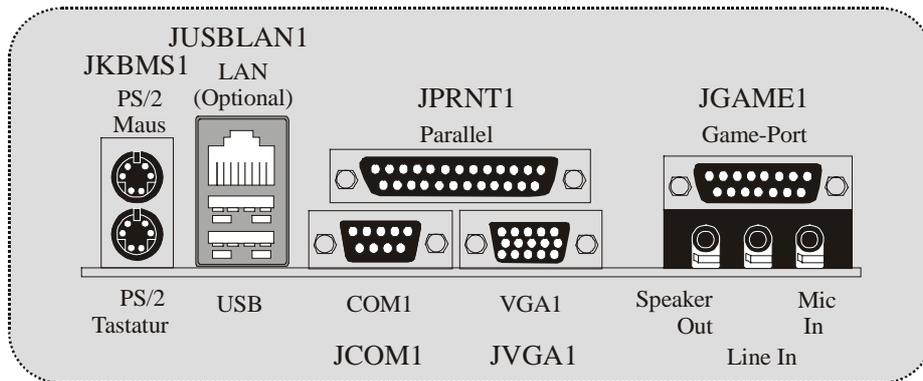
|                                                                                                  |                                                                                        |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <br>5<br>JDJ1 | Pin1 ==> SMBDT<br>Pin2 ==> SMBCK<br>Pin3 ==> -INTR_B<br>Pin4 ==> Key<br>Pin5 ==> PWRGD |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|

### TV Out Header: JTV1 (optional)

|                                                                                                  |                                                                      |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <br>4<br>JTV1 | Pin1 ==> TV_Y<br>Pin2 ==> Ground<br>Pin3 ==> Ground<br>Pin4 ==> TV_C |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|

## Motherboard Description

### Anschlüsse auf der Rückseite



### Die Signallampe für Lan-Port Status:

| Status          | Normal                                            | Download          |
|-----------------|---------------------------------------------------|-------------------|
| Geschwindigkeit |                                                   |                   |
| 10Mbps          | Lampe von rechts: grün<br>Lampe von links: kein   | Lampe:<br>blinken |
| 100Mbps         | Lampe von rechts: grün<br>Lampe von links: orange | Lampe:<br>blinken |

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## Motherboard Description

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# Français

## M7NCG 400 Particularités

### CPU

- Soutient le processeur d'AMD @ Socket462 jusqu'à XP 3200 +.
- Dirigeant à Autobus de Côté 200/266/333MHz de Devant.

### Chipset

- Pont du Nord : nFORCE2 Crush18G IGP Chipset.
- Pont du Sud : ●MCP Chipset.
  - Hyper de vitesse haute 800Mb/s-transporte l'interface au MCP.

### Mémoire Principale

- Soutient jusqu'aux dispositifs de 3 DDR.
- Soutient les dispositifs de DDR 200/266/333MHz (sans CEE) .
- Haute exécution(performance) 128 particules DDR333 Architecture de Mémoire(souvenir) de Banque de Jumeau.
- La plus grande capacité de mémoire(souvenir) est 3GB.

### Fentes

- Trois fentes de maître d'autobus PCI 32 bits.
- Une fente CNR.
- Une fente AGP : \* AGP3.0 8X interface à 533Mb/s.
  - \* Supports AGP 4X, 8X.

### À bord IDE

- Soutient quatre lecteurs de disques d'IDE.
- Soutient PIO Mode 4, le Mode de Maître et le Mode de Maître d'Autobus de DMA Ultra 33/66/100/133.

### À bord VGA

- GeForce 4MX graphisme de Série traitement d'unité (GPU).

### 1394 Chip (optionnel)

- Realtek 8801BL.
- Soutiennent 2 ports avec le taux de transfert jusqu'à 400Mbps.

### Audio

- AC97 2.2 interface.
- PC99 plainte.
- Soutient 6 canaux.
- S/PDIF Out.

### TV Out (optionnel)

- Soutient s-video output mode.
-

## **Motherboard Description**

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- Affichant une résolution de 1024 x 768 pixels (incluant tout DOS mode)
- Soutient TV format : NTSC-M (Nord-Américain et Taiwan)  
NTSC-J (Japon)  
PAL (Europe et Asie)

### **À bord Périphériques**

- Soutient 360Ko, 720Ko, 1.2MB, 1.44MB et 2.88MB des conducteurs de disquette.
- Soutient 2 ports périodiques.
- Soutient 1 multi-mode le port parallèle. (SPP/EPP/ECP mode)
- Soutient souris de PS/2 et clavier de PS/2.
- Soutient 2 ports d'USB2.0 en arrière et 4 ports d'USB2.0 en avant.
- Soutient S/PDIF Out connecteur.

### **BIOS**

- ACCORDENT le BIOS légal.
- Soutient APM1.2.
- Soutient ACPI.
- Soutient la Fonction d'USB.

### **Système de Fonctionnement**

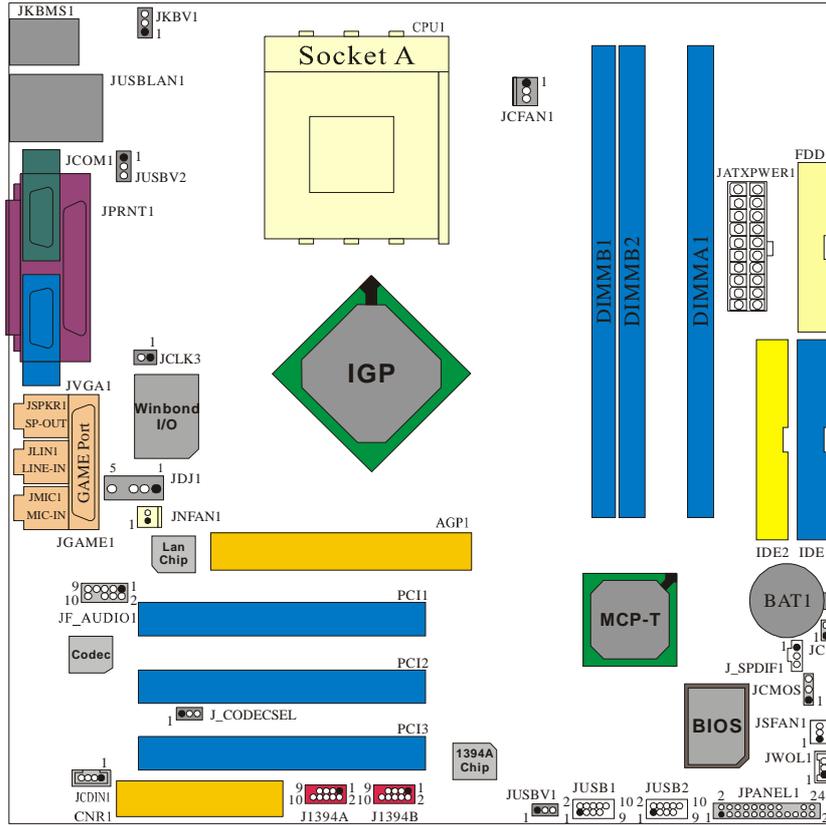
- Offre l'exécution(performance) la plus haute pour MS-DOS, Windows 2000, des Fenêtres Moi, des Fenêtres XP, SCO UNIX etc.

### **Dimensions**

- Micro Facteur de Forme d'ATX : 24.4cm X 24.4cm (W X L)

## Motherboard Description

### Dessin d'M7NCG 400



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## Motherboard Description

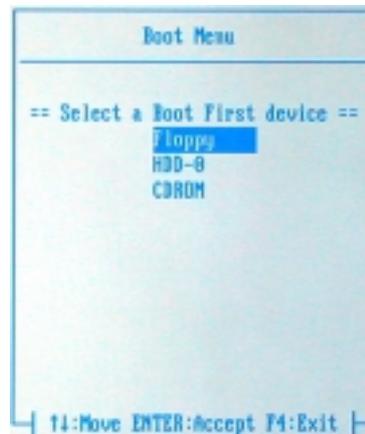
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### 9th Touch™ is NICE TOUCH

[9th Touch] means users could enjoy the speed, safety & convenience when respective booting requirement. The easiest way is just to touch 「F9」 function key during booting procedure to choose any device you like to boot for the system. Forget about entering CMOS, rebooting activities. In addition, at the same time, the system configuration will be very safe.



1. Please insert the bootable CD/Floppy Disk into the boot devices.
2. Press "F9" after powering on the system.
3. Use the Arrow key to select the boot devices.
4. Press "Enter" to start the boot-up process.



## ***Motherboard Description***

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### **BIOS STAR -[ FLASHER™ ]**

Regularly, when users want to update BIOS, there are two steps to be followed. First, move to DOS environment. Second, use and maybe download the flash utility to update the BIOS. Unfortunately, there is no DOS support under WindowsR XP. Moreover, it takes time to prepare the right flash utility and make a Bootable Floppy Disk if necessary. BIOSTAR's [FLASHER™] technology integrates flash utility function onto BIOS firmware. The advantage is users do not need neither to enter DOS nor to prepare the utility. Just simply enter CMOS and do it.



#### **Flasher Step by Step**

1. Download the latest BIOS file from the BIOSTAR website to a floppy disk.
2. Insert the disk that contains the newest BIOS file into the floppy drive.
3. Power ON the computer.
4. Press [DEL] to enter CMOS setup.
5. Select " Upgrade BIOS " item then press Enter, refer to Figure 1.

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## Motherboard Description

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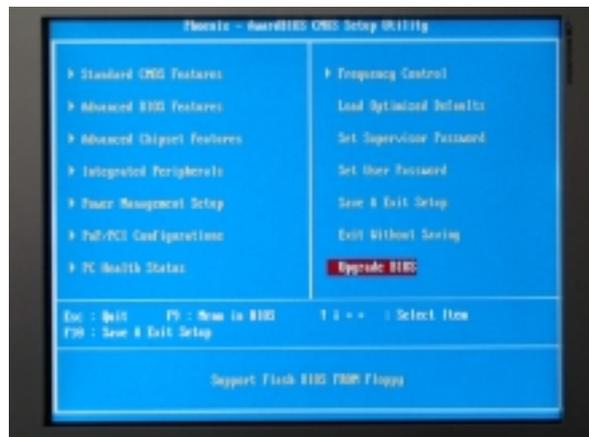


Figure 1

6. Press " Arrow Up/Down " key to choose BIOS file, refer to Figure 2

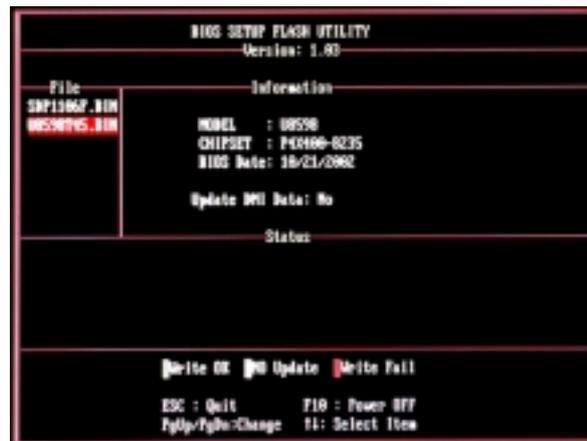


Figure 2

7. Press [Enter] to load the BIOS from the floppy disk, refer to Figure 3.

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## Motherboard Description

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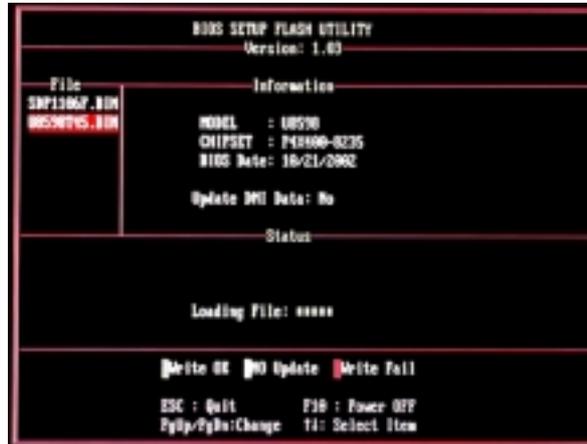


Figure 3

8. At the prompt "Are you sure to flash (Y/N) ", press [Y] to flash BIOS or [N] to cancel the flashing process, refer to Figure 4.



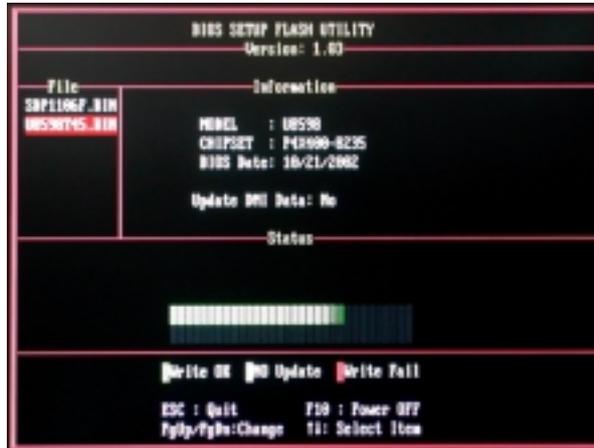
Figure 4

8. After pressing [Y], the flash starts to process, refer to Figure 5.

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## Motherboard Description

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10. A message "Flash done, Restart System (Y/N)" will appear if the system was successfully updated the BIOS, refer to Figure 6.

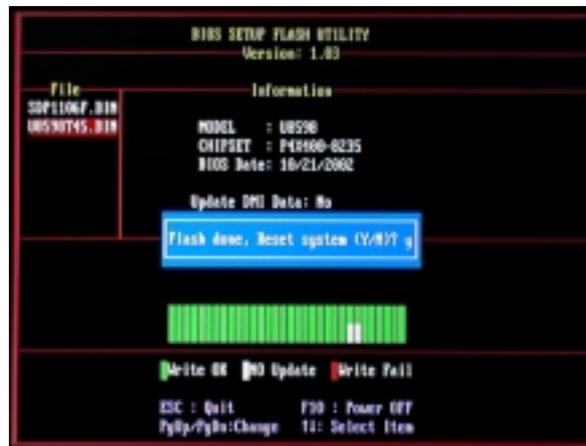


Figure 6

11. Press [Enter], then the flashing is done!

## ***Motherboard Description***

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### **Watchdog Technology**

It is important to know that when overclocking, the system can be at a vulnerable state. Therefore, the BIOSTAR Watchdog Technology was designed to protect your PC under dangerous over-clock situations. Any over-clocking that reaches the threshold settings, the Watchdog Technology will disable your system from rebooting in the BIOS setting. Under this circumstance, please power off your PC. After that, press <Insert> and power on your system simultaneously to restart your system. This user-friendly design can save you from squandering your time on opening the case just to clear the CMOS. In the end, thanks to the Watchdog Technology, everything is back at a safe and sound!

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## Trouble Shooting

| PROBABLE                                                                                                                                           | SOLUTION                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No power to the system at all Power light don't illuminate, fan inside power supply does not turn on. Indicator light on keyboard does not turn on | <ul style="list-style-type: none"> <li>* Make sure power cable is securely plugged in</li> <li>* Replace cable</li> <li>* Contact technical support</li> </ul>                                                                                                                                                                  |
| System inoperative. Keyboard lights are on, power indicator lights are lit, hard drive is spinning.                                                | <ul style="list-style-type: none"> <li>* Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.</li> </ul>                                                                                                                                                                          |
| System does not boot from hard disk drive, can be booted from CD-ROM drive.                                                                        | <ul style="list-style-type: none"> <li>* Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup.</li> <li>* Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.</li> </ul> |
| System only boots from CD-ROM. Hard disk can be read and applications can be used but booting from hard disk is impossible.                        | <ul style="list-style-type: none"> <li>* Back up data and applications files. Reformat the hard drive. Re-install applications and data using backup disks.</li> </ul>                                                                                                                                                          |
| Screen message says "Invalid Configuration" or "CMOS Failure."                                                                                     | <ul style="list-style-type: none"> <li>* Review system's equipment . Make sure correct information is in setup.</li> </ul>                                                                                                                                                                                                      |
| Cannot boot system after installing second hard drive.                                                                                             | <ul style="list-style-type: none"> <li>* Set master/slave jumpers correctly.</li> <li>* Run SETUP program and select correct drive types. Call drive manufacturers for compatibility with other drives.</li> </ul>                                                                                                              |

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## Solución de Problemas

| CAUSA PROBABLE                                                                                                                                                | SOLUCIÓN                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No hay corriente en el sistema. La luz de corriente no ilumina, ventilador dentro de la fuente de alimentación apagada. Indicador de luz del teclado apagado. | * Asegúrese que el cable de transmisión esté seguramente enchufado.<br>* Reemplace el cable.<br>* Contacte ayuda técnica.                                                                                                                                                                                                                   |
| Sistema inoperativo. Luz del teclado encendido, luz de indicador de corriente iluminado, disco rígido está girando.                                           | * Presione los dos extremos del DIMM, presione para abajo firmemente hasta que el módulo encaje en el lugar.                                                                                                                                                                                                                                |
| Sistema no arranca desde el disco rígido, puede ser arrancado desde el CD-ROM drive.                                                                          | * Controle el cable de ejecución desde el disco hasta el disco del controlador. Asegúrese de que ambos lados estén enchufados con seguridad; controle el tipo de disco en la configuración estándar CMOS.<br>* Copiando el disco rígido es extremadamente importante. Todos los discos rígidos son capaces de dañarse en cualquier momento. |
| Sistema solamente arranca desde el CD-ROM. Disco rígido puede leer y aplicaciones pueden ser usados pero el arranque desde el disco rígido es imposible.      | * Copie datos y documentos de aplicación. Vuelva a formatear el disco rígido. Vuelva a instalar las aplicaciones y datos usando el disco de copiado.                                                                                                                                                                                        |
| Mensaje de pantalla "Invalid Configuration" o "CMOS Failure."                                                                                                 | * Revise el equipo del sistema. Asegúrese de que la información configurada sea correcta.                                                                                                                                                                                                                                                   |
| No puede arrancar después de instalar el segundo disco rígido.                                                                                                | * Fije correctamente el puente master/esclavo.<br>* Ejecute el programa SETUP y seleccione el tipo de disco correcto. Llame a una manufacturación del disco para compatibilidad con otros discos.                                                                                                                                           |

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## Problemlösung

| MÖGLICHE URSACHE                                                                                                                                                                           | LÖSUNG                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Das System hat keine Spannungsversorgung. Die Stromanzeige leuchtet nicht, der Lüfter im Inneren der Stromversorgung wird nicht eingeschaltet. Tastaturleuchten sind nicht an.             | <ul style="list-style-type: none"> <li>* Versichern Sie sich, dass das Stromkabel richtig angebracht ist</li> <li>* Ersetzen Sie das Stromkabel</li> <li>* Wenden Sie sich an Ihre Kundendienststelle</li> </ul>                                                                                                                                                                 |
| Das System funktioniert nicht. Die Tastaturleuchten sind an, die Stromanzeige leuchtet, die Festplatte dreht sich.                                                                         | <ul style="list-style-type: none"> <li>* Drücken Sie das DIMM-Modul bei gleichem Druck an beide Seiten, bis es einrastet.</li> </ul>                                                                                                                                                                                                                                             |
| Das System wird von der Festplatte nicht hochgefahren, vom CD-ROM-Treiber aber ja.                                                                                                         | <ul style="list-style-type: none"> <li>* Überprüfen Sie das Kabel zwischen Festplatte und Festplatten-Controller. Versichern Sie sich, dass beide Enden richtig angebracht sind; überprüfen Sie den Laufwerktyp in der standardmäßigen CMOS-Einrichtung.</li> <li>* Ein Backup der Festplatte ist sehr wichtig. Alle Festplatten können irgendwann beschädigt werden.</li> </ul> |
| Das System wird nur von der CD-ROM hochgefahren. Die Festplatte wird gelesen und die Anwendungen sind funktionsfähig, aber es ist nicht möglich, das System von der Festplatte zu starten. | <ul style="list-style-type: none"> <li>* Machen Sie eine Sicherungskopie von allen Daten und Anwendungsdateien. Formatieren Sie die Festplatte und installieren Sie die Anwendungen und Daten mit Hilfe von Backup-Disks.</li> </ul>                                                                                                                                             |
| Auf dem Bildschirm erscheint die Meldung "Ungültige Konfiguration" oder "CMOS Fehler."                                                                                                     | <ul style="list-style-type: none"> <li>* Überprüfen Sie die Systemkomponenten und versichern Sie sich, dass diese richtig eingerichtet sind.</li> </ul>                                                                                                                                                                                                                          |
| Das System kann nach der Installation einer zweiten Festplatte nicht hochgefahren werden.                                                                                                  | <ul style="list-style-type: none"> <li>* Setzen Sie die Master/Slave-Jumper richtig ein.</li> <li>* Führen Sie das SETUP-Programm aus und wählen Sie die richtigen Laufwerktypen. Wenden Sie sich an den Laufwerkhersteller, um die Kompatibilität mit anderen Laufwerken zu überprüfen.</li> </ul>                                                                              |



08/26/2003

