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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

**CALIFORNIA, USA ONLY**

The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.
"Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

**ASRock Website: http://www.asrock.com**

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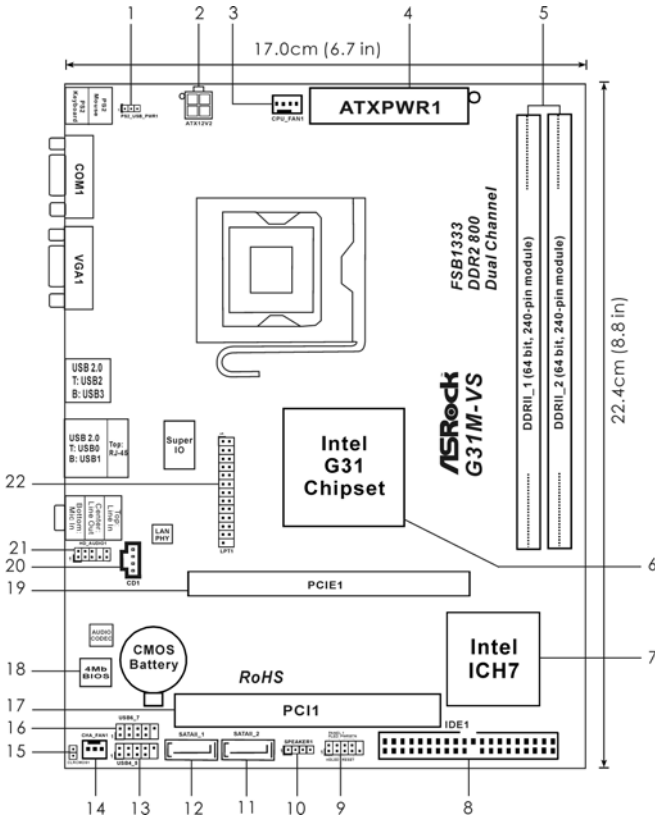
English

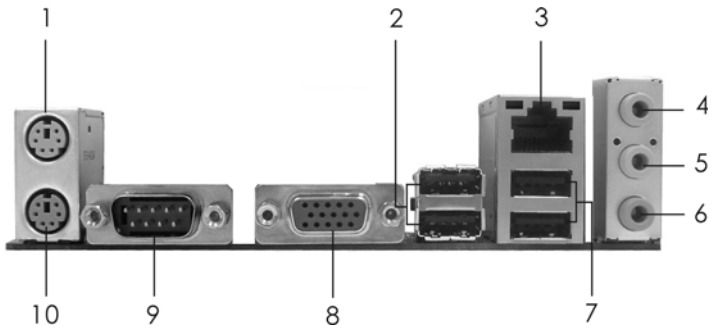
# Motherboard Layout




| | |
|---|---|
| 1 | PS2_USB_PWR1 Jumper |
| 2 | ATX 12V Connector (ATX12V2) |
| 3 | CPU Fan Connector (CPU_FAN1) |
| 4 | ATX Power Connector (ATXPWR1) |
| 5 | 2 x 240-pin DDR2 DIMM Slots (Dual Channel: DDRII_1, DDRII_2; Yellow) |
| 6 | North Bridge Controller |
| 7 | South Bridge Controller |
| 8 | IDE1 Connector (IDE1, Blue) |
| 9 | System Panel Header (PANEL1, Orange) |
| 10 | Chassis Speaker Header (SPEAKER 1, Purple) |
| 11 | Secondary SATAII Connector (SATAII_2; Red) |
| 12 | Primary SATAII Connector (SATAII_1; Red) |
| 13 | USB 2.0 Header (USB4_5, Blue) |
| 14 | Chassis Fan Connector (CHA_FAN1) |
| 15 | Clear CMOS Jumper (CLRCMOS1) |
| 16 | USB 2.0 Header (USB6_7, Blue) |
| 17 | PCI Slot (PCI1) |
| 18 | BIOS SPI Chip |
| 19 | PCI Express x16 Slot (PCIE1) |
| 20 | Internal Audio Connector: CD1 (Black) |
| 21 | Front Panel Audio Header (HD_AUDIO1, Lime) |
| 22 | Print Port Header (LPT1, Purple) |

English

## I/O Panel




| | | | |
|---|---|---|---|
| 1 | PS/2 Mouse Port (Green) | 6 | Microphone (Pink) |
| 2 | USB 2.0 Ports (USB23) | 7 | USB 2.0 Ports (USB01) |
| 3 | RJ-45 Port | 8 | VGA Port |
| 4 | Line In (Light Blue) | 9 | COM Port |
| 5 | Line Out (Lime) | 10 | PS/2 Keyboard Port (Purple) |

* To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. Please refer to below steps for the software setting of Multi-Streaming.

**For Windows® XP:**

After restarting your computer, you will find “Mixer” tool on your system. Please select “Mixer ToolBox” , click “Enable playback multi-streaming”, and click “ok”. Choose “2CH” or “4CH” and then you are allowed to select “Realtek HDA Primary output” to use Rear Speaker and Front Speaker, or select “Realtek HDA Audio 2nd output” to use front panel audio. Then reboot your system.

**For Windows® Vista™:**

After restarting your computer, please double-click “Realtek HD Audio Manager” on the system tray. Set “Speaker Configuration” to “Quadraphonic” or “Stereo”. Click “Device advanced settings”, choose “Make front and rear output devices playbacks two different audio streams simultaneously”, and click “ok”. Then reboot your system.

English

# 1. Introduction

Thank you for purchasing ASRock ***G31M-VS*** motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

This Quick Installation Guide contains introduction of the motherboard and step-by-step installation guide. More detailed information of the motherboard can be found in the user manual presented in the Support CD.

Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well. ASRock website http://www.asrock.com
If you require technical support related to this motherboard, please visit our website for specific information about the model you are using.
www.asrock.com/support/index.asp

## 1.1 Package Contents

ASRock ***G31M-VS*** Motherboard
(Micro ATX Form Factor: 8.8-in x 6.7-in, 22.4 cm x 17.0 cm)
ASRock ***G31M-VS*** Quick Installation Guide
ASRock ***G31M-VS*** Support CD
One 80-conductor Ultra ATA 66/100 IDE Ribbon Cable (Optional)
One Serial ATA (SATA) Data Cable (Optional)
One Serial ATA (SATA) HDD Power Cable (Optional)
One I/O Panel Shield

English

## 1.2 Specifications

| | |
|---|---|
| **Platform** | - Micro ATX Form Factor: 8.8-in x 6.7-in, 22.4 cm x 17.0 cm |
| **CPU** | - LGA 775 for Intel® Dual Core Core™ 2 Extreme / Core™ 2 Duo / Pentium® Dual Core / Celeron® Dual Core / Celeron®, supporting Dual Core Wolfdale processors<br>- Supports CPU power up to 65W<br>- Supports FSB1333/1066/800 MHz<br>- Supports Hyper-Threading Technology (see **CAUTION 1**)<br>- Supports Untied Overclocking Technology (see **CAUTION 2**)<br>- Supports EM64T CPU |
| **Chipset** | - Northbridge: Intel® G31<br>- Southbridge: Intel® ICH7 |
| **Memory** | - Dual Channel DDR2 Memory Technology (see **CAUTION 3**)<br>- 2 x DDR2 DIMM slots<br>- Supports DDR2 800/667 non-ECC, un-buffered memory<br>- Max. capacity of system memory: 8GB (see **CAUTION 4**) |
| **Expansion Slot** | - 1 x PCI Express x16 slot<br>- 1 x PCI slot |
| **Graphics** | - Intel® Graphics Media Accelerator 3100<br>- Pixel Shader 2.0, DirectX 9.0<br>- Max. shared memory 384MB (see **CAUTION 5**) |
| **Audio** | - 5.1 CH Windows® Vista™ Premium Level HD Audio (Realtek ALC662 Audio Codec) |
| **LAN** | - Realtek PCIE x1 LAN 8103EL / 8102EL<br>- Speed: 10/100 Ethernet<br>- Supports Wake-On-LAN |
| **Rear Panel I/O** | I/O Panel<br>- 1 x PS/2 Mouse Port<br>- 1 x PS/2 Keyboard Port<br>- 1 x Serial Port: COM1<br>- 1 x VGA Port<br>- 4 x Ready-to-Use USB 2.0 Ports<br>- 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)<br>- HD Audio Jack: Line in / Front Speaker / Microphone |

| | |
|---|---|
| **Connector** | - 2 x SATAII 3.0 Gb/s connectors (No Support for RAID and "Hot Plug" functions) (see **CAUTION 6**)<br>- 1 x ATA100 IDE connector (supports 2 x IDE devices)<br>- 1 x Print port header<br>- CPU/Chassis FAN connector<br>- 24 pin ATX power connector<br>- 4 pin 12V power connector<br>- CD in header<br>- Front panel audio connector<br>- 2 x USB 2.0 headers (support 4 USB 2.0 ports) (see **CAUTION 7**) |
| **BIOS Feature** | - 4Mb AMI BIOS<br>- AMI Legal BIOS<br>- Supports "Plug and Play"<br>- ACPI 1.1 Compliance Wake Up Events<br>- Supports jumperfree<br>- AMBIOS 2.3.1 Support<br>- VCCM Voltage Multi-adjustment<br>- Supports Smart BIOS |
| **Support CD** | - Drivers, Utilities, AntiVirus Software (Trial Version) |
| **Unique Feature** | - ASRock OC Tuner (see **CAUTION 8**)<br>- Intelligent Energy Saver (see **CAUTION 9**)<br>- Instant Boot<br>- Hybrid Booster:<br>- CPU Frequency Stepless Control (see **CAUTION 10**)<br>- ASRock U-COP (see **CAUTION 11**)<br>- Boot Failure Guard (B.F.G.) |
| **Hardware Monitor** | - CPU Temperature Sensing<br>- Chassis Temperature Sensing<br>- CPU Fan Tachometer<br>- Chassis Fan Tachometer<br>- CPU Quiet Fan<br>- Voltage Monitoring: +12V, +5V, +3.3V, Vcore |
| **OS** | - Microsoft® Windows® 2000 / XP / XP 64-bit / Vista™ / Vista™ 64-bit compliant |
| **Certifications** | - FCC, CE |

* For detailed product information, please visit our website: http://www.asrock.com

English

**WARNING**

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

## *CAUTION!*

1. About the setting of "Hyper Threading Technology", please check page 29 of "User Manual" in the support CD.
2. This motherboard supports Untied Overclocking Technology. Please read "Untied Overclocking Technology" on page 19 for details.
3. This motherboard supports Dual Channel Memory Technology. Before you implement Dual Channel Memory Technology, make sure to read the installation guide of memory modules on page 12 for proper installation.
4. Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® XP and Windows® Vista™. For Windows® XP 64-bit and Windows® Vista™ 64-bit with 64-bit CPU, there is no such limitation.
5. The maximum shared memory size is defined by the chipset vendor and is subject to change. Please check Intel® website for the latest information.
6. Before installing SATAII hard disk to SATAII connector, please read the "SATAII Hard Disk Setup Guide" on page 23 of "User Manual" in the support CD to adjust your SATAII hard disk drive to SATAII mode. You can also connect SATA hard disk to SATAII connector directly.
7. Power Management for USB 2.0 works fine under Microsoft® Windows® Vista™ 64-bit / Vista™ / XP 64-bit / XP SP1 or SP2 / 2000 SP4.
8. It is a user-friendly ASRock overclocking tool which allows you to surveil your system by hardware monitor function and overclock your hardware devices to get the best system performance under Windows® environment. Please visit our website for the operation procedures of ASRock OC Tuner. ASRock website: http://www.asrock.com
9. Featuring an advanced proprietary hardware and software design, Intelligent Energy Saver is a revolutionary technology that delivers unparalleled power savings. In other words, it is able to provide exceptional power saving and improve power efficiency without sacrificing computing performance. Please visit our website for the operation procedures of Intelligent Energy Saver.
   ASRock website: http://www.asrock.com

English

10. Although this motherboard offers stepless control, it is not recommended to perform over-clocking. Frequencies other than the recommended CPU bus frequencies may cause the instability of the system or damage the CPU.
11. While CPU overheat is detected, the system will automatically shutdown. Before you resume the system, please check if the CPU fan on the motherboard functions properly and unplug the power cord, then plug it back again. To improve heat dissipation, remember to spray thermal grease between the CPU and the heatsink when you install the PC system.

English

# 2. Installation

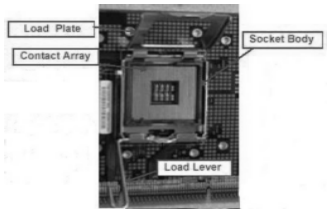
### Pre-installation Precautions

Take note of the following precautions before you install motherboard components or change any motherboard settings.

1. Unplug the power cord from the wall socket before touching any component. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.
2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded antstatic pad or in the bag that comes with the component.
5. When placing screws into the screw holes to secure the motherboard to the chassis, please do not over-tighten the screws! Doing so may damage the motherboard.

## 2.1 CPU Installation

For the installation of Intel 775-LAND CPU, please follow the steps below.



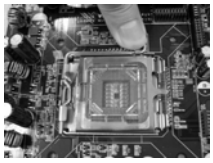

775-Pin Socket Overview

Before you insert the 775-LAND CPU into the socket, please check if the CPU surface is unclean or if there is any bent pin on the socket. Do not force to insert the CPU into the socket if above situation is found. Otherwise, the CPU will be seriously damaged.

English

Step 1. Open the socket:

Step 1-1. Disengaging the lever by depressing down and out on the hook to clear retention tab.



Step 1-2. Rotate the load lever to fully open position at approximately 135 degrees.

Step 1-3. Rotate the load plate to fully open position at approximately 100 degrees.

Step 2. Insert the 775-LAND CPU:

Step 2-1. Hold the CPU by the edges where are marked with black lines.

Step 2-2. Orient the CPU with IHS (Integrated Heat Sink) up. Locate Pin1 and the two orientation key notches.

775-LAND CPU

775-Pin Socket

For proper inserting, please ensure to match the two orientation key notches of the CPU with the two alignment keys of the socket.

Step 2-3. Carefully place the CPU into the socket by using a purely vertical motion.

Step 2-4. Verify that the CPU is within the socket and properly mated to the orient keys.

Step 3. Remove PnP Cap (Pick and Place Cap):

Use your left hand index finger and thumb to support the load plate edge, engage PnP cap with right hand thumb and peel the cap from the socket while pressing on center of PnP cap to assist in removal.

English

1. It is recommended to use the cap tab to handle and avoid kicking off the PnP cap.
2. This cap must be placed if returning the motherboard for after service.

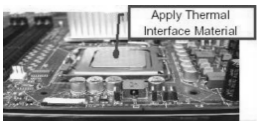
Step 4. Close the socket:
Step 4-1. Rotate the load plate onto the IHS.
Step 4-2. While pressing down lightly on load plate, engage the load lever.
Step 4-3. Secure load lever with load plate tab under retention tab of load lever.

## 2.2 Installation of CPU Fan and Heatsink

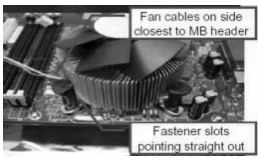
For proper installation, please kindly refer to the instruction manuals of your CPU fan and heatsink.

Below is an example to illustrate the installation of the heatsink for 775-LAND CPU.

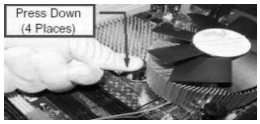
Step 1. Apply thermal interface material onto center of IHS on the socket surface.




Step 2. Place the heatsink onto the socket. Ensure fan cables are oriented on side closest to the CPU fan connector on the motherboard (CPU_FAN1, see page 2, No. 3).
Step 3. Align fasteners with the motherboard throughholes.




Step 4. Rotate the fastener clockwise, then press down on fastener caps with thumb to install and lock. Repeat with remaining fasteners.




If you press down the fasteners without rotating them clockwise, the heatsink cannot be secured on the motherboard.

Step 5. Connect fan header with the CPU fan connector on the motherboard.
Step 6. Secure excess cable with tie-wrap to ensure cable does not interfere with fan operation or contact other components.

English

## 2.3 Installation of Memory Modules (DIMM)

***G31M-VS*** motherboard provides two 240-pin DDR2 (Double Data Rate 2) DIMM slots, and supports Dual Channel Memory Technology. For dual channel configuration, you always need to install two **identical** (the same brand, speed, size and chip-type) memory modules in the DDR2 DIMM slots to activate Dual Channel Memory Technology. Otherwise, it will operate at single channel mode.

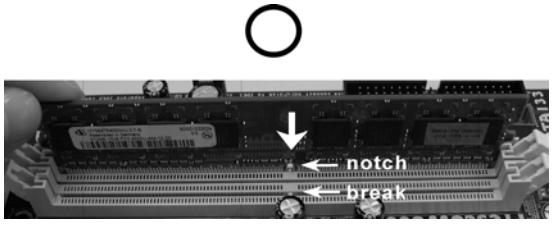
1. It is not allowed to install a DDR memory module into DDR2 slot; otherwise, this motherboard and DIMM may be damaged.
2. If you install only one memory module or two non-identical memory modules, it is unable to activate the Dual Channel Memory Technology.

### Installing a DIMM

Please make sure to disconnect power supply before adding or removing DIMMs or the system components.

Step 1. Unlock a DIMM slot by pressing the retaining clips outward.

Step 2. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.



The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation.

Step 3. Firmly insert the DIMM into the slot until the retaining clips at both ends fully snap back in place and the DIMM is properly seated.

English

## 2.4 Expansion Slots (PCI and PCI Express Slots)

There are 1 PCI slot and 1 PCI Express slot on this motherboard.

**PCI slot:** PCI slot is used to install expansion card that has the 32-bit PCI interface.

**PCIE slot:** PCIE1 (PCIE x16 slot) is used for PCI Express card with x16 lane width graphics card.

If you install the add-on PCI Express VGA card to PCIE1 (PCIE x16 slot), the onboard VGA will be disabled. If you install the add-on PCI Express VGA card to PCIE1 (PCIE x16 slot) and adjust the "Internal Graphics Mode Select" BIOS option to [Enabled, 1MB] or [Enabled, 8MB], the onboard VGA will be enabled, and the primary screen will be onboard VGA.

### Installing an expansion card

Step 1. Before installing the expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.

Step 2. Remove the bracket facing the slot that you intend to use. Keep the screws for later use.

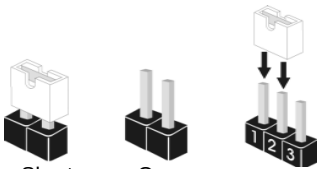
Step 3. Align the card connector with the slot and press firmly until the card is completely seated on the slot.

Step 4. Fasten the card to the chassis with screws.

English

## 2.5 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is “Short”. If no jumper cap is placed on pins, the jumper is “Open”. The illustration shows a 3-pin jumper whose pin1 and pin2 are “Short” when jumper cap is placed on these 2 pins.




Short Open

| Jumper | Setting | Description |
|---|---|---|
| PS2_USB_PWR1 (see p.2 No. 1) | | Short pin2, pin3 to enable +5VSB (standby) for PS/2 or USB wake up events. |

Note: To select +5VSB, it requires 2 Amp and higher standby current provided by power supply.

| | |
|---|---|
| Clear CMOS (CLRCMOS1, 2-pin jumper) (see p.2 No. 15) | 2-pin jumper |

Note: CLRCMOS1 allows you to clear the data in CMOS. The data in CMOS includes system setup information such as system password, date, time, and system setup parameters. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short 2 pins on CLRCMOS1 for 5 seconds.

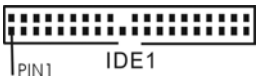
English

## 2.6 Onboard Headers and Connectors

Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage of the motherboard!

Primary IDE connector (Blue)

(39-pin IDE1, see p.2 No. 8)




connect the blue end to the motherboard

connect the black end to the IDE devices

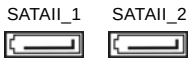
80-conductor ATA 66/100 cable

Note: Please refer to the instruction of your IDE device vendor for the details.

Serial ATAII Connectors

(SATAII_1: see p.2, No. 12)

(SATAII_2: see p.2, No. 11)

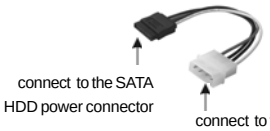



These Serial ATAII (SATAII) connectors support SATAII or SATA hard disk for internal storage devices. The current SATAII interface allows up to 3.0 Gb/s data transfer rate.

Serial ATA (SATA) Data Cable (Optional)

Either end of the SATA data cable can be connected to the SATA / SATAII hard disk or the SATAII connector on the motherboard.

Serial ATA (SATA) Power Cable (Optional)



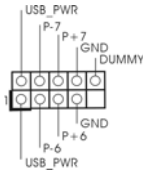

Please connect the black end of SATA power cable to the power connector on each drive. Then connect the white end of SATA power cable to the power connector of the power supply.

English

USB 2.0 Headers

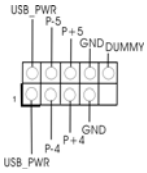
(9-pin USB6_7)

(see p.2 No. 16)




(9-pin USB4_5)

(see p.2 No. 13)

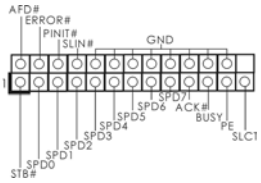



Besides four default USB 2.0 ports on the I/O panel, there are two USB 2.0 headers on this motherboard. Each USB 2.0 header can support two USB 2.0 ports.

Print Port Header

(25-pin LPT1)

(see p.2 No. 22)




This is an interface for print port cable that allows convenient connection of printer devices.

Internal Audio Connector

(4-pin CD1)

(CD1: see p.2 No. 20)

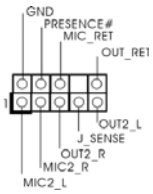
CD1

This connector allows you to receive stereo audio input from sound sources such as a CD-ROM, DVD-ROM, TV tuner card, or MPEG card.

Front Panel Audio Header

(9-pin HD_AUDIO1)

(see p.2 No. 21)




This is an interface for front panel audio cable that allows convenient connection and control of audio devices.

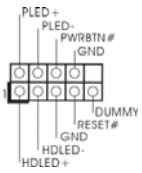
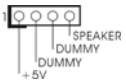
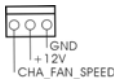
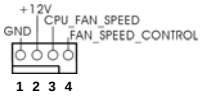
1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instruction in our manual and chassis manual to install your system.
2. If you use AC'97 audio panel, please install it to the front panel audio header as below:
   A. Connect Mic_IN (MIC) to MIC2_L.
   B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L.
   C. Connect Ground (GND) to Ground (GND).
   D. MIC_RET and OUT_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel.

English

E. Enter BIOS Setup Utility. Enter Advanced Settings, and then select Chipset Configuration. Set the Front Panel Control option from [Auto] to [Enabled].

F. Enter Windows system. Click the icon on the lower right hand taskbar to enter Realtek HD Audio Manager.
For Windows® 2000 / XP / XP 64-bit OS:
Click “Audio I/O”, select “Connector Settings” , choose “Disable front panel jack detection”, and save the change by clicking “OK”.
For Windows® Vista™ / Vista™ 64-bit OS:
Click the right-top “Folder” icon , choose “Disable front panel jack detection”, and save the change by clicking “OK”.

G. To activate the front mic.
For Windows® 2000 / XP / XP 64-bit OS:
Please select “Front Mic” as default record device.
If you want to hear your voice through front mic, please deselect "Mute" icon in “Front Mic” of “Playback” portion.
For Windows® Vista™ / Vista™ 64-bit OS:
Go to the "Front Mic" Tab in the Realtek Control panel.
Click "Set Default Device" to make the Front Mic as the default record device.

| | | |
|---|---|---|
| System Panel Header<br>(9-pin PANEL1)<br>(see p.2 No. 9) |  | This header accommodates several system front panel functions. |
| Chassis Speaker Header<br>(4-pin SPEAKER 1)<br>(see p.2 No. 10) |  | Please connect the chassis speaker to this header. |
| Chassis Fan Connector<br>(3-pin CHA_FAN1)<br>(see p.2 No. 14) |  | Please connect a chassis fan cable to this connector and match the black wire to the ground pin. |
| CPU Fan Connector<br>(4-pin CPU_FAN1)<br>(see p.2 No. 3) |  | Please connect a CPU fan cable to this connector and match the black wire to the ground pin. |

English

Though this motherboard provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin CPU fan to the CPU fan connector on this motherboard, please connect it to Pin 1-3.

**Pin 1-3 Connected**

3-Pin Fan Installation

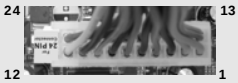
ATX Power Connector

(24-pin ATXPWR1)

(see p.2 No. 4)

Please connect an ATX power supply to this connector.

Though this motherboard provides 24-pin ATX power connector, it can still work if you adopt a traditional 20-pin ATX power supply. To use the 20-pin ATX power supply, please plug your power supply along with Pin 1 and Pin 13.




20-Pin ATX Power Supply Installation

ATX 12V Connector

(4-pin ATX12V2)

(see p.2 No. 2)

Please note that it is necessary to connect a power supply with ATX 12V plug to this connector so that it can provides sufficient power. Failing to do so will cause the failure to power up.

English

## 2.7 Serial ATA (SATA) / Serial ATAII (SATAII) Hard Disks Installation

This motherboard adopts Intel® ICH7 south bridge chipset that supports Serial ATA (SATA) / Serial ATAII (SATAII) hard disks. You may install SATA / SATAII hard disks on this motherboard for internal storage devices. This section will guide you to install the SATA / SATAII hard disks.

STEP 1: Install the SATA / SATAII hard disks into the drive bays of your chassis.
STEP 2: Connect the SATA power cable to the SATA / SATAII hard disk.
STEP 3: Connect one end of the SATA data cable to the motherboard's SATAII connector.
STEP 4: Connect the other end of the SATA data cable to the SATA / SATAII hard disk.

## 2.8 Driver Installation Guide

To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly.

## 2.9 Untied Overclocking Technology

This motherboard supports Untied Overclocking Technology, which means during overclocking, FSB enjoys better margin due to fixed PCI / PCIE buses. Before you enable Untied Overclocking function, please enter "Overclock Mode" option of BIOS setup to set the selection from [Auto] to [CPU, PCIE, Async.]. Therefore, CPU FSB is untied during overclocking, but PCI / PCIE buses are in the fixed mode so that FSB can operate under a more stable overclocking environment.

Please refer to the warning on page 7 for the possible overclocking risk before you apply Untied Overclocking Technology.

English

## 3. BIOS Information

The Flash Memory on the motherboard stores BIOS Setup Utility. When you start up the computer, please press <F2> during the Power-On-Self-Test (POST) to enter BIOS Setup utility; otherwise, POST continues with its test routines. If you wish to enter BIOS Setup after POST, please restart the system by pressing <Ctl> + <Alt> + <Delete>, or pressing the reset button on the system chassis. The BIOS Setup program is designed to be user-friendly. It is a menu-driven program, which allows you to scroll through its various sub-menus and to select among the predetermined choices. For the detailed information about BIOS Setup, please refer to the User Manual (PDF file) contained in the Support CD.

## 4. Software Support CD information

This motherboard supports various Microsoft® Windows® operating systems: 2000 / XP / XP 64-bit / Vista™ / Vista™ 64-bit. The Support CD that came with the motherboard contains necessary drivers and useful utilities that will enhance motherboard features. To begin using the Support CD, insert the CD into your CD-ROM drive. It will display the Main Menu automatically if “AUTORUN” is enabled in your computer. If the Main Menu does not appear automatically, locate and double-click on the file “ASSETUP. EXE” from the BIN folder in the Support CD to display the menus.

# 1. Einführung

Wir danken Ihnen für den Kauf des ASRock ***G31M-VS*** Motherboard, ein zuverlässiges Produkt, welches unter den ständigen, strengen Qualitätskontrollen von ASRock gefertigt wurde. Es bietet Ihnen exzellente Leistung und robustes Design, gemäß der Verpflichtung von ASRock zu Qualität und Halbarkeit.
Diese Schnellinstallationsanleitung führt in das Motherboard und die schrittweise Installation ein. Details über das Motherboard finden Sie in der Bedienungsanleitung auf der Support-CD.

Da sich Motherboard-Spezifikationen und BIOS-Software verändern können, kann der Inhalt dieses Handbuches ebenfalls jederzeit geändert werden. Für den Fall, dass sich Änderungen an diesem Handbuch ergeben, wird eine neue Version auf der ASRock-Website, ohne weitere Ankündigung, verfügbar sein. Die neuesten Grafikkarten und unterstützten CPUs sind auch auf der ASRock-Website aufgelistet.
ASRock-Website: http://www.asrock.com
Wenn Sie technische Unterstützung zu Ihrem Motherboard oder spezifische Informationen zu Ihrem Modell benötigen, besuchen Sie bitte unsere Webseite:
www.asrock.com/support/index.asp

## 1.1 Kartoninhalt

ASRock ***G31M-VS*** Motherboard
(Micro ATX-Formfaktor: 22.4 cm x 17.0 cm; 8.8 Zoll x 6.7 Zoll)
ASRock ***G31M-VS*** Schnellinstallationsanleitung
ASRock ***G31M-VS***_ Support-CD
Ein 80-adriges Ultra-ATA 66/100 IDE-Flachbandkabel (Option)
Ein Seriell-ATA- (SATA) Datenkabel (Option)
Ein Seriell-ATA (SATA) Festplattennetzkabel (Option)
Ein I/O Shield

## 1.2 Spezifikationen

| | |
|---|---|
| **Plattform** | - Micro ATX-Formfaktor: 22.4 cm x 17.0 cm; 8.8 Zoll x 6.7 Zoll |
| **CPU** | - LGA 775 für Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® Dual Core / Celeron® unterstützt Penryn Quad Core Yorkfield und Dual Core Wolfdale Prozessoren<br>- Unterstützt CPU bis 65W<br>- FSB1333/1066/800 MHz<br>- Unterstützt Hyper-Threading-Technologie (siehe **VORSICHT 1**)<br>- Unterstützt Untied-Übertaktungstechnologie (siehe **VORSICHT 2**)<br>- Unterstützt EM64T-CPU |
| **Chipsatz** | - Northbridge: Intel® G31<br>- Southbridge: Intel® ICH7 |
| **Speicher** | - Unterstützung von Dual-Kanal-DDR2-Speichertechnologie (siehe **VORSICHT 3**)<br>- 2 x Steckplätze für DDR2<br>- Unterstützt DDR2 800/667 non-ECC, ungepufferter Speicher<br>- Max. Kapazität des Systemspeichers: 8GB (siehe **VORSICHT 4**) |
| **Erweiterungs-steckplätze Onboard-VGA** | - 1 x PCI Express x16-Steckplätze<br>- 1 x PCI -Steckplätze<br>- Intel® Graphics Media Accelerator 3100<br>- Pixel Shader 2.0, DX9.0 VGA<br>- Maximal gemeinsam genutzter Speicher 384MB (siehe **VORSICHT 5**) |
| **Audio** | - 5.1 CH Windows® Vista™ Premium Level HD Audio (ALC662 Audio Codec) |
| **LAN** | - Realtek PCIE x1 LAN 8103EL / 8102EL<br>- Speed: 10/100 Ethernet<br>- Unterstützt Wake-On-LAN |
| **E/A-Anschlüsse an der Rückseite** | I/O Panel<br>- 1 x PS/2 Mouse Port<br>- 1 x PS/2 Keyboard Port<br>- 1 x Serieller port: COM 1<br>- 1 x VGA Port<br>- 4 x Ready-to-Use USB 2.0 Ports<br>- 1 x RJ-45 LAN Port mit LED (ACT/LINK LED und SPEED LED)<br>- Audioanschlüsse: Line In / Line Out / Mikrofon |

| | |
|---|---|
| **Anschlüsse** | - 2 x SATAII-Anschlüsse, unterstützt bis 3.0 Gb/s Datenübertragungsrate (Unterstützt keine “RAID”- und “Hot-Plug”-Funktionen) (siehe **VORSICHT 6**)<br>- 1 x ATA100 IDE-Anschlüsse (Unterstützt bis 2 IDE-Geräte)<br>- 1 x Druckerport-Anschlussleiste<br>- CPU/Gehäuse-Lüfteranschluss<br>- 24-pin ATX-Netz-Header<br>- 4-pin anschluss für 12V-ATX-Netzteil<br>- Interne Audio-Anschlüsse<br>- Anschluss für Audio auf der Gehäusevorderseite<br>- 2 x USB 2.0 Buchse (unterstützt 4 USB 2.0 Ports) (siehe **VORSICHT 7**) |
| **BIOS** | - 4Mb AMI BIOS<br>- AMI legal BIOS mit Unterstützung für “Plug and Play”<br>- ACPI 1.1-Weckfunktionen<br>- JumperFree-Modus<br>- SMBIOS 2.3.1<br>- VCCM Stromspannung Multianpassung<br>- Unterstützt Smart BIOS |
| **Support-CD** | - Treiber, Dienstprogramme, Antivirussoftware (Probeversion) |
| **Einzigartige Eigenschaft** | - ASRock OC Tuner (siehe **VORSICHT 8**)<br>- Intelligent Energy Saver (Intelligente Energiesparfunktion) (siehe **VORSICHT 9**)<br>- Sofortstart<br>- Hybrid Booster:<br>- Schrittloser CPU-Frequenz-Kontrolle (siehe **VORSICHT 10**)<br>- ASRock U-COP (siehe **VORSICHT 11**)<br>- Boot Failure Guard (B.F.G. – Systemstartfehlerschutz) |
| **Hardware Monitor** | - Überwachung der CPU-Temperatur<br>- Motherboardtemperaturerkennung<br>- Drehzahlmessung für CPU-Lüfter<br>- Drehzahlmessung für Gehäuselüfter<br>- CPU-Lüftergeräuschdämpfung<br>- Spannungsüberwachung: +12V, +5V, +3.3V, Vcore |
| **Betriebssysteme** | - Unterstützt Microsoft® Windows® 2000 / XP / XP 64-Bit / Vista™ / Vista™ 64-Bit |
| **Zertifizierungen** | - FCC, CE |

* Für die ausführliche Produktinformation, besuchen Sie bitte unsere Website: http://www.asrock.com

**WARNUNG**

Beachten Sie bitte, dass Overclocking, einschließlich der Einstellung im BIOS, Anwenden der Untied Overclocking-Technologie oder Verwenden von Overclocking-Werkzeugen von Dritten, mit einem gewissen Risiko behaftet ist. Overclocking kann sich nachteilig auf die Stabilität Ihres Systems auswirken oder sogar Komponenten und Geräte Ihres Systems beschädigen. Es geschieht dann auf eigene Gefahr und auf Ihre Kosten. Wir übernehmen keine Verantwortung für mögliche Schäden, die aufgrund von Overclocking verursacht wurden.

## *VORSICHT!*

1. Die Einstellung der “Hyper-Threading Technology”, finden Sie auf Seite 29 des auf der Support-CD enthaltenen Benutzerhandbuches beschrieben.
2. Dieses Motherboard unterstützt die Untied-Übertaktungstechnologie. Unter “Entkoppelte Übertaktungstechnologie” auf Seite 19 finden Sie detaillierte Informationen.
3. Dieses Motherboard unterstützt Dual-Kanal-Speichertechnologie. Vor Implementierung der Dual-Kanal-Speichertechnologie müssen Sie die Installationsanleitung für die Speichermodule auf Seite 12 zwecks richtiger Installation gelesen haben.
4. Durch Betriebssystem-Einschränkungen kann die tatsächliche Speichergröße weniger als 4 GB betragen, da unter Windows® XP und Windows® Vista™ etwas Speicher zur Nutzung durch das System reserviert wird. Unter Windows® XP 64-bit und Windows® Vista™ 64-bit mit 64-Bit-CPU besteht diese Einschränkung nicht.
5. Die Maximalspeichergröße ist von den Chipshändler definiert und umgetauscht. Bitte überprüfen Sie Intel® website für die neuliche Information.
6. Vor Installation der SATAII-Festplatte an den SATAII-Anschluss lesen Sie bitte “Setup-Anleitung für SATAII-Festplatte” auf Seite 23 der “Bedienungsanleitung” auf der Support-CD, um Ihre SATAII-Festplatte dem SATAII-Modus anzugleichen. Sie können die SATA-Festplatte auch direkt mit dem SATAII-Anschluss verbinden.
7. Das Power Management für USB 2.0 arbeitet unter Microsoft® Windows® Vista™ 64-Bit / Vista™ / XP 64-Bit / XP SP1 oder SP2/2000 SP4 einwandfrei.
8. Es ist ein benutzerfreundlicher ASRock Übertaktenswerkzeug, das erlaubt, dass Sie Ihr System durch den Hardware-Monitor Funktion zu überblicken und Ihre Hardware-Geräte übertakten, um die beste Systemleistung unter der Windows® Umgebung zu erreichen. Besuchen Sie bitte unsere Website für die Operationsverfahren von ASRock OC Tuner. ASRock-Website: http://www.asrock.com

Deutsch

9. Mit einem fortschrittlichen, eigenständigen Hard- und Softwaredesign nutzt der Intelligent Energy Saver eine revolutionäre Technologie, die bisher unerreichte Energieeinsparungen ermöglicht. Mit anderen Worten: Sie verbrauchen besonders wenig Energie und erreichen einen hohen Wirkungsgrad, ohne dass dies zu Lasten der Rechenleistung geht. Auf unseren Internetseiten finden Sie einige Erläuterungen zur Funktionsweise des Intelligent Energy Saver.
   ASRock-Website: http://www.asrock.com
10. Obwohl dieses Motherboard stufenlose Steuerung bietet, wird Overclocking nicht empfohlen. Frequenzen, die von den empfohlenen CPU-Busfrequenzen abweichen, können Instabilität des Systems verursachen oder die CPU beschädigen.
11. Wird eine Überhitzung der CPU registriert, führt das System einen automatischen Shutdown durch. Bevor Sie das System neu starten, prüfen Sie bitte, ob der CPU-Lüfter am Motherboard richtig funktioniert, und stecken Sie bitte den Stromkabelstecker aus und dann wieder ein. Um die Wärmeableitung zu verbessern, bitte nicht vergessen, etwas Wärmeleitpaste zwischen CPU und Kühlkörper zu sprühen.

## 1.3 Einstellung der Jumper

Die Abbildung verdeutlicht, wie Jumper gesetzt werden. Werden Pins durch Jumperkappen verdeckt, ist der Jumper “Gebrückt”. Werden keine Pins durch Jumperkappen verdeckt, ist der Jumper “Offen”. Die Abbildung zeigt einen 3-Pin Jumper dessen Pin1 und Pin2 “Gebrückt” sind, bzw. es befindet sich eine Jumper-Kappe auf diesen beiden Pins.

Gebrückt Offen

| Jumper | Einstellun | Beschreibung |
|---|---|---|
| PS2_USB_PWR1 (siehe S.2 - No. 1) | | Überbrücken Sie Pin2, Pin3, um +5VSB (Standby) zu setzen und die PS/2 oder USB-Weckfunktionen zu aktivieren. |

Hinweis: Um +5VSB nutzen zu können, muss das Netzteil auf dieser Leitung 2A oder mehr leisten können.

| | | |
|---|---|---|
| CMOS löschen (CLRCMOS1, 2-Pin jumper) (siehe S.2 - No. 15) | 2-Pin jumper | |

Hinweis: Mit CLRCMOS1 können Sie die Daten im CMOS löschen. Die CMOS Daten beinhalten die Systeminformationen wie Systemkennwort, Datum, Zeit und System-Setupeinstellungen. Um die Einstellungen zu löschen und Default-Werte wiederherzustellen, schalten Sie den Computer aus, ziehen Sie den Netzstecker und überbrücken Sie 2-pin von CLRCMOS1 mithilfe des Jumpers für 5 Sekunden.

Deutsch

## 1.4 Integrierte Header und Anschlüsse

Integrierte Header und Anschlüsse sind KEINE Jumper. Setzen Sie KEINE Jumperkappen auf diese Header und Anschlüsse. Wenn Sie Jumperkappen auf Header und Anschlüsse setzen, wird das Motherboard unreparierbar beschädigt!

Primärer IDE-Anschluss (Blauer)

(39-pin IDE1, siehe S.2 - No. 8)

Blauer Anschluss zum Motherboard

Schwarzer Anschluss zur Festplatte

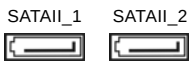
80-adriges ATA 66/100 Kabel

Hinweis: Details entnehmen Sie bitte den Anweisungen Ihres IDE-Gerätehändlers.

Seriell-ATAII-Anschlüsse

(SATAII_1: siehe S.2, Punkt 12)

(SATAII_2: siehe S.2, Punkt 11)



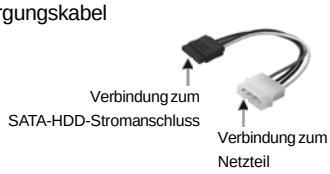

Diese Serial ATA (SATA II) -Anschlüsse unterstützen interne SATA- oder SATA II-Festplatten. Die aktuelle SATAII-Schnittstelle ermöglicht eine Datenübertragungsrate bis 3,0 Gb/s.

Serial ATA- (SATA-) Datenkabel (Option)

Sie können beide Enden des SATA-Datenkabels entweder mit der SATA / SATAII-Festplatte oder dem SATAII-Anschluss am Mainboard verbinden.

Deutsch

Serial ATA- (SATA-)
Stromversorgungskabel
(Option)

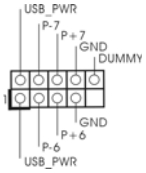



Verbinden Sie bitte das schwarze Ende des SATA-Stromversorgungskabels mit dem Stromanschluss jedes Laufwerks. Verbinden Sie dann das weiße Ende des SATA-tromversorgungskabels mit dem Stromanschluss des Netzteils.

USB 2.0-Header

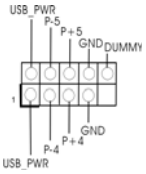
(9-pol. USB6_7)

(siehe S.2 - No. 16)




(9-pol. USB4_5)

(siehe S.2 - No. 13)

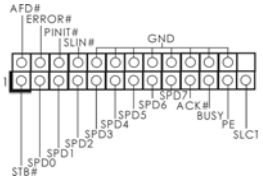



Zusätzlich zu den vier üblichen USB 2.0-Ports an den I/O-Anschlüssen befinden sich zwei USB 2.0-Anschlussleisten am Motherboard. Pro USB 2.0-Anschlussleiste werden zwei USB 2.0-Ports unterstützt.

Druckerport-Anschlussleiste

(25-pol. LPT1)

(siehe S.2 - No. 22)




Dies ist eine Schnittstelle zum Anschluss eines Druckerport-Kabels, mit dem Sie passende Drucker auf einfache Weise anschließen können.

Interne Audio-Anschlüsse

(4-Pin CD1)

(CD1: siehe S.2 - No. 20)

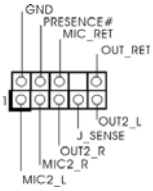
CD1

Diese ermöglichen Ihnen Stereo-Signalquellen, wie z. B. CD-ROM, DVD-ROM, TV-Tuner oder MPEG-Karten mit Ihrem System zu verbinden.

Anschluss für Audio auf der Gehäusevorderseite

(9-Pin HD_AUDIO1)

(siehe S.2 - No. 21)




Dieses Interface zu einem Audio-Panel auf der Vorderseite Ihres Gehäuses, ermöglicht Ihnen eine bequeme Anschlussmöglichkeit und Kontrolle über Audio-Geräte.

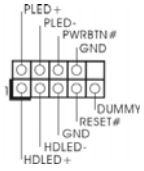
Deutsch

1. High Definition Audio unterstützt Jack Sensing (automatische Erkennung falsch angeschlossener Geräte), wobei jedoch die Bildschirmverdrahtung am Gehäuse HDA unterstützen muss, um richtig zu funktionieren. Beachten Sie bei der Installation im System die Anweisungen in unserem Handbuch und im Gehäusehandbuch.
2. Wenn Sie die AC'97-Audioleiste verwenden, installieren Sie diese wie nachstehend beschrieben an der Front-Audioanschlussleiste:
   A. Schließen Sie Mic_IN (MIC) an MIC2_L an.
   B. Schließen Sie Audio_R (RIN) an OUT2_R und Audio_L (LIN) an OUT2_L an.
   C. Schließen Sie Ground (GND) an Ground (GND) an.
   D. MIC_RET und OUT_RET sind nur für den HD-Audioanschluss gedacht. Diese Anschlüsse müssen nicht an die AC'97-Audioleiste angeschlossen werden.
   E. Rufen Sie das BIOS-Setup-Dienstprogramm auf. Wechseln Sie zu Erweiterte Einstellungen und wählen Sie Chipset-Konfiguration. Setzen Sie die Option Frontleistenkontrolle von [Automatisch] auf [Aktiviert].
   F. Rufen Sie das Windows-System auf. Klicken Sie auf das Symbol in der Taskleiste unten rechts, um den Realtek HD Audio-Manager aufzurufen.
   Für Windows® 2000 / XP / XP 64-Bit Betriebssystem:
   Klicken Sie auf "Audio-E/A", wählen Sie die "Anschlusseinstellungen" , wählen Sie "Erkennung der Frontleistenbuchse deaktivieren" und speichern Sie die Änderung durch Klicken auf "OK".
   Für Windows® Vista™ / Vista™ 64-Bit Betriebssystem:
   Die Rechtoberseite „Dateiordner" Ikone anklicken , „Schalttafel Buchse Entdeckung sperren" wählen und die Änderung speichern, indem Sie „OKAY" klicken.
   G. Aktivierung des vorderseitigen Mikrofons.
   Für Betriebssystem Windows® 2000 / XP / XP 64-Bit:
   Wählen Sie "Front Mic" (Vorderes Mikr.) als Standard-Aufnahmegerät. Möchten Sie Ihre Stimme über das vorderseitige Mikrofon hören, dann wählen Sie bitte das Symbol "Mute" (Stumm) unter "Front Mic" (Vorderes Mikr.) im Abschnitt "Playback" (Wiedergabe) ab.
   Für Betriebssystem Windows® Vista™ / Vista™ 64-Bit:
   Rufen Sie die Registerkarte "Front Mic" (Vorderes Mikr.) im Realtek-Bedienfeld auf. Klicken Sie auf "Set Default Device" (Standardgerät einstellen), um das vorderseitige Mikrofon als Standard-Aufnahmegerät zu übernehmen.

System Panel-Header

(9-pin PANEL1)

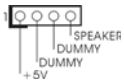
(siehe S.2 - No. 9)




Dieser Header unterstützt mehrere Funktion der Systemvorderseite.

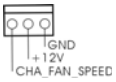
Deutsch

Gehäuselautsprecher-Header
(4-pin SPEAKER1)
(siehe S.2 - No. 10)



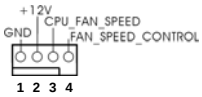

Schließen Sie den Gehäuselautsprecher an diesen Header an.

Gehäuselüfteranschluss
(3-pin CHA_FAN1)
(siehe S.2 - No. 14)




Verbinden Sie das Gehäuselüfterkabel mit diesem Anschluss und passen Sie den schwarzen Draht dem Erdungsstift an.

CPU-Lüfteranschluss
(4-pin CPU_FAN1)
(siehe S.2 - No. 3)




Verbinden Sie das CPU - Lüfterkabel mit diesem Anschluss und passen Sie den schwarzen Draht dem Erdungsstift an.

Obwohl dieses Motherboard einen vierpoligen CPU-Lüfteranschluss (Quiet Fan) bietet, können auch CPU-Lüfter mit dreipoligem Anschluss angeschlossen werden; auch ohne Geschwindigkeitsregulierung. Wenn Sie einen dreipoligen CPU-Lüfter an den CPU-Lüferanschluss dieses Motherboards anschließen möchten, verbinden Sie ihn bitte mit den Pins 1 – 3.

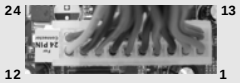
**Pins 1–3 anschließen**

Lüfter mit dreipoligem Anschluss installieren

ATX-Netz-Header
(24-pin ATXPWR1)
(siehe S.2 - No. 4)

Verbinden Sie die ATX-Stromversorgung mit diesem Header.

Obwohl dieses Motherboard einen 24-pol. ATX-Stromanschluss bietet, kann es auch mit einem modifizierten traditionellen 20-pol. ATX-Netzteil verwendet werden. Um ein 20-pol. ATX-Netzteil zu verwenden, stecken Sie den Stecker mit Pin 1 und Pin 13 ein.




Installation eines 20-pol. ATX-Netzteils

Deutsch

| | | |
|---|---|---|
| Anschluss für 12V-ATX-Netzteil (4-pol. ATX12V1) (siehe S.2 - Nr. 2) | | Beachten Sie bitte, dass Sie eine Stromversorgung mit ATX 12-Volt-Stecker mit diesem Anschluss verbinden müssen, damit ausreichend Strom geliefert werden kann. Andernfalls reicht der Strom nicht aus, das System zu starten. |

# 2. BIOS-Information

Das Flash Memory dieses Motherboards speichert das Setup-Utility. Drücken Sie <F2> während des POST (Power-On-Self-Test) um ins Setup zu gelangen, ansonsten werden die Testroutinen weiter abgearbeitet. Wenn Sie ins Setup gelangen wollen, nachdem der POST durchgeführt wurde, müssen Sie das System über die Tastenkombination <Ctrl> + <Alt> + <Delete> oder den Reset-Knopf auf der Gehäusevorderseite, neu starten. Natürlich können Sie einen Neustart auch durchführen, indem Sie das System kurz ab- und danach wieder anschalten.
Das Setup-Programm ist für eine bequeme Bedienung entwickelt worden. Es ist ein menügesteuertes Programm, in dem Sie durch unterschiedliche Untermenüs scrollen und die vorab festgelegten Optionen auswählen können. Für detaillierte Informationen zum BIOS-Setup, siehe bitte das Benutzerhandbuch (PDF Datei) auf der Support CD.

# 3. Software Support CD information

Dieses Motherboard unterstützt eine Reiche von Microsoft® Windows® Betriebssystemen: 2000 / XP / XP 64-Bit / Vista™ / Vista™ 64-Bit. Die Ihrem Motherboard beigefügte Support-CD enthält hilfreiche Software, Treiber und Hilfsprogramme, mit denen Sie die Funktionen Ihres Motherboards verbessern können Legen Sie die Support-CD zunächst in Ihr CD-ROM-Laufwerk ein. Der Willkommensbildschirm mit den Installationsmenüs der CD wird automatisch aufgerufen, wenn Sie die “Autorun”-Funktion Ihres Systems aktiviert haben. Erscheint der Wilkommensbildschirm nicht, so “doppelklicken” Sie bitte auf das File ASSETUP.EXE im BIN-Verzeichnis der Support-CD, um die Menüs aufzurufen.
Das Setup-Programm soll es Ihnen so leicht wie möglich machen. Es ist menügesteuert, d.h. Sie können in den verschiedenen Untermenüs Ihre Auswahl treffen und die Programme werden dann automatisch installiert.

# 1. Introduction

Merci pour votre achat d'une carte mère ASRock ***G31M-VS***, une carte mère très fiable produite selon les critères de qualité rigoureux de ASRock. Elle offre des performances excellentes et une conception robuste conformément à l'engagement d'ASRock sur la qualité et la fiabilité au long terme.
Ce Guide d'installation rapide présente la carte mère et constitue un guide d'installation pas à pas. Des informations plus détaillées concernant la carte mère pourront être trouvées dans le manuel l'utilisateur qui se trouve sur le CD d'assistance.

Les spécifications de la carte mère et le BIOS ayant pu être mis à jour, •le contenu de ce manuel est sujet à des changements sans notification. Au cas où n'importe qu'elle modification intervenait sur ce manuel, la version mise à jour serait disponible sur le site web ASRock sans nouvel avis. Vous trouverez les listes de prise en charge des cartes VGA et CPU également sur le site Web ASRock.
Site web ASRock, http://www.asrock.com
Si vous avez besoin de support technique en relation avec cette carte mère, veuillez consulter notre site Web pour de plus amples informations particulières au modèle que vous utilisez.
www.asrock.com/support/index.asp

## 1.1 Contenu du paquet

Carte mère ASRock ***G31M-VS***
(Facteur de forme Micro ATX: 8.8 pouces x 6.7 pouces, 22.4 cm x 17.0 cm)
Guide d'installation rapide ASRock ***G31M-VS***
CD de soutien ASRock ***G31M-VS***
Un câble ruban IDE Ultra ATA 66/100 80 conducteurs (en option)
Un câble de données Serial ATA (SATA) (en option)
Un cordon d'alimentation DD série ATA (SATA) (en option)
Un écran I/O

## 1.2 Spécifications

| | |
|---|---|
| **Format** | - Facteur de forme Micro ATX :<br>8.8 pouces x 6.7 pouces, 22.4 cm x 17.0 cm |
| **CPU** | - LGA 775 pour Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® Dual Core / Celeron® acceptant les processeurs Penryn Quad Core Yorkfield et Dual Core Wolfdale<br>- Supporte les processeurs jusqu'à 65W<br>- FSB1333/1066/800MHz CPUs<br>- Prise en charge de la technologie Hyper-Threading (voir **ATTENTION 1**)<br>- Prend en charge la technologie Untied Overclocking (voir **ATTENTION 2**)<br>- Prise en charge de la technologie EM64T par le CPU |
| **Chipsets** | - Northbridge: Intel® G31<br>- Southbridge: Intel® ICH7 |
| **Mémoire** | - Compatible avec la Technologie de Mémoire à Canal Double (voir **ATTENTION 3**)<br>- 2 x slots DIMM DDR2<br>- Supporte DDR2 800/667 non-ECC, sans amortissement mémoire<br>- Capacité maxi de mémoire système: 8GB (voir **ATTENTION 4**) |
| **Slot d'extension** | - 1 x slot PCI Express x16<br>- 1 x slot PCI |
| **VGA sur carte** | - Intel® Graphics Media Accelerator 3100<br>- nuanceur de pixels 2.0, VGA DX9.0<br>- mémoire partagée max 384MB (voir **ATTENTION 5**) |
| **Audio** | - 5.1 Son haute définition de première qualité CH Windows® Vista™ (codec audio ALC662) |
| **LAN** | - Realtek PCIE x1 LAN 8103EL / 8102EL<br>- Vitesse: 10/100 Ethernet<br>- Support du Wake-On-LAN |
| **Panneau arrière E/S** | I/O Panel<br>- 1 x port souris PS/2<br>- 1 x port clavier PS/2<br>- 1 x port série: COM 1<br>- 1 x port VGA<br>- 4 x ports USB 2.0 par défaut<br>- 1 x port LAN RJ-45 avec LED (ACT/LED CLIGNOTANTE et LED VITESSE) |

| | |
|---|---|
| | - Jack audio: entrée ligne / sortie ligne / microphone |
| **Connecteurs** | - 2 x connecteurs SATAII, prennent en charge un taux de transfert de données pouvant aller jusqu'à 3.0Go/s (Ne supporte pas les fonctions "RAID" et "Hot-Plug" (Connexion à chaud)) (voir **ATTENTION 6**)<br>- 1 x ATA100 IDE connecteurs (prend en charge jusqu'à 2 périphériques IDE)<br>- 1 x embase de port d'impression<br>- Connecteur pour ventilateur de CPU/Châssis<br>- br. 24 connecteur d'alimentation ATX<br>- br. 4 connecteur d'alimentation 12V ATX<br>- Connecteurs audio internes<br>- Connecteur audio panneau avant<br>- 2 x en-tête USB 2.0 (accepte 4 ports USB 2.0) (voir **ATTENTION 7**) |
| **BIOS** | - 4Mb BIOS AMI<br>- BIOS AMI<br>- Support du "Plug and Play"<br>- Compatible pour événements de réveil ACPI 1.1<br>- Gestion jumperless<br>- Support SMBIOS 2.3.1<br>- VCCM Tension Multi-ajustement<br>- Prise en charge du Smart BIOS |
| **CD d'assistance** | - Pilotes, utilitaires, logiciel anti-virus (Version d'essai) |
| **Caractéristique unique** | - Tuner ASRock OC (voir **ATTENTION 8**)<br>- Économiseur d'énergie intelligent (voir **ATTENTION 9**)<br>- l'Instant Boot<br>- L'accélérateur hybride:<br>  - Contrôle direct de la fréquence CPU (voir **ATTENTION 10**)<br>  - ASRock U-COP (voir **ATTENTION 11**)<br>  - Garde d'échec au démarrage (B.F.G.) |
| **Surveillance système** | - Contrôle de la température CPU<br>- Mesure de température de la carte mère<br>- Tachéomètre ventilateur CPU<br>- Tachéomètre ventilateur châssis<br>- Ventilateur silencieux d'unité centrale<br>- Monitoring de la tension: +12V, +5V, +3.3V, Vcore |
| **OS** | - Microsoft® Windows® 2000 / XP / XP 64-bit / Vista™ / Vista™ 64-bit |
| **Certifications** | - FCC, CE |

* Pour de plus amples informations sur les produits, s'il vous plaît visitez notre site web: http://www.asrock.com

**ATTENTION**

Il est important que vous réalisiez qu'il y a un certain risque à effectuer l'overclocking, y compris ajuster les réglages du BIOS, appliquer la technologie Untied Overclocking, ou utiliser des outils de tiers pour l'overclocking. L'overclocking peut affecter la stabilité de votre système, ou même causer des dommages aux composants et dispositifs de votre système. Si vous le faites, c'est à vos frais et vos propres risques. Nous ne sommes pas responsables des dommages possibles causés par l'overclocking.

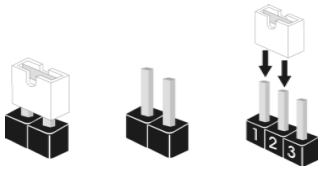
## *ATTENTION!*

1. En ce qui concerne le paramétrage "Hyper-Threading Technology", veuillez consulter la page 29 du manuel de l'utilisateur sur le CD technique.
2. Cette carte mère prend en charge la technologie Untied Overclocking. Veuillez lire "La technologie de surcadençage à la volée" à la page 19 pour plus d'informations.
3. Cette carte mère supporte la Technologie de Mémoire à Canal Double. Avant d'intégrer la Technologie de Mémoire à Canal Double, assurez-vous de bien lire le guide d'installation des modules mémoire en page 12 pour réaliser une installation correcte.
4. Du fait des limites du système d'exploitation, la taille mémoire réelle réservée au système pourra être inférieure à 4 Go sous Windows® XP et Windows® Vista™. Avec Windows® XP 64 bits et Windows® Vista™ 64 bits avec CPU 64 bits, il n'y a pas ce genre de limitation.
5. La dimension maximum du memoire partage est definie par le vendeur de jeu de puces et est sujet de changer. Veuillez verifier la Intel® website pour les informations recentes SVP.
6. Avant d'installer le disque dur SATAII au connecteur SATAII, veuillez lire le Guide « Installation du disque dur SATAII » à la page 23 du « Manuel de l'utilisateur » qui se trouve sur le CD de support pour régler votre lecteur de disque dur SATAII au mode SATAII. Vous pouvez aussi directement connecter le disque dur SATA au connecteur SATAII.
7. La gestion de l'alimentation pour l'USB 2.0 fonctionne bien sous Microsoft® Windows® Vista™ 64-bit/ Vista™ / XP 64-bit / XP SP1; SP2/ 2000 SP4.
8. Il s'agit d'un usage facile ASRock overclocking outil qui vous permet de surveiller votre système en fonction de la monitrice de matériel et overclocker vos périphériques de matériels pour obtenir les meilleures performances du système sous environnement Windows®. S'il vous plaît visitez notre site web pour le fonctionnement des procédures de Tuner ASRock OC.
   ASRock website: http://www.asrock.com

9. Comprenant une conception matérielle et logicielle propriétaire avancée, Intelligent Energy Saver est une technologie révolutionnaire qui offre des gains d'énergie incomparables. En d'autres termes, il est capable d'apporter des économies d'énergie exceptionnelles et d'améliorer l'efficacité énergétique sans sacrifier aux performances de calcul. Veuillez visiter notre site Web pour les procédures d'utilisation d'Intelligent Energy Saver.
   Site Web ASRock : http://www.asrock.com
10. Même si cette carte mère offre un contrôle sans souci, il n'est pas recommandé d'y appliquer un over clocking. Des fréquences de bus CPU autres que celles recommandées risquent de rendre le système instable ou d'endommager le CPU et la carte mère.
11. Lorsqu'une surchauffe du CPU est détectée, le système s'arrête automatiquement. Avant de redémarrer le système, veuillez vérifier que le ventilateur d'UC sur la carte mère fonctionne correctement et débranchez le cordon d'alimentation, puis rebranchez-le. Pour améliorer la dissipation de la chaleur, n'oubliez pas de mettre de la pâte thermique entre le CPU le dissipateur lors de l'installation du PC.

## 1.3 Réglage des cavaliers

L'illustration explique le réglage des cavaliers. Quand un capuchon est placé sur les broches, le cavalier est « FERME ». Si aucun capuchon ne relie les broches,le cavalier est « OUVERT ». L'illustration montre un cavalier à 3 broches dont les broches 1 et 2 sont "FERMEES" quand le capuchon est placé sur ces 2 broches.




Ferme Ouvert

| Le cavalier | | Description |
|---|---|---|
| PS2_USB_PWR1<br>(voir p.2 No. 1) | | Court-circuitez les broches 2 et 3 pour choisir +5VSB (standby) et permettre aux périphériques PS/2 ou USB de réveiller le système. |

Note: Pour sélectionner +5VSB, il faut obligatoirement 2 Amp et un courant standby supérieur fourni par l'alimentation.

Effacer la CMOS
(CLRCMOS1,
le cavalier à 2 broches)
(voir p.2 No. 15)

le cavalier à 2 broches

Note: CLRCMOS1 vous permet d'effacer les données de la CMOS. Ces données incluent les informations système telles que le mot de passe, la date, l'heure, et les paramètres du système. Pour restaurer les paramètres système à leur valeur par défaut, éteignez l'ordinateur et débranchez le câble d'alimentation. Puis placez un cavalier sur les pins CLRCMOS1 pendant 5 secondes. N'oubliez pas de retirer le cavalier avant après avoir restauré le CMOS.

## 1.4 En-têtes et Connecteurs sur Carte

Les en-têtes et connecteurs sur carte NE SONT PAS des cavaliers. NE PAS placer les capuchons de cavalier sur ces en-têtes et connecteurs. Le fait de placer les capuchons de cavalier sur les en-têtes et connecteurs causera à la carte mère des dommages irréversibles!

Connecteur IDE primaire (Bleu)

(IDE1 br. 39, voir p.2 No. 8)

connecteur bleu vers la carte mère

connecteur noir vers le disque dur

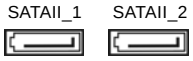
Câble ATA 66/100 80 conducteurs

Note: Veuillez vous reporter aux instructions du fabricant de votre IDE périphérique pour les détails.

Connecteurs Série ATAII

(SATAII_1: voir p.2 fig. 12)

(SATAII_2: voir p.2 fig. 11)




Ces deux connecteurs Serial ATA (SATAII) prennent en charge les disques durs SATA ou SATAII pour les dispositifs de stockage interne. L'interface SATAII actuelle permet des taux transferts de données pouvant aller jusqu'à 3,0 Go/s.

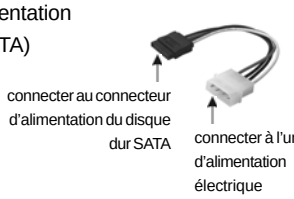
Câble de données Série ATA (SATA)

(en option)

L'une des deux extrémités du câble de données SATA peut être connectée au disque dur SATA / SATAIIou au connecteur SATAII sur la carte mère.

Cordon d'alimentation Série ATA (SATA)

(en option)




Veuillez connecter l'extrémité noire du cordon d'alimentation SATA sur le connecteur d'alimentation sur chaque unité. Connectez ensuite l'extrémité blanche du cordon d'alimentation SATA sur le connecteur d'alimentation de l'unité d'alimentation électrique.

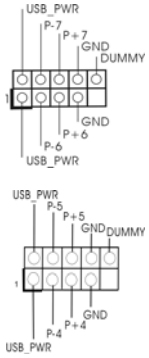
En-tête USB 2.0

(USB6_7 br.9)

(voir p.2 No. 16)

(USB4_5 br.9)

(voir p.2 No. 13)

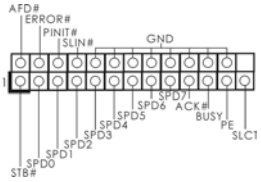



A côté des quatre ports USB 2.0 par défaut sur le panneau E/S, il y a deux embases USB 2.0 sur cette carte mère. Chaque embase USB 2.0 peut prendre en charge 2 ports USB 2.0.

Embase de port d'impression

(LPT1 25 broches)

(voir p.2 No. 22)




AII s'agit d'une interface pour le câble du port d'impression, qui permet le raccordement pratique de périphériques d'impression.

Connecteurs audio internes

(CD1 br. 4)

(CD1: voir p.2 No. 20)

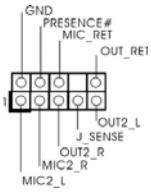
CD1

Ils vous permettent de gérer des entrées audio à partir de sources stéréo comme un CD-ROM, DVD-ROM, un tuner TV ou une carte MPEG.

Connecteur audio panneau avant

(HD_AUDIO1 br. 9)

(voir p.2 No. 21)




C'est une interface pour un câble audio en façade qui permet le branchement et le contrôle commodes de périphériques audio.

Français

1. L'audio à haute définition (HDA) prend en charge la détection de fiche, mais le fil de panneau sur le châssis doit prendre en charge le HDA pour fonctionner correctement. Veuillez suivre les instructions dans notre manuel et le manuel de châssis afin installer votre système.
2. Si vous utilisez le panneau audio AC'97, installez-le sur l'adaptateur audio du panneau avant conformément à la procédure ci-dessous :
   A. Connectez Mic_IN (MIC) à MIC2_L.
   B. Connectez Audio_R (RIN) à OUT2_R et Audio_L (LIN) à OUT2_L.
   C. Connectez Ground (GND) à Ground (GND).
   D. MIC_RET et OUT_RET sont réservés au panneau audio HD. Vous n'avez pas besoin de les connecter pour le panneau audio AC'97.
   E. Entrer dans l'utilitaire de configuration du BIOS. Saisir les Paramètres avancés puis sélectionner Configuration du jeu de puces. Définir l'option panneau de commande de [Auto] à [Activé].
   F. Entrer dans le système Windows. Cliquer sur l'icône sur la barre de tâches dans le coin inférieur droite pour entrer dans le Gestionnaire audio Realtek HD.
   Pour Windows® 2000 / XP / XP 64-bit OS:
   Cliquer sur « E/S audio», sélectionner « Paramètres du connecteur »

   , choisir « Désactiver la détection de la prise du panneau de commande » et sauvegarder les changements en cliquant sur « OK ».

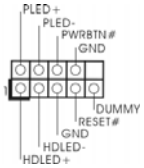
   Pour Windows® Vista™ / Vista™ 64-bit OS:
   Cliquer droit "Fichier" icone , selectionner" la detection incapable de jack de panel d'avant " et sauvegarder le changement par cliquer"ok".
   G. Pour activer le mic.
   Pour les SE Windows® 2000 / XP / XP 64 bits :
   Veuillez sélectionner "Front Mic" ( Mic. Avant) comme le dispositif d'enregistrement par défaut.
   Si vous voulez entendre votre voix à travers le mic. avant veuillez désactiver l'icône «Silence» dans "Front Mic" ( Mic. Avant) de la portion "Playback" (Lecture).
   Pour les SE Windows® Vista™ / Vista™ 64 bits :
   Allez à l'onglet «Front Mic» ( Mic. Avant) dans le panneau de commandes Realtek.
   Cliquez sur «Configurer le dispositif par défaut» pour faire du Mic Avant le dispositif d'enregistrement par défaut.

Français

En-tête du panneau système

(9-pin PANEL1)

(voir p.2 No. 9)

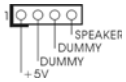



Cet en-tête permet d'utiliser plusieurs fonctions du panneau système frontal.

En-tête du haut-parleur de châssis

(SPEAKER1 br. 4)

(voir p.2 No. 10)

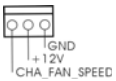



Veuillez connecter le haut-parleur de châssis sur cet en-tête.

Connecteur du ventilateur de châssis

(CHA_FAN1 br. 3)

(voir p.2 No. 14)

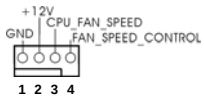



Veuillez connecter le câble du ventilateur du châssis sur ce connecteur en branchant le fil noir sur la broche de terre.

Connecteur du ventilateur de l'UC

(CPU_FAN1 br. 4)

(voir p.2 No. 3)




Veuillez connecter le câble de ventilateur d'UC sur ce connecteur et brancher le fil

ien que cette carte mère offre un support de (Ventilateur silencieux) ventilateur de CPU à 4 broches , le ventilateur de CPU à 3 broches peut bien fonctionner même sans la fonction de commande de vitesse du ventilateur. Si vous prévoyez de connecter le ventilateur de CPU à 3 broches au connecteur du ventilateur de CPU sur cette carte mère, veuillez le connecter aux broches 1-3.

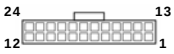
**Installation de ventilateur à 3 broches**

Broches 1-3 connectées

En-tête d'alimentation ATX

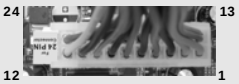
(ATXPWR1 br. 24)

(voir p.2 No. 4)




Veuillez connecter l'unité d'alimentation ATX sur cet en-tête.

Bien que cette carte mère fournisse un connecteur de courant ATX 24 broches, elle peut encore fonctionner si vous adopter une alimentation traditionnelle ATX 20 broches. Pour utiliser une alimentation ATX 20 broches, branchez à l'alimentation électrique ainsi qu'aux broches 1 et 13.




20-Installation de l'alimentation électrique ATX

Connecteur ATX 12V

(ATX12V1 br.4)

(voir p.2 No. 2)

Veuillez connecter une unité d'alimentation électrique ATX 12V sur ce connecteur.

Français

## 2. Informations sur le BIOS

La puce Flash Memory sur la carte mère stocke le Setup du BIOS. Lorsque vous démarrez l'ordinateur, veuillez presser <F2> pendant le POST (Power-On-Self-Test) pour entrer dans le BIOS; sinon, le POST continue ses tests de routine. Si vous désirez entrer dans le BIOS après le POST, veuillez redémarrer le système en pressant <Ctl> + <Alt> + <Suppr>, ou en pressant le bouton de reset sur le boîtier du système. Vous pouvez également redémarrer en éteignant le système et en le rallumant. L'utilitaire d'installation du BIOS est conçu pour être convivial. C'est un programme piloté par menu, qui vous permet de faire défiler par ses divers sous-menus et de choisir parmi les choix prédéterminés. Pour des informations détaillées sur le BIOS, veuillez consulter le Guide de l'utilisateur (fichier PDF) dans le CD technique.

## 3. Informations sur le CD de support

Cette carte mère supporte divers systèmes d'exploitation Microsoft® Windows®: 2000 / XP / XP 64 bits / Vista™ / Vista™ 64 bits. Le CD technique livré avec cette carte mère contient les pilotes et les utilitaires nécessaires pour améliorer les fonctions de la carte mère. Pour utiliser le CD technique, insérez-le dans le lecteur de CD-ROM. Le Menu principal s'affiche automatiquement si "AUTORUN" est activé dans votre ordinateur. Si le Menu principal n'apparaît pas automatiquement, localisez dans le CD technique le fichier "ASSETUP.EXE" dans le dossier BIN et double-cliquez dessus pour afficher les menus.

# 1. Introduzione

Grazie per aver scelto una scheda madre ASRock ***G31M-VS***, una scheda madre affidabile prodotta secondo i severi criteri di qualità ASRock. Le prestazioni eccellenti e il design robusto si conformano all'impegno di ASRock nella ricerca della qualità e della resistenza.

Questa Guida Rapida all'Installazione contiene l'introduzione alla motherboard e la guida passo-passo all'installazione. Informazioni più dettagliate sulla motherboard si possono trovare nel manuale per l'utente presente nel CD di supporto.

Le specifiche della scheda madre e il software del BIOS possono essere aggiornati, pertanto il contenuto di questo manuale può subire variazioni senza preavviso. Nel caso in cui questo manuale sia modificato, la versione aggiornata sarà disponibile sul sito di ASRock senza altro avviso. Sul sito ASRock si possono anche trovare le più recenti schede VGA e gli elenchi di CPU supportate.
ASRock website http://www.asrock.com
Se si necessita dell'assistenza tecnica per questa scheda madre, visitare il nostro sito per informazioni specifiche sul modello che si sta usando.
www.asrock.com/support/index.asp

## 1.1 Contenuto della confezione

Scheda madre ASRock ***G31M-VS***
(Micro ATX Form Factor: 8.8-in x 6.7-in, 22.4 cm x 17.0 cm)
Guida di installazione rapida ASRock ***G31M-VS***
CD di supporto ASRock ***G31M-VS***
Un cavo IDE 80-pin Ultra ATA 66/100 (Opzionale)
Un cavo dati Serial ATA (SATA) (Opzionale)
Un cavo alimentatore HDD Serial ATA (SATA) (Opzionale)
Un I/O Shield

## 1.2 Specifiche

| | |
|---|---|
| **Piattaforma** | - Micro ATX Form Factor: 8.8-in x 6.7-in, 22.4 cm x 17.0 cm |
| **Processore** | - LGA 775 per Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® Dual Core / Celeron® in grado di supportare processori Penryn Quad Core Yorkfield e Dual Core Wolfdale<br>- Supporta CPU fino a 65W<br>- FSB1333/1066/800 MHz<br>- Supporto tecnologia Hyper Threading (vedi **ATTENZIONE 1**)<br>- Supporta la tecnologia overclocking "slegata" (vedi **ATTENZIONE 2**)<br>- Supporto CPU EM64T |
| **Chipset** | - Northbridge: Intel® G31<br>- Southbridge: Intel® ICH7 |
| **Memoria** | - Supporto tecnologia Dual Channel DDR2 Memory (vedi **ATTENZIONE 3**)<br>- 2 x slot DDR2 DIMM<br>- Supporto DDR2 800/667 non-ECC, momoria senza buffer<br>- Capacità massima della memoria di sistema: 8GB (vedi **ATTENZIONE 4**) |
| **Slot di espansione**<br>**VGA su scheda** | - 1 x slot PCI Express x16<br>- 1 x slot PCI<br>- Intel® Graphics Media Accelerator 3100<br>- Pixel Shader 2.0, VGA DX9.0<br>- Memoria massima condivisa 384MB (vedi **ATTENZIONE 5**) |
| **Audio** | - 5.1 Audio HD CH Windows® Vista™ Premium Level (ALC662 Audio Codec) |
| **LAN** | - Realtek PCIE x1 LAN 8103EL / 8102EL<br>- Velocità: 10/100 Ethernet<br>- Supporta Wake-On-LAN |
| **Pannello posteriore I/O** | I/O Panel<br>- 1 x porta PS/2 per mouse<br>- 1 x porta PS/2 per tastiera<br>- 1 x Porta COM<br>- 1 x Porta VGA<br>- 4 x porte USB 2.0 già integrate<br>- 1 x porte LAN RJ-45 con LED (LED azione/collegamento e LED velocità)<br>- Audio Jack: Line In / Line Out / Microfono |

| | |
|---|---|
| **Connettori** | - 2 x connettori SATAII 3.0Go/s (Non supporta le funzioni “RAID” e “Collegamento a caldo”) (vedi **ATTENZIONE 6**)<br>- 1 x connettori ATA100 IDE (supporta fino a 2 dispositivi IDE)<br>- 1 x Collettore porta stampante<br>- Connettore ventolina CPU/telaio<br>- 24-pin collettore alimentazione ATX<br>- 4-pin connettore ATX 12V<br>- Connettori audio interni<br>- Connettore audio sul pannello frontale<br>- 2 x header USB 2.0 (supporta 4 porte USB 2.0) (vedi **ATTENZIONE 7**) |
| **BIOS** | - 4Mb AMI BIOS<br>- Suppor AMI legal BIOS<br>- Supporta “Plug and Play”<br>- Compatibile con ACPI 1.1 wake up events<br>- Supporta jumperfree<br>- Supporta SMBIOS 2.3.1<br>- Regolazione multi-voltaggio VCCM<br>- Smart BIOS supportato |
| **CD di supporto** | - Driver, utilità, software antivirus (Versione dimostrativa) |
| **Caratteristica speciale** | - Sintonizzatore ASRock OC (vedi **ATTENZIONE 8**)<br>- Intelligent Energy Saver (Risparmio intelligente dell’energia) (vedi **ATTENZIONE 9**)<br>- Instant Boot<br>- Booster ibrido:<br>- Stepless control per frequenza del processore (vedi **ATTENZIONE 10**)<br>- ASRock U-COP (vedi **ATTENZIONE 11**)<br>- Boot Failure Guard (B.F.G.) |
| **Monitoraggio Hardware** | - Sensore per la temperatura del processore<br>- Sensore temperatura scheda madre<br>- Indicatore di velocità per la ventola del processore<br>- Indicatore di velocità per la ventola di raffreddamento<br>- Ventola CPU silenziosa<br>- Voltaggio: +12V, +5V, +3.3V, Vcore |
| **Compatibilità SO** | - Microsoft® Windows® 2000 / XP / XP 64 bit / Vista™ / Vista™ 64 bit |
| **Certificazioni** | - FCC, CE |

* Per ulteriori informazioni, prego visitare il nostro sito internet: http://www.asrock.com

**AVVISO**

Si prega di prendere atto che la procedura di overclocking implica dei rischi, come anche la regolazione delle impostazioni del BIOS, l'applicazione della tecnologia Untied Overclocking Technology, oppure l'uso di strumenti di overclocking forniti da terzi. L'overclocking può influenzare la stabilità del sistema, ed anche provocare danni ai componenti ed alle periferiche del sistema. La procedura è eseguita a proprio rischio ed a proprie spese. Noi non possiamo essere ritenuti responsabili per possibili danni provocati dall'overclocking.

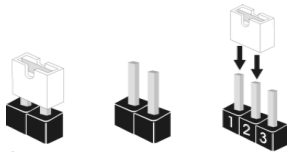
## *ATTENZIONE!*

1. Per il settaggio della "Tecnologia Hyper-Threading", per favore controllare pagina 29 del Manuale dell'utente all'interno del CD di supporto.
2. Questa scheda madre supporta la tecnologia overclocking "slegata". Per i dettagli leggere "Tecnologia di Untied Overclocking" a pagina 19.
3. Questa scheda madre supporta la tecnologia Dual Channel Memory. Prima di implementare la tecnologia Dual Channel Memory, assicurarsi di leggere la guida all'installazione dei moduli di memoria, a pagina 12, per seguire un'installazione appropriata.
4. A causa delle limitazioni del sistema operativo, le dimensioni effettive della memoria possono essere inferiori a 4GB per l'accantonamento riservato all'uso del sistema sotto Windows® XP e Windows® Vista™. Per Windows® XP 64-bit e Windows® Vista™ 64-bit con CPU 64-bit, non c'è tale limitazione.
5. La dimensione massima della memoria condivisa viene stabilita dal venditore del chipset ed e' soggetta a modificazioni. Prego fare riferimento al sito internet Intel® per le ultime informazioni.
6. Prima di installare il disco rigido SATAII con il connettore SATAII, leggere la "Guida per la configurazione del disco rigido SATAII" a pagina 23 del "Manuale utente" nel CD in dotazione in modo da poter predisporre il disco rigido SATAII per la modalità SATAII. È anche possibile connettere il disco rigido SATA direttamente al connettore SATAII.
7. La Gestione Risorse per USB 2.0 funziona perfettamente con Microsoft® Windows® Vista™ 64-bit / Vista™ / XP 64 bit / XP SP1; SP2/2000 SP4.
8. Si tratta di uno strumento di sicronizzazione ASRock di face uso in grado di implementare il controllo del sistema tramite la funzione di hardware monitor e sincronizzare le Vostre unita' hardware per ottenere la migliore prestazione in Windows®. Prego visitare il nostro sito Internet per ulteriori dettagli circa l'uso del Sintonizzatore ASRock OC.
   ASRock website: http://www.asrock.com

9. Dotato di un design avanzato e brevettato dell'hardware e del software, Intelligent Energy Saver è una tecnologia rivoluzionaria che offre un risparmio energetico senza pari. In altre parole: è capace di fornire un risparmio energetico eccezionale e di migliorare l'efficienza senza sacrificare le prestazioni di computazione. Visitare il nostro sito per informazioni sulle procedure operative di Intelligent Energy Saver. Sito ASRock: http://www.asrock.com
10. Anche se questa motherboard offre il controllo stepless, non si consiglia di effettuare l'overclocking. Frequenze del bus del processore diverse da quelle raccomandate possono causare instabilità al sistema o danni al processore e alla scheda madre.
11. Se il processore si surriscalda, il sistema si chiude automaticamente. Prima di riavviare il sistema, assicurarsi che la ventolina CPU della scheda madre funzioni correttamente; scollegare e ricollegare il cavo d'alimentazione. Per migliorare la dissipazione del calore, ricordare di applicare l'apposita pasta siliconica tra il processore e il dissipatore quando si installa il sistema.

## 1.3 Setup dei Jumpers

L'illustrazione mostra come sono settati i jumper. Quando il ponticello è posizionato sui pin, il jumper è "CORTOCIRCUITATO". Se sui pin non ci sono ponticelli, il jumper è "APERTO". L'illustrazione mostra un jumper a 3 pin in cui il pin1 e il pin2 sono "CORTOCIRCUITATI" quando il ponticello è posizionato su questi pin.




CORTOCIRCUITATO APERTO

| Jumper | Settaggio del Jumper | |
|---|---|---|
| PS2_USB_PWR1 (vedi p.2 Nr. 1) | | Cortocircuitare pin2, pin3 per settare a +5VSB (standby) e abilitare PS/2 o USB wake up events. |

Nota: Per selezionare +5VSB, si richiedono almeno 2 Ampere e il consumo di corrente in standby sarà maggiore.

Resettare la CMOS
(CLRCMOS1, jumper a 2 pin)
(vedi p.2 Nr. 15)

jumper a 2 pin

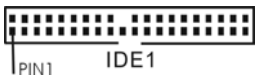
Nota: CLRCMOS1 consente di pulire i dati nella CMOS. I dati nella CMOS includono informazioni del setup del sistema, come per esempio la password di sistema, la data, l'ora, e i parametri del setup di sistema. Per pulire I parametri di sistema e resettare ai parametri di default, spegnere il computer e scollegare l'alimentatore, poi collegare il jumper sul CLRCMOS1 per 5 secondi.

## 1.4 Collettori e Connettori su Scheda

I collettori ed i connettori su scheda NON sono dei jumper. NON installare cappucci per jumper su questi collettori e connettori. L'installazione di cappucci per jumper su questi collettori e connettori provocherà danni permanenti alla scheda madre!

Connettore IDE primario (Blu)

(39-pin IDE1, vedi p.2 Nr. 8)




Connettore blu alla schedamadre

Connettore nero all'hard disk drive

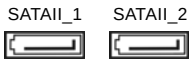
Cavo ATA 66/100 a 80 Pin

Nota: Fate riferimento alle istruzioni del produttore del dispositivo IDE per maggiori dettagli.

Connettori Serial ATAII

(SATAII_1: vedi p.2 Nr. 12)

(SATAII_2: vedi p.2 Nr. 11)




Questi due connettori Serial ATA (SATAII) supportano le periferiche di archiviazione HD SATA o SATAII per le funzioni di archiviazione interna. ATAII (SATAII) supportano cavi SATAII per dispositivi di memoria interni. L'interfaccia SATAII attuale permette velocità di trasferimento dati fino a 3.0 Gb/s.

Cavi dati Serial ATA (SATA)

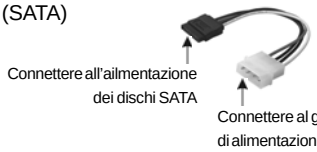
(Opzionale)

Entrambe le estremità del cavo dati SATA possono collegarsi all'hard disk SATA / SATAII o al connettore SATAII sulla scheda madre.

Italiano

Cavo d'alimentazione Serial ATA (SATA)

(Opzionale)

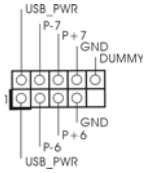



Connettete l'estremità nera del cavo di alimentazione SATA al connettore di alimentazione su ciascun drive. Poi connettete l'estremità bianca del cavo di alimentazione SATA al connettore power dell'alimentatore.

Collettore USB 2.0

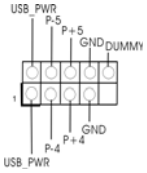
(9-pin USB6_7)

(vedi p.2 No. 16)




(9-pin USB4_5)

(vedi p.2 No. 13)

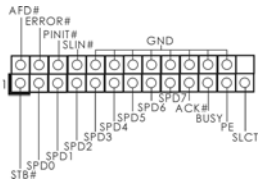



Oltre alle quattro porte USB 2.0 predefinite nel pannello I/O, la scheda madre dispone di due intestazioni USB 2.0. Ciascuna intestazione USB 2.0 supporta due porte USB 2.0.

Collettore porta stampante

(LPT1 25 pin)

(vedi p.2 No. 22)




Questa è un'interfaccia per il cavo porta stampante che consente di collegare, con comodità, dispositivi di stampa.

Connettori audio interni

(4-pin CD1)

(CD1: vedi p.2 Nr. 20)

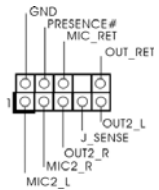
CD1

Permettono di ricevere input stereo audio da fonti di suono come CD-ROM, DVD - ROM,TV tuner, o schede MPEG.

Connettore audio sul pannello frontale

(9-pin HD_AUDIO1)

(vedi p.2 Nr. 21)




È un'interfaccia per il cavo del pannello audio. Che consente connessione facile e controllo dei dispositivi audio.

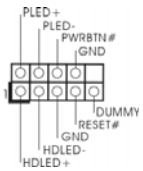
Italiano

1. La caratteristica HDA (High Definition Audio) supporta il rilevamento dei connettori, però il pannello dei cavi sul telaio deve supportare la funzione HDA (High Definition Audio) per far sì che questa operi in modo corretto. Attenersi alle istruzioni del nostro manuale e del manuale del telaio per installare il sistema.
2. Se si utilizza un pannello audio AC'97, installarlo nell'intestazione audio del pannello anteriore, come indicato di seguito:
   A. Collegare Mic_IN (MIC) a MIC2_L.
   B. Collegare Audio_R (RIN) a OUT2_R e Audio_L (LIN) ad OUT2_L.
   C. Collegare Ground (GND) a Ground (GND).
   D. MIC_RET e OUT_RET sono solo per il pannello audio HD. Non è necessario collegarli per il pannello audio AC'97.
   E. Entrare nel programma di impostazione BIOS. Entrare su Impostazioni avanzate, quindi selezionare Configurazione chipset. Impostare l'opzione Comando pannello anteriore da [Auto] a [Attivato].
   F. Entrare nel sistema di Windows. Fare clic sull'icona situata nell'angolo inferiore destro della barra delle applicazioni per entrare su Realtek HD Audio Manager.
   Per Windows® 2000 / XP / XP 64-bit OS:
   Fare clic su "Audio I/O", selezionare "Impostazioni connettore" , scegliere "Disattiva rilevazione presa pannello anteriore" e salvare la modifica facendo clic su "OK".
   Per Windows® Vista™ / Vista™ 64-bit OS:
   Cliccare sull'icona in alto a destra "Folder" ("Cartella") , selezionare "Disable front panel jack detection" "Disabilitare individuazione presa pannello frontale") e cliccare "OK" per memorizzare.
   G. Per attivare il microfono anteriore.
   Per il sistema operativo Windows® 2000 / XP / XP 64-bit:
   Selezionare "Microfono anteriore" come dispositivo predefinito per la registrazione. Per ascoltare la propria voce tramite il microfono anteriore, deselezionare l'icona "Muto" in "Microfono anteriore" di "Riproduzione".
   Per il sistema operative Windows® Vista™ / Vista™ 64-bit:
   Andare alla scheda "Microfono anteriore" nel pannello di controllo d i Realtek. Fare clic su "Imposta dispositivo predefinito" per impostare il microfono anteriore come dispositivo predefinito per la registrazione.

Collettore pannello di sistema

(9-pin PANEL1)

(vedi p.2 Nr. 9)



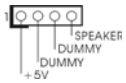

Questo collettore accomoda diverse funzioni di sistema pannello frontale.

Italiano

Collettore casse telaio

(4-pin SPEAKER1)

(vedi p.2 Nr. 10)

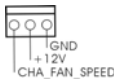



Collegare le casse del telaio a questo collettore.

Connettore ventolina telaio

(3-pin CHA_FAN1)

(vedi p.2 Nr. 14)

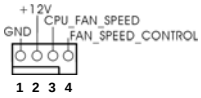



Collegare il cavo della ventolina telaio a questo connettore e far combaciare il filo nero al pin terra.

Connettore ventolina CPU

(4-pin CPU_FAN1)

(vedi p.2 Nr. 3)




Collegare il cavo della ventolina CPU a questo connettore e far combaciare il filo nero al pin terra.

Sebbene la presente scheda madre disponga di un supporto per ventola CPU a 4 piedini (ventola silenziosa), la ventola CPU a 3 piedini è in grado di funzionare anche senza la funzione di controllo della velocità della ventola. Se si intende collegare la ventola CPU a 3 piedini al connettore della ventola CPU su questa scheda madre, collegarla ai piedini 1-3.

**Piedini 1-3 collegati**

Installazione della ventola a 3 piedini

Connettore alimentazione ATX

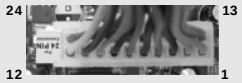
(24-pin ATXPWR1)

(vedi p.2 Nr. 4)

Collegare la sorgente d'alimentazione ATX a questo connettore.

Con questa scheda madre, c'è in dotazione un connettore elettrico ATX a 24 pin, ma può funzionare lo stesso se si adotta un alimentatore ATX a 20 pin. Per usare l'alimentatore ATX a 20 pin, collegare l'alimentatore con il Pin 1 e il Pin 13.

Installazione dell'alimentatore ATX a 20 pin




Connettore ATX 12V

(4-pin ATX12V1)

(vedi p.2 Nr. 2)

È necessario collegare una alimentazione con spinotto da 12V ATX a questo connettore in modo che possa fornire energia sufficiente. In caso contrario l'unità non si avvia.

## 2. Informazioni sul BIOS

La Flash Memory sulla scheda madre contiene le Setup Utility. Quando si avvia il computer, premi <F2> durante il Power-On-Self-Test (POST) della Setup utility del BIOS; altrimenti, POST continua con i suoi test di routine. Per entrare il BIOS Setup dopo il POST, riavvia il sistema premendo <Ctl> + <Alt> + <Delete>, o premi il tasto di reset sullo chassis del sistema. Per informazioni più dettagliate circa il Setup del BIOS, fare riferimento al Manuale dell'Utente (PDF file) contenuto nel cd di supporto.

## 3. Software di supporto e informazioni su CD

Questa scheda madre supporta vari sistemi operativi Microsoft® Windows®: 2000 / XP / XP 64-bit / Vista™ / Vista™ 64-bit. Il CD di supporto a corredo della scheda madre contiene i driver e utilità necessari a potenziare le caratteristiche della scheda. Inserire il CD di supporto nel lettore CD-ROM. Se la funzione "AUTORUN" è attivata nel computer, apparirà automaticamente il Menù principale. Se il Menù principale non appare automaticamente, posizionarsi sul file "ASSETUP.EXE" nel CESTINO del CD di supporto e cliccare due volte per visualizzare i menù.

# 1. Introducción

Gracias por su compra de ASRock ***G31M-VS*** placa madre, una placa de confianza producida bajo el control de calidad estricto y persistente. La placa madre provee realización excelente con un diseño robusto conforme al compromiso de calidad y resistencia de ASRock.

Esta Guía rápida de instalación contiene una introducción a la placa base y una guía de instalación paso a paso. Puede encontrar una información más detallada sobre la placa base en el manual de usuario incluido en el CD de soporte.

Porque las especificaciones de la placa madre y el software de BIOS podrían ser actualizados, el contenido de este manual puede ser cambiado sin aviso. En caso de cualquier modificación de este manual, la versión actualizada estará disponible en el website de ASRock sin previo aviso. También encontrará las listas de las últimas tarjetas VGA y CPU soportadas en la página web de ASRock.

Website de ASRock http://www.asrock.com

Si necesita asistencia técnica en relación con esta placa base, visite nuestra página web con el número de modelo específico de su placa.

www.asrock.com/support/index.asp

## 1.1 Contenido de la caja

Placa base ASRock ***G31M-VS***

(Factor forma Micro ATX: 22,4 cm x 17,0 cm, 8,8" x 6,7")

Guía de instalación rápida de ASRock ***G31M-VS***

CD de soporte de ASRock ***G31M-VS***

Una cinta de datos IDE de conducción 80 Ultra ATA 66/100 (Opcional)

Un Cable de Datos Serial ATA (SATA) (Opcional)

Un cable serie ATA (SATA) de alimentación de disco duro (Opcional)

Una protección I/O

## 1.2 Especificación

| | |
|---|---|
| **Plataforma** | - Factor forma Micro ATX: 22,4 cm x 17,0 cm, 8,8" x 6,7" |
| **Procesador** | - LGA 775 para Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Doble Núcleo / Celeron® Doble Núcleo / Celeron® compatible con procesadores Yorkfield de Penryn Núcleo Cuádruple y Wolfdale de Doble Núcleo<br>- Compatible con CPU de hasta 65W<br>- FSB1333/1066/800 MHz<br>- Admite tecnología Hyper Threading (ver **ATENCIÓN 1**)<br>- Admite tecnología de aumento de velocidad liberada (vea **ATENCIÓN 2**)<br>- Admite CPU EM64T |
| **Chipset** | - North Bridge: Intel® G31<br>- South Bridge: Intel® ICH7 |
| **Memoria** | - Soporte de Tecnología de Memoria de Doble Canal (ver **ATENCIÓN 3**)<br>- 2 x DDR2 DIMM slots<br>- Soporta DDR2 800/667 non-ECC, memoria de un-buffered<br>- Máxima capacidad de la memoria del sistema: 8GB (vea **ATENCIÓN 4**) |
| **Ranuras de Expansión VGA OnBoard** | - 1 x ranuras PCI Express x16<br>- 1 x ranuras PCI<br>- Intel® Graphics Media Accelerator 3100<br>- Sombreador de Píxeles 2.0, VGA DX9.0<br>- 384MB de Memoria máxima compartida (vea **ATENCIÓN 5**) |
| **Audio** | - Sonido HD de Nivel Superior 5.1 Canales Windows® Vista™ (Códec de sonido ALC662) |
| **LAN** | - Realtek PCIE x1 LAN 8103EL / 8102EL<br>- Velocidad: 10/100 Ethernet<br>- Soporta Wake-On-LAN |
| **Entrada/Salida de Panel Trasero** | I/O Panel<br>- 1 x puerto de ratón PS/2<br>- 1 x puerto de teclado PS/2<br>- 1 x puerto serial: COM1<br>- 1 x Puerto VGA<br>- 4 x puertos USB 2.0 predeterminados<br>- 1 x Puerto LAN RJ-45 con LED (LED de ACCIÓN/ENLACE y LED de VELOCIDAD)<br>- Audio Jack: Line In / Line Out / Micrófono |

| | |
|---|---|
| **Conectores** | - 2 x conexiones SATAII, admiten una velocidad de transferencia de datos de hasta 3,0Gb/s (No soporta las funciones “RAID” y “Conexión en caliente”) (ver **ATENCIÓN 6**)<br>- 1 x ATA100 conexiones IDE (admite hasta 2 dispositivos IDE)<br>- 1 x cabecera de puerto de impresora<br>- Conector del ventilador del CPU/chasis<br>- 24-pin cabezal de alimentación ATX<br>- 4-pin conector de ATX 12V power<br>- Conector de Audio Interno<br>- Conector de audio de panel frontal<br>- 2 x Conector USB 2.0 (compatible con 4 puertos USB 2.0) (vea **ATENCIÓN 7**) |
| **BIOS** | - 4Mb AMI BIOS<br>- AMI legal BIOS<br>- Soporta “Plug and Play”<br>- ACPI 1.1 compliance wake up events<br>- Soporta “jumper free setup”<br>- Soporta SMBIOS 2.3.1<br>- Múltiple ajuste de VCCM oltage<br>- Compatible con Smart BIOS |
| **CD de soport** | - Controladores, Utilerías, Software de Anti Virus (Versión de prueba) |
| **Característica Única** | - Sintonizador de ASRock OC (vea **ATENCIÓN 8**)<br>- Administrador de energía inteligente (vea **ATENCIÓN 9**)<br>- Instant Boot<br>- Amplificador Híbrido:<br>  - Stepless control de frecuencia de CPU (vea **ATENCIÓN 10**)<br>  - ASRock U-COP (vea **ATENCIÓN 11**)<br>  - Protección de Falla de Inicio (B.F.G..) |
| **Monitor Hardware** | - Sensibilidad a la temperatura del procesador<br>- Sensibilidad a la temperatura de la placa madre<br>- Taquímetros de los ventiladores del procesador y del procesador<br>- Taquímetros de los ventiladores del procesador y del chasis<br>- Ventilador silencioso para procesador<br>- Monitor de Voltaje: +12V, +5V, +3.3V, Vcore |
| **OS** | - En conformidad con Microsoft® Windows® 2000 / XP / XP 64 bits / Vista™ / Vista™ 64 bits |
| **Certificaciones** | - FCC, CE |

* Para más información sobre los productos, por favor visite nuestro sitio web: http://www.asrock.com

**ADVERTENCIA**

Tenga en cuenta que hay un cierto riesgo implícito en las operaciones de aumento de la velocidad del reloj, incluido el ajuste del BIOS, aplicando la tecnología de aumento de velocidad liberada o utilizando las herramientas de aumento de velocidad de otros fabricantes. El aumento de la velocidad puede afectar a la estabilidad del sistema e, incluso, dañar los componentes y dispositivos del sistema. Esta operación se debe realizar bajo su propia responsabilidad y Ud. debe asumir los costos. No asumimos ninguna responsabilidad por los posibles daños causados por el aumento de la velocidad del reloj.

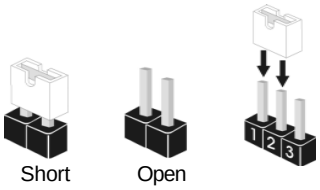
## *ATENCIÓN !*

1. Por favor consulte página 29 del Manual del Usuario en el soporte CD sobre la configuración de Hyper-Threading Technology.
2. Esta placa base admite la tecnología de aumento de velocidad liberada. Por favor lea “Tecnología de Forzado de Reloj (Overclocking) no relacionado” en la página 19 para obtener detalles.
3. Esta placa base soporta Tecnología de Memoria de Doble Canal. Antes de implementar la Tecnología de Memoria de Doble Canal, asegúrese de leer la guía de instalación de módulos de memoria en la página 12 para su correcta instalación.
4. Debido a las limitaciones del sistema, el tamaño real de la memoria debe ser inferior a 4GB para que el sistema pueda funcionar bajo Windows® XP y Windows® Vista™. Para equipos con Windows® XP 64-bit y Windows® Vista™ 64-bit con CPU de 64-bit, no existe dicha limitación.
5. El tamaño de la memoria compartido máximo es definido por el vendedor del chipset y está conforme al cambio. Por favor compruebe el Web site de Intel® para la información más última.
6. Antes de instalar un disco duro SATAII en el conector SATAII, consulte la sección “Guía de instalación de discos duros SATAII” en la página 23 del “Manual de usuario” que se incluye en el CD de soporte para configurar su disco duro SATAII en modo SATAII. También puede conectar un disco duro SATA directamente al conector SATAII.
7. Power Management para USB 2.0 funciona bien bajo Microsoft® Windows® Vista™ 64 bits / Vista™ / XP 64 bits / XP SP1; SP2/2000 SP4.
8. Es una herramienta de overclocking de ASRock de usuario-fácil que le permite a supervisar su sistema por la función de monitor de hardware y overclock sus dispositivos de hardware para obtener el mejor funcionamiento del sistema bajo el entorno de Windows®. Por favor visite nuestro sitio web para los procedimientos de operación de Sintonizador de ASRock OC.
   Sitio web de ASRock: http://www.asrock.com

9. Contiene avanzado hardware y diseño de software de propietario. Intelligent Energy Saver es una revolucionaria tecnología que consigue ahorros de energía sin rival. En otras palabras, permite alcanzar un nivel de ahorro de energía excepcional y mejorar la eficiencia energética sin sacrificar el rendimiento del procesador. Visite nuestro sitio web para más información acerca del funcionamiento de Intelligent Energy Saver. Sitio web de ASRock: http://www.asrock.com
10. Aunque esta placa base ofrece un control complete, no es recomendable forzar la velocidad. Las frecuencias de bus de la CPU distintas a las recomendadas pueden causar inestabilidad en el sistema o dañar la CPU.
11. Cuando la temperatura de CPU está sobre-elevada, el sistema va a apagarse automaticamente. Antes de reanudar el sistema, compruebe si el ventilador de la CPU de la placa base funciona apropiadamente y desconecte el cable de alimentación, a continuación, vuelva a conectarlo. Para mejorar la disipación de calor, acuérdese de aplicar thermal grease entre el procesador y el disipador de calor cuando usted instala el sistema de PC.

## 1.3 Setup de Jumpers

La siguiente ilustración muestra setup de Jumpers. Cuando el jumper cap está colocado sobre los pins, el jumper está “SHORT”. Si ningun jumper cap está colocado sobre los pins, el jumper está “OPEN”. La ilustración muestra un jumper de 3-pin cuyo pin1 y pin2 están “SHORT” cuando el jumper cap está colocado sobre estes 2 pins.




Short Open

| Jumper | Setting | Descripción |
|---|---|---|
| PS2_USB_PWR1 (vea p.2, N. 1) | | Ponga en cortocircuito pin 2, pin 3 para habilitar +5VSB (standby) para PS/2 o USB wake up events. |

Atención: Para elegir +5VSB, se necesita corriente mas que 2 Amp proveida por la fuente de electricidad.

| | | |
|---|---|---|
| Limpiar CMOS (CLRCMOS1, jumper de 2 pins) (vea p.2, N. 15) | jumper de 2 pins | |

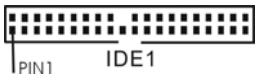
Atención: CLRCMOS1 permite que Usted limpie los datos en CMOS. Los datos en CMOS incluyen informaciones de la configuración del sistema, tales como la contraseña del sistema, fecha, tiempo, y parámetros de la configuración del sistema. Para limpiar y reconfigurar los parametros del sistema a la configuración de la fábrica, por favor apague el computador y desconecte el cable de la fuente de electricidad, ponga en cortocircuito los pins de CLRCMOS1 por más que 5 segundos usando un jumper cap.

## 1.4 Cabezales y Conectores en Placas

Los conectores y cabezales en placa NO son puentes. NO coloque las cubiertas de los puentes sobre estos cabezales y conectores. El colocar cubiertas de puentes sobre los conectores y cabezales provocará un daño permanente en la placa base.

IDE conector primario (Azul)

(39-pin IDE1, vea p.2, N. 8)




Conector azul a placa madre

Conector negro a aparato IDE

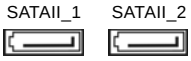
Cable ATA 66/100 de conducción 80

Atención: Consulte las instrucciones del distribuidor del dispositivo IDE para conocer los detalles.

Conexiones de serie ATAII

(SATAII_1: vea p.2, N. 12)

(SATAII_2: vea p.2, N. 11)




Estos dos conectores de la Serie ATA (SATAII) soportan HDDs SATA o SATAII para dispositivos de almacenamiento interno. La interfaz SATAII actual permite una velocidad de transferencia de 3.0 Gb/s.

Cable de datos de serie ATA (SATA)

(Opcional)

Ambos extremos del cable pueden conectarse al disco duro SATA / SATAII o la conexión de la placa base.

Cable de alimentación de serie ATA (SATA)

(Opcional)

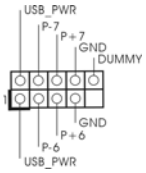
Conecte el extremo negro del cable de alimentación SATA en la conexión de alimentación de cada unidad. A continuación, conecte el extremo blanco del cable de alimentación SATA a la conexión de alimentación de la fuente de alimentación.

Español

Cabezal USB 2.0

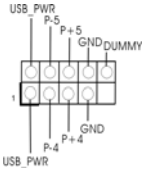
(9-pin USB6_7)

(ver p.2, No. 16)




(9-pin USB4_5)

(ver p.2, No. 13)

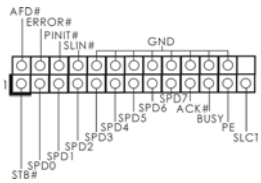



Además de cuatro puertos USB 2.0 predeterminados en el panel de E/S, hay dos bases de conexiones USB 2.0 en esta placa base. Cada una de estas bases de conexiones admite dos puertos USB 2.0.

Cabecera de puerto de impresora

(LPT1 de 25 terminales)

(vea p.2, N. 22)




Esta es una interfaz de puerto para cable de impresora que permite conectar cómodamente dispositivos de impresión.

Conector de audio interno

(4-pin CD1)

(CD1: vea p. 2, N. 20)

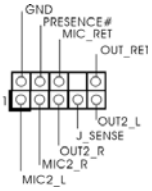
CD1

Permite recepción de input audio de fuente sónica como CD-ROM, DVD-ROM, TV tuner, o tarjeta MPEG.

Conector de audio de panel frontal

(9-pin HD_AUDIO1)

(vea p.2, N. 21)




Este es una interface para cable de audio de panel frontal que permite conexión y control conveniente de apparatos de Audio.

1. El Audio de Alta Definición soporta la detección de conector, pero el cable de panel en el chasis debe soportar HDA para operar correctamente. Por favor, siga las instrucciones en nuestro manual y en el manual de chasis para instalar su sistema.
2. Si utiliza el panel de sonido AC'97, instálelo en la cabecera de sonido del panel frontal de la siguiente manera:
   A. Conecte Mic_IN (MIC) a MIC2_L.
   B. Conecte Audio_R (RIN) a OUT2_R y Audio_L (LIN) en OUT2_L.
   C. Conecte Ground (GND) a Ground (GND).
   D. MIC_RET y OUT_RET son sólo para el panel de sonido HD. No necesitará conectarlos al panel de sonido AC'97.

E. Entre en la Utilidad de configuración del BIOS Entre en Configuración avanzada y, a continuación, seleccione Configuración del conjunto de chips. En el panel de control frontal cambie la opción [Automático] a [Habilitado].

F. Entre en el sistema Windows. Haga clic en el icono de la barra de tareas situada en la parte inferior derecha para entrar en el Administrador de audio HD Realtek.

Para Windows® 2000 / XP / XP 64-bit OS:

Haga clic en “E/S de audio”, seleccione “Configuración de conectores” , elija “Deshabilitar la detección del conector del panel frontal” y guarde el cambio haciendo clic en “Aceptar”.

Para Windows® Vista™ / Vista™ 64-bit OS:

Haga el clic el icono de la “Carpeta” de derecho-superior , eliga “Inhabilitable la detección del gato del panel delantero” y ahorre el cambio por chascando “OK”.

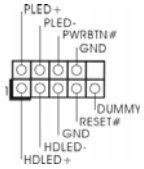
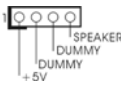
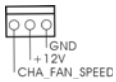
G. Para activar el micrófono frontal.

Para el sistema operativo Windows® XP / XP de 64 bits:

Seleccione “Micrófono frontal” como el dispositivo de grabación predeterminado. Si desea escuchar su propia voz a través del micrófono frontal, anule la selección del icono «Activar silencio» en “Micrófono frontal” de la sección “Reproducción”.

Para el sistema operativo Windows® Vista™ / Vista™ de 64 bits:

Vaya a la ficha «Micrófono central» en el panel Control de Realtek. Haga clic en «Establecer dispositivo predeterminado» para convertir el micrófono central en el dispositivo de grabación predeterminado.

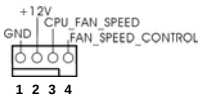
| | | |
|---|---|---|
| Cabezal de panel de sistema<br>(9-pin PANEL1)<br>(vea p.2, N. 9) |  | Este cabezar acomoda varias dunciones de panel frontal de sistema. |
| Cabezal del altavoz del chasis<br>(4-pin SPEAKER1)<br>(vea p.2, N. 10) |  | Conecte el altavoz del chasis a su cabezal. |
| Conector del ventilador del chasis<br>(3-pin CHA_FAN1)<br>(vea p.2, N. 14) |  | Conecte el cable del ventilador del chasis a este conector y haga coincidir el cable negro con el conector de tierra. |

Español

Conector del ventilador de la CPU

(4-pin CPU_FAN1)

(vea p.2, N. 3)




Conecte el cable del ventilador de la CPU a este conector y haga coincidir el cable negro con el conector de tierra.

Aunque esta placa base proporciona compatibilidad para un ventilador (silencioso) de procesador de 4 contactos, el ventilador de procesador de 3 contactos seguirá funcionando correctamente incluso sin la función de control de velocidad del ventilador. Si pretende enchufar el ventilador de procesador de 3 contactos en el conector del ventilador de procesador de esta placa base, conéctelo al contacto 1-3.

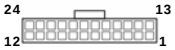
**Contacto 1-3 conectado**

Instalación del ventilador de 3 contactos

Cabezal de alimentación ATX

(24-pin ATXPWR1)

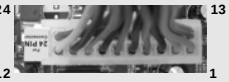
(vea p.2, N. 4)




Conecte la fuente de alimentación ATX a su cabezal.

A pesar de que esta placa base incluye in conector de alimentación ATX de 24 pins, ésta puede funcionar incluso si utiliza una fuente de alimentación ATX de 20 pins tradicional. Para usar una fuente de alimentación ATX de 20 pins, por favor, conecte su fuente de alimentación usando los Pins 1 y 13.

Instalación de una Fuente de Alimentación ATX de 20 Pins




Conector de ATX 12V power

(4-pin ATX12V1)

(ver p.2, No. 2)

Tenga en cuenta que es necesario conectar este conector a una toma de corriente con el enchufe ATX 12V, de modo que proporcione suficiente electricidad. De lo contrario no se podrá encender.

Español

## 2. BIOS Información

La utilidad de configuración de la BIOS se almacena en el chip BIOS FWH. Cuando se arranca el equipo, pulse <F2> durante la prueba automática de encendido (POST) para entrar en la Utilidad de la configuración de la BIOS, de lo contrario, POST continúa con sus rutinas de prueba. Si desea entrar en la Utilidad de configuración de la BIOS después de POST, reanude el sistema pulsando <Ctl>+ <Alt>+<Supr> o pulsando el botón de restauración situado en el chasis del sistema. Para obtener información detalladas sobre la Utilidad de configuración de la BIOS, consulte el Manual del usuario (archivo PDF), que se encuentra en el CD de soporte.

## 3.Información de Software Support CD

Esta placa-base soporta diversos tipos de sistema operativo Windows®: 2000 / XP / XP 64 bits / Vista™ / Vista™ 64 bits El CD de instalación que acompaña la placa-base trae todos los drivers y programas utilitarios para instalar y configurar la placa-base. Para iniciar la instalación, ponga el CD en el lector de CD y se desplegará el Menú Principal automáticamente si «AUTORUN» está habilitado en su computadora. Si el Menú Principal no aparece automáticamente, localice y doble-pulse en el archivo “ASSETUP.EXE” para iniciar la instalación.

시리얼 ATA(SATA) 전원 케이블

(선택 사양)

SATA 전원 케이블의 검은색 끝부분을 드라이브의 전원 커넥터에 연결하십시오. 그 다음에 SATA 전원 케이블의 흰색 끝을 전원 공급장치의 전원 커넥터에 연결합니다.

---

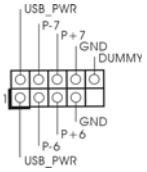
USB 2.0 헤더

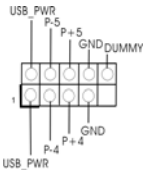
(9 핀 USB6_7)

(2 페이지, 16 번 항목 참조)

(9 핀 USB4_5)

(2 페이지, 13 번 항목 참조)



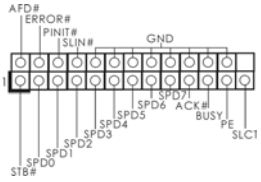

본 머더보드에는 I/O 패널에 있는 4 개의 기본 USB 2.0 포트 외에도 USB 2.0 헤더가 2 개 있습니다. 각각의 USB 2.0 헤더는 2 개의 USB 2.0 포트를 지원할 수 있습니다.

---

프린트 포트 헤더

(25 핀 LPT1)

(2 페이지, 22 번 항목 참조)




이것은 프린터 장치를 편리하게 연결할 수 있도록 해주는 프린트 포트 케이블용 인터페이스입니다.

---

내부 오디오 콘넥터

(4 핀 CD1)

(CD1: 2 페이지, 20 번 항목 참조)

CD1

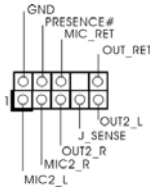
이 콘넥터는 CD-ROM, DVD-ROM, TV 튜너, 또는 MPEG 카드의 사운드 소스로부터 스테레오 입력을 받기 위한 것입니다.

---

전면부 오디오 콘넥터

(9 핀 HD_AUDIO1)

(2 페이지, 21 번 항목 참조)

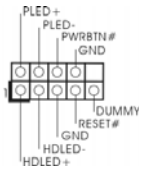



이 콘넥터는 오디오 장치를 편리하게 조절하고 연결할 수 있는 전면 오디오 인터페이스입니다.

한국어

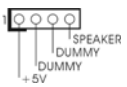
1. High Definition Audio(고음질 오디오)는 잭 센스 기능을 지원하나, 제대로작동하려 면 섀시의 패널 와이어가 HAD 를 지원해야 합니다. 이 설명서 및 섀시 설명서의지침 을 따라 시스템을 설치하십시오.
2. AC' 97 오디오 패널을 사용하는 경우, 이를 아래와 같이 프런트 패널 의오디오헤 더에 설치하십시 오.
   A. Mic_IN (MIC)을 MIC2_L 에 연결합니다.
   B. Audio_R (RIN)을 OUT2_R 에 연결하고, Audio_L (LIN)을 OUT2_L 에 연결합 니다.
   C. Ground (GND)을 Ground (GND) 에 연결합니다.
   D. MIC_RET 및 OUT_RET 는 HD 오디오 패널 전용입니다. 이들을 AC' 97 오디오 패널에 연결 하지 않아도 됩니다.
   E. BIOS 설정 유틸리티를 선택합니다. 고급 설정을 선택한 다음, 칩셋구성을 선택합니다. 프론트 패널 제어를 [자동]에서 [사용]으로 설정합니다.
   F. Windows® 시스템을 시작합니다. 우측 하단의 작업 표시줄에 있는 아이콘을 클릭하여 Realtek HD Audio Manager 를 시작합니다.
   Windows® 2000 / XP / XP 64 비트 작업시스템에 대하여:
   "오디오 입출력" 을 클릭하고, "커넥터 설정" 을 선택하고, "프론트패널 잭 감지 사용 안함" 을 선택한 다음, "확인" 을 클릭하여 변경 내용을저장합니다.
   Windows® Vista™ / Vista™ 64 비트 작업시스템에 대하여:
   우상부의 "폴더" 아이콘을 클릭하여 "프론트 면 판삽입구 검측기능을 잠금" 을 선택한후 "확인" 을 클릭하여 변경을 저장합니다.
   G. 앞면 마이크 활성화
   Windows® 2000 / XP / XP 64 비트 OS 의 경우:
   "앞면 마이크" 를 기본 녹음 장치로 선택하십시오.
   앞면 마이크를 통해 자기 목소리를 듣고 싶으면 "재생" 부분의 "앞면 마이크" 에서 "음소거" 아이콘을 선택하십시오.
   Windows® Vista™ / Vista™ 64 비트 OS 의 경우:
   Realtek 제어판의 "앞면 마이크" 탭으로 이동합니다. "기본 장치설정" 을 클릭하여 앞면 마이크를 기본 녹음 장치로 설정합니다.

시스템 콘넥터
(9 핀 PANEL1)
(2 페이지, 9 번 항목 참조)




이 콘넥터는 시스템 전면 패널 기능을 지원하기 위한 것입니다.

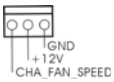
섀시 스피커 헤더
(4 핀 SPEAKER 1)
(2 페이지, 10 번 항목 참조)




섀시 스피커를 이 헤더에 연결하십시오.

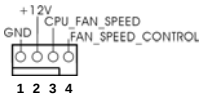
한국어

새시 팬 커넥터
(3 핀 CHA_FAN1)
(2 페이지, 14 번 항목 참조)




새시 팬 케이블을 이 커넥터에 연결하고 흑색 선을 접지 핀에 맞추십시오.

CPU 팬 커넥터
(4 핀 CPU_FAN1)
(2 페이지, 3 번 항목 참조)




CPU 팬 케이블을 이 커넥터에 연결하고 흑색 선을 접지 핀에 맞추십시오.

본 머더보드가 4 핀 CPU 팬(저소음 팬) 지원을 제공하기는 하지만 팬 속도 제어 기능없이도 3 핀 CPU 팬을 성공적으로 작동할 수 있습니다. 본 머더보드의 CPU 팬 커넥터에 3 핀 CPU 팬을 연결하려면 1-3 번 핀에 연결하십시오.

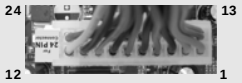
**1-3 번 핀에 연결됨**

3 핀 팬 설치

ATX 전원 헤더
(24 핀 ATXPWR1)
(2 페이지, 4 항목 참조)

ATX 전원 공급기를 이 헤더에 연결하십시오.

이 마더보드는 24 핀 ATX 전원 커넥터를 제공하지만, 종래의 20 핀 ATX 전원공급장치를 사용해도 작동이 가능합니다. 20 핀 ATX 전원 공급장치를 사용하려면, Pin 1 과 Pin 13 으로 전원공급장치를 연결하십시오.




20 핀 ATX 전원 공급장치 설치

ATX 12V 파워 콘넥터
(4 핀 ATX12V1)
(2 페이지, 2 번 항목 참조)

ATX 12V 플러그가 달린 전원공급장치를 이 커넥터에 연결해야 충분한 전력을 공급할 수 있습니다. 그러지 않을 경우 전원을 켤 수 없습니다.

한국어

## 2. 시스템 바이오스 정보

메인보드의 플래쉬 메모리에는 바이오스 셋업 유틸리티가 저장되어 있습니다. 컴퓨터를 사용하실 때, "자가진단 테스트"(POST) 가 실시되는 동안 <F2>키를 눌러 바이오스 셋업으로 들어가세요; 만일 그렇게 하지 않으면 POST는 테스트 루틴을 계속하여 실행할 것입니다. 만일 POST 이후 바이오스 셋업을 하기 원하신다면,<Ctl>+<Alt>+<Delete>키를 누르거나, 또는 시스템 본체의 리셋 버튼을 눌러 시스템을 재 시작하여 주시기 바랍니다. 바이오스 셋업 프로그램은 사용하기 편하도록 디자인되어 있습니다. 각 항목은 다양한 서브 메뉴 표가 올라오며 미리 정해진 값 중에서 선택할 수 있도록 되어 있습니다. 바이오스 셋업에 대한 보다 상세한 정보를 원하신다면 보조 CD안의 포함된 사용자 매뉴얼(PDF 파일)을 따라 주시기 바랍니다.

## 3. 소프트웨어 지원 CD 정보

이 메인보드는 여러 가지 마이크로소프트 윈도우 운영 체계를 지원합니다 : 2000/XP/XP 64비트/Vista™/Vista™ 64-bit. 메인보드에 필요한 드라이버와 사용자 편의를 위해 제공되는 보조 CD는 메인보드 의 기능을 향상시켜 줄 것입니다. 보조 CD를 사용하여 시작하시려면, CD-ROM 드라이브에 CD를 넣어주시기 바랍니다. 만일 고객님의 컴퓨터가 "AUTORUN" 이 가능하다면 자동으로 메인 메뉴를 모니터에 디스플레이 시켜 줄 것입니다. 만일 자동으로 메인 메뉴가 나타나지 않는다면, 보조 CD의 디스플레이 메뉴 안에 있는 BIN 폴더의 ASSETUP.EXE 파일을 더블 클릭하여 주시기 바랍니다.
(D: \BIN\ASSETUP.EXE, D:는 CD-ROM 드라이브)

한국어

# 1. 主板简介

谢谢你采用了华擎 *G31M-VS* 主板，本主板由华擎严格制造，质量可靠，稳定性好，能够获得卓越的性能。本安装指南介绍了安装主板的步骤。更加详细的主板信息可参看驱动光盘的用户手册。

由于主板规格和BIOS软件将不断升级，本手册之相关内容变更恕不另行通知。请留意华擎网站上公布的升级版本。你也可以在华擎网站找到最新的显卡和CPU支持表。
华擎网址：http://www.asrock.com
如果您需要与此主板有关的技术支持，请参观我们的网站以了解您使用机种的规格信息。
www.asrock.com/support/index.asp

## 1.1 包装盒内物品

华擎 *G31M-VS* 主板
（Micro ATX 规格：8.8 英寸 X 6.7 英寸，22.4 厘米 X 17.0 厘米）
华擎 *G31M-VS* 快速安装指南
华擎 *G31M-VS* 支持光盘
一条 80-conductor Ultra ATA 66/100 IDE 排线(选配)
一条 Serial ATA(SATA)数据线(选配)
一条 Serial ATA(SATA)硬盘电源线(选配)
一块 I/O 挡板

简体中文

## 1.2 主板规格

| | |
|---|---|
| 架构 | – Micro ATX 规格:<br>8.8 英寸 X 6.7 英寸, 22.4 厘米 X 17.0 厘米 |
| 处理器 | – LGA 775 支持 Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron® Dual Core / Celeron®,支持 Penryn Quad Core Yorkfield 和 Dual Core Wolfdale 处理器<br>– 支持高达 65W 的 CPU 电源<br>– FSB1333/1066/800MHz CPU<br>– 支持 Hyper-Threading 超线程技术 (详见*警告*1)<br>– 支持异步超频技术 (详见*警告*2)<br>– 支持 EM64T CPU |
| 芯片组 | – 北桥: Intel® G31<br>– 南桥: Intel® ICH7 |
| 系统内存 | – 支持双通道 DDR2 内存技术 (见警告 3)<br>– 配备 2 个 DDR2 DIMM 插槽<br>– 支持 DDR2 800/667 non-ECC、un-buffered 内存<br>– 系统最高支持 8GB 容量 (见警告 4) |
| 扩展插槽 | – 1 x PCI Express x16 插槽<br>– 1 x PCI 插槽 |
| 板载显卡 | – Intel® Graphics Media Accelerator 3100<br>– Pixel Shader 2.0 技术, DX9.0 显卡<br>– 最大共享内存 384MB (见警告 5) |
| 音效 | – 5.1 声道 Windows® Vista™ Premium 级别高保真音频 (ALC662 音频编解码器) |
| 板载 LAN 功能 | – Realtek PCIE x1 LAN 8103EL/8102EL<br>– 速度:10/100Mbps<br>– 支持网路唤醒 (Wake-On-LAN) |
| Rear Panel I/O (后面板输入/输出接口) | I/O 界面<br>– 1 个 PS/2 鼠标接口<br>– 1 个 PS/2 键盘接口<br>– 1 个串行接口<br>– 1 个 VGA 接口<br>– 4 个可直接使用的 USB 2.0 接口<br>– 1 个 RJ-45 局域网接口与 LED 指示灯(ACT/LINK LED 和 SPEED LED)<br>– 高保真音频插孔: 音频输出 / 输入 / 麦克风 |

| | |
|---|---|
| 连接头 | – 2 x SATAII 3.0Gb/s 连接头（不支持“RAID”和“Hot-Plug”功能)(详见*警告6*)<br>– 1 x ATA100 IDE 插座（最高支持2个IDE驱动器)<br>– 1 x 打印机端口接针<br>– CPU/机箱风扇接头<br>– 24针ATX电源接头<br>– 4针12V电源接头<br>– 内置音频接头<br>– 前置音频面板接头<br>– 2 x USB 2.0接口（支持4个USB 2.0接口)<br>（详见*警告7*） |
| BIOS | – 4Mb AMI BIOS<br>– 采用AMI BIOS<br>– 支持即插即用（Plug and Play,PnP)<br>– ACPI 1.1 电源管理<br>– 支持唤醒功能<br>– 支持jumperfree免跳线模式<br>– 支持SMBIOS 2.3.1<br>– VCCM电压多功能调节器<br>– 支持Smart BIOS（智能BIOS) |
| 支持光盘 | – 驱动程序,工具软件,杀毒软件（测试版本) |
| 独家功能 | – 华擎超频调节器（详见*警告8*）<br>– 智能节能器(Intelligent Energy Saver)<br>（见警告9）<br>– 即时开机功能<br>– Hybrid Booster(安心超频技术)：<br>– 支持CPU无级频率调控（见警告10）<br>– ASRock U-COP（见警告11）<br>– Boot Failure Guard (B.F.G.,启动失败恢复技术) |
| 硬件监控器 | – CPU温度侦测<br>– 主板温度侦测<br>– CPU风扇转速计<br>– 系统风扇转速计<br>– CPU静音风扇<br>– 电压范围: +12V, +5V, +3.3V, 核心电压 |
| 操作系统 | – Microsoft® Windows® 2000/XP/XP 64位元/Vista™/Vista™ 64位元适用于此主板 |
| 认证 | – FCC, CE |

* 请参阅华擎网站了解详细的产品信息: http://www.asrock.com

**警告**

请了解超频具有不可避免的风险，这些超频包括调节BIOS设置、运用异步超频技术或使用第三方超频工具。超频可能会影响您的系统稳定性，甚至会导致系统组件和设备的损坏。这种风险和代价须由您自己承担，我们对超频可能导致的损坏不承担责任。

## *警告！*

1、关于“Hyper-Threading Technology”（超线程技术）的设置，请参考CD光盘中的“User Manual”(用户手册，英文版)第29页，或是“BIOS设置程序”第6页(中文版)。

2、这款主板支持异步超频技术。请阅读第19页的”Untied Overclocking Technology”(自由超频技术)了解详情。

3、这款主板支援双通道内存技术。在您实现双通道内存技术之前，为能正确安装，请确认您已经阅读了第12页的内存模组安装指南。

4、由于操作系统的限制，在Windows® XP和Windows® Vista™下，供系统使用的实际内存容量可能小于4GB。对於Windows® XP 64位元和Windows® Vista™ 64位元搭配64位元CPU来说，不会存在这样的限制。

5、最大共享内存大小由芯片组厂商定义并且可以更改。请查阅Intel®网站了解最新资讯。

6、在将SATAII硬盘连接到SATAII接口之前，请阅读CD光盘中的“User Manual”(用户手册，英文版)第23页的“SATAII Hard Disk Setup Guide”（SATAII硬盘安装指南）调整您的SATAII硬盘驱动器为SATAII模式。您也可以直接将SATA硬盘连接到SATAII接口。

7、USB2.0电源管理在Windows® Vista™ 64位元/Vista™/XP 64位元/XP SP1或SP2/2000 SP4系统下可正常工作。

8、这是一款具有友好使用介面的华擎超频工具，让您通过硬件监控功能监控您的系统，帮助您在Windows®环境下对硬件运行超频以获得最佳的系统性能。请访问我们的网站了解华擎超频调节器的使用方法。
华擎网站：http://www.asrock.com

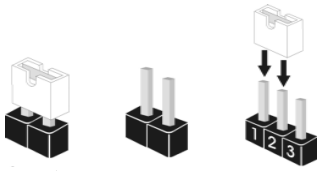
9、智能节能器(Intelligent Energy Saver)采用先进的软硬件专利设计，这项革新技术带来极佳的节能效果。换句话说，它可以在不牺牲性能的前提下，让系统更省电，并提高能源效率。请访问我们的网站了解智能节能器(Intelligent Energy Saver)的使用方法。
华擎网站：http://www.asrock.com

10、尽管本主板提供无级频率调控，但不推荐用户超频使用。不同于标准CPU总线频率的非标准频率可能会使系统不稳定，甚至会损害CPU和主板。

11、当检测到CPU 过热问题时，系统会自动关机。在您重新启动系统之前，请检查主板上的CPU风扇是否正常运转并拔出电源线，然后再将它插回。为了提高散热性，在安装PC系统时请在CPU和散热器之间涂一层导热胶。

## 1.3 跳线设置

插图所示的就是设置跳线的方法。当跳线帽放置在针脚上时，这个跳线就是“短接”。如果针脚上没有放置跳线帽，这个跳线就是“开路”。插图显示了一个3针脚的跳线，当跳线帽放置在针脚1和针脚2之间时就是“短接”。




短接　　开路

| 接脚 | 设定 | 说明 |
|---|---|---|
| PS2_USB_PWR1<br>(见第2页第1项) | 1_2 +5V　2_3 +5VSB | 短接pin2 和pin3，就可以设置+5VSB(待机)，使PS/2 或USB能唤醒系统。 |

注意： 选择+5VSB，电源必须能提供+2 AMP 或更高的待机电流。

| | |
|---|---|
| 清除CMOS<br>(CLRCMOS1，2针脚跳线)<br>(见第2页第15项) | 2 针脚跳线 |

注意： CLRCMOS1 允许你清除CMOS数据，这些CMOS数据包括系统密码、日期、时间和系统参数等系统设置信息。要清除系统参数和重置系统默认设置，然后用跳线帽短路CLRCMOS1的针脚5秒钟。

## 1.4 板载接头和接口

板载接头和接口不是跳线。切勿将跳线帽放置在这些接头和接口上。将跳线帽放置在接头和接口上将会导致主板的永久性损坏!

主 IDE 连接头(蓝色)

(39针 IDE1，见第2页第8项)

蓝色端接到主板上 黑色端接到硬盘驱动器上

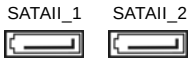
80 针 的 ATA 66/100 排线

**注意：** 请查阅您的 IDE 驱动器供应商提供的说明书了解详细资料。

Serial ATAII 接口

(SATAII_1:见第2页第12项)

(SATAII_2:见第2页第11项)




这里有两组Serial ATAII (SATAII)接口支持SATA或SATAII硬盘作为内部储存设置。目前SATAII界面理论上可提供高达3.0Gb/s的数据传输速率。

Serial ATA (SATA) 数据线 (选配)

SATA数据线的任意一端均可连接SATA/SATAII硬盘或者主板上的SATAII接口。

Serial ATA (SATA) 电源线 (选配)

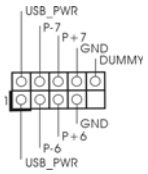
请将SATA电源线黑色的一端连接到任一个SATA驱动器的电源接口。然后将SATA电源线白色的一端连接到电源适配器的电源接口。

简体中文

USB 2.0 扩展接头

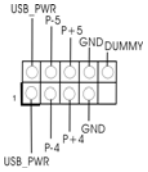
(9针 USB6_7)

(见第2页第16项)




(9针 USB4_5)

(见第2页第13项)

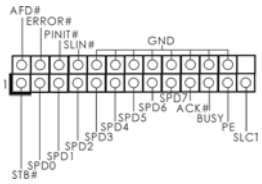



除了位於I/O面板的四个默认USB 2.0接口之外，这款主板有两组USB 2.0接针。每组USB 2.0接针可以支持两个USB 2.0接口。

打印机端口接针

(25针 LPT1)

(见第2页第22项)




这是一个连接打印机端口的接口，方便您连接打印机设备。

内置的音频接头

(4针 CD1)

(CD1：见第2页第20项)

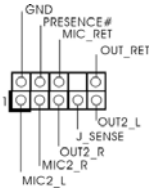
CD1

可以通过CD-ROM，DVD-ROM，TV 调谐器或MPEG卡接收音频输入。

前置音频面板接头

(9针 HD_AUDIO1)

(见第2页第21项)




可以方便连接音频设备。

1. 高保真音频(High Definition Audio，HDA)支持智能音频接口检测功能(Jack Sensing)，但是机箱面板的连线必须支持HDA才能正常使用。请按我们提供的手册和机箱手册上的使用说明安装您的系统。
2. 如果您使用AC'97音频面板，请按照下面的步骤将它安装到前面板音频接针：
   A. 将Mic_IN(MIC)连接到MIC2_L。
   B. 将Audio_R(RIN)连接到OUT2_R，将Audio_L(LIN)连接到OUT2_L。
   C. 将Ground(GND)连接到Ground(GND)。
   D. MIC_RET和OUT_RET仅用于HD音频面板。您不必将它们连接到AC'97音频面板。

简体中文

E. 进入BIOS设置程序。进入Advanced Settings(高级设置)并选择Chipset Configuration(芯片组配置)。将Front Panel Control(前面板控制)选项由Auto(自动)设置为Enabled(启用)。

F. 进入Windows系统。点击右下角任务栏上的图标进入Realtek HD Audio Manager(Realtek高保真音频管理器)。

支持Windows® 2000/XP/XP 64位元操作系统:

点击"Audio I/O"(音频输入/输出接口),点选"Connector Settings"(连接设置) ,选择"Disable front panel jack detection"(关闭前面板插孔检测)并点击"OK"保存更改。

支持Windows® Vista™/Vista™ 64位元操作系统:

点击右上角的"Folder"(文件)图标 选择"Disable front panel jack detection"(关闭前面板插孔检测)并点击"OK"保存更改。

G. 启用前置麦克风。

支持Windows® 2000/XP/XP 64位元操作系统:

请选择"Front Mic"(前置麦克风)作为默认录音设备。

如果您想通过前置麦克风聆听您的声音,请点击"Playback"(播放)部分"Front Mic"(前置麦克风)一项里的"Mute"(静音)图标。

支持Windows® Vista™/Vista™ 64位元操作系统:

进入Realtek控制面版的"Front Mic"(前置麦克风)选项卡。

点击"Set Default Device"(设置默认设备)将前置麦克风设置为默认录音设备。

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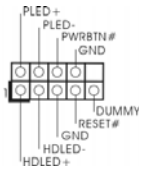
**系统面板接头**

(9针 PANEL1)

(见第2页第9项)




这个接头提供数个系统前面板功能。

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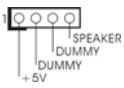
**机箱喇叭接头**

针 SPEAKER1)

(见第2页第10项)




请将机箱喇叭连接到这个接(4头。

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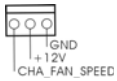
**机箱风扇接头**

(3针 CHA_FAN1)

(见第2页第14项)




请将机箱风扇连接线接到这个接头，并让黑线与接地的针脚相接。

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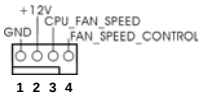
**CPU风扇接头**

(4针 CPU_FAN1)

(见第2页第3项)




请将CPU风扇连接线接到这个接头，并让黑线与接地的针脚相接。

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简体中文

虽然此主板支持4-Pin CPU风扇(Quiet Fan,静音风扇),但是没有调速功能的3-Pin CPU风扇仍然可以在此主板上正常运行。如果您打算将3-Pin CPU风扇连接到此主板的CPU风扇接口,请将它连接到Pin 1-3。

Pin 1-3 连接

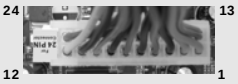
3-Pin风扇的安装

ATX电源接头
(24针 ATXPWR1)
(见第2页第4项)

请将ATX电源供应器连接到这个接头。

虽然此主板提供24-pin ATX电源接口,但是您仍然可以使用传统的20-pin ATX电源。为了使用20-pin ATX电源,请顺著Pin 1和Pin 3插上电源接头。

20-Pin ATX电源安装说明




ATX 12V电源接口
(4针 ATX12V1)
(见第2页第2项)

请注意,必需将带有ATX 12V插头的电源供应器连接到这个插座,这样就可以提供充足的电力。如果不这样做,就会导致供电故障。

简体中文

## 2. BIOS信息

主板上的Flash Memory存储了BIOS设置程序。请再启动电脑进行开机自检(POST)时按下<F2>键进入BIOS设置程序；此外，你也可以让开机自检(POST)进行常规检验。如果你需要在开机自检(POST)之后进入BIOS设置程序，请按下<Ctrl>+<Alt>+<Delete>键重新启动电脑，或者按下系统面板上的重启按钮。有关BIOS设置的详细信息，请查阅随机支持光盘里的用户手册(PDF文件)。

## 3. 支持光盘信息

本主板支持各种微软视窗操作系统：Microsoft® Windows® 2000/XP/XP 64位元/Vista™/Vista™ 64位元。主板随机支持光盘包含各种有助于提高主板效能的必要驱动和实用程序。请将随机支持光盘放入光驱里，如果电脑的“自动运行”功能已启用，屏幕将会自动显示主菜单。如果主菜单不能自动显示，请查找支持光盘内BIN文件夹下的 “ASSETUP.EXE”，并双击它，即可调出主菜单。

## 电子信息产品污染控制标示

依据中国发布的「电子信息产品污染控制管理办法」及SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为10年。

图一

## 有毒有害物质或元素的名称及含量说明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

| 部件名称 | 有害物质或元素 | | | | | |
|---|---|---|---|---|---|---|
| | 铅(Pb) | 镉(Cd) | 汞(Hg) | 六价铬(Cr(VI)) | 多溴联苯(PBB) | 多溴二苯醚(PBDE) |
| 印刷电路板及其电子组件 | X | O | O | O | O | O |
| 外部信号连接头及线材 | X | O | O | O | O | O |

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006标准规定的限量要求，然该部件仍符合欧盟指令2002/95/EC的规范。

备注：此产品所标示之环保使用年限，系指在一般正常使用状况下。