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

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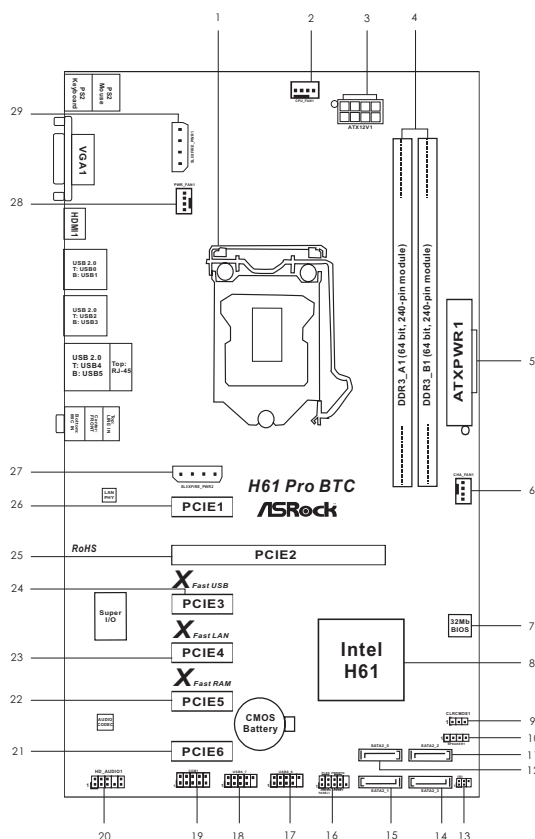
The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.

“Perchlorate Material-special handling may apply, see
www.dtsc.ca.gov/hazardouswaste/perchlorate”

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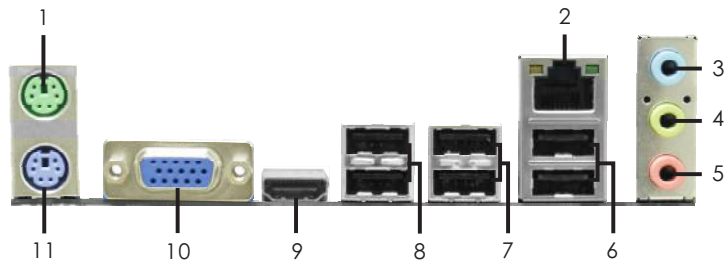


Motherboard Layout



- | | | | |
|----|---|----|--|
| 1 | 1155-Pin CPU Socket | 15 | SATA2 Connector (SATA2_1) |
| 2 | CPU Fan Connector (CPU_FAN1) | 16 | System Panel Header (PANEL1) |
| 3 | ATX 12V Power Connector (ATX12V1) | 17 | USB 2.0 Header (USB8_9) |
| 4 | 2 x 240-pin DDR3 DIMM Slots
(Dual Channel: DDR3_A1, DDR3_B1) | 18 | USB 2.0 Header (USB6_7) |
| 5 | ATX Power Connector (ATXPWR1) | 19 | COM Port Header (COM1) |
| 6 | Chassis Fan Connector (CHA_FAN1) | 20 | Front Panel Audio Header (HD_AUDIO1) |
| 7 | 32Mb SPI Flash | 21 | PCI Express 2.0 x1 Slot (PCIE6) |
| 8 | Intel H61 Chipset | 22 | PCI Express 2.0 x1 Slot (PCIE5) |
| 9 | Clear CMOS Jumper (CLRCMOS1) | 23 | PCI Express 2.0 x1 Slot (PCIE4) |
| 10 | Chassis Speaker Header (SPEAKER1) | 24 | PCI Express 2.0 x1 Slot (PCIE3) |
| 11 | SATA2 Connector (SATA2_2) | 25 | PCI Express 3.0 x16 Slot (PCIE2) |
| 12 | SATA2 Connector (SATA2_0) | 26 | PCI Express 2.0 x1 Slot (PCIE1) |
| 13 | Infrared Module Header (IR1) | 27 | SLI/XFire Power Connector (SLI/XFIRE_PWR2) |
| 14 | SATA2 Connector (SATA2_3) | 28 | Power Fan Connector (PWR_FAN1) |
| | | 29 | SLI/XFire Power Connector (SLI/XFIRE_PWR1) |

I/O Panel



- 1

PS/2 Mouse Port (Green)
- * 2

LAN RJ-45 Port
- 3

Line In (Light Blue)
- ** 4

Front Speaker (Lime)
- 5

Microphone (Pink)
- 6

USB 2.0 Ports (USB45)
- 7

USB 2.0 Ports (USB23)
- 8

USB 2.0 Ports (USB01)
- 9

HDMI Port
- 10

D-Sub Port
- 11

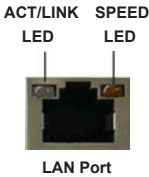
PS/2 Keyboard Port (Purple)

* There are two LED next to the LAN port. Please refer to the table below for the LAN port LED indications.

LAN Port LED Indications

Activity/Link LED	
Status	Description
Off	No Link
Blinking	Data Activity
On	Link

SPEED LED	
Status	Description
Off	10Mbps connection
Orange	100Mbps connection
Green	1Gbps connection



To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. After restarting your computer, you will find "VIA HD Audio Deck" tool on your system. Please follow below instructions according to the OS you install.

For Windows® XP / XP 64-bit OS:

Please click "VIA HD Audio Deck" icon  , and click "Speaker". Then you are allowed to

select "2 Channel" or "4 Channel". Click "Power" to save your change.

For Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit OS:

Please click "VIA HD Audio Deck" icon  , and click "Advanced Options" on the left side

on the bottom. In "Advanced Options" screen, select "Independent Headphone", and click "OK" to save your change.

1. Introduction

Thank you for purchasing ASRock **H61 Pro BTC** 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 **H61 Pro BTC** Motherboard (ATX Form Factor)

ASRock **H61 Pro BTC** Quick Installation Guide

ASRock **H61 Pro BTC** Support CD

2 x Serial ATA (SATA) Data Cables (Optional)

1 x I/O Panel Shield



ASRock Reminds You...

To get better performance in Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit, it is recommended to set the BIOS option in Storage Configuration to AHCI mode. For the BIOS setup, please refer to the "User Manual" in our support CD for details.

1.2 Specifications

Platform	- ATX Form Factor - All Solid Capacitor design
CPU	- Supports 3rd and 2nd generation Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® in LGA1155 package - Supports Intel® Turbo Boost 2.0 Technology - Supports K-Series unlocked CPUs
Chipset	- Intel® H61 - Supports Intel® Rapid Start Technology and Smart Connect Technology
Memory	- Dual Channel DDR3 Memory Technology - 2 x DDR3 DIMM Slots - Supports DDR3 1600/1333/1066 non-ECC, un-buffered memory (DDR3 1600 with Intel® Ivy Bridge CPU, DDR3 1333 with Intel® Sandy Bridge CPU) - Max. capacity of system memory: 16GB (see CAUTION 1) - Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2 with Intel® Ivy Bridge CPU
Expansion Slot	- 1 x PCI Express 3.0 x16 Slot (PCIe2 @ x16 mode) * PCIe 3.0 is only supported with Intel® Ivy Bridge CPU. With Intel® Sandy Bridge CPU, it only supports PCIe 2.0. - 5 x PCI Express 2.0 x1 Slots
Graphics	* Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated. - Supports Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 with Intel® Ivy Bridge CPU - Supports Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) with Intel® Sandy Bridge CPU - Pixel Shader 5.0, DirectX 11 with Intel® Ivy Bridge CPU. Pixel Shader 4.1, DirectX 10.1 with Intel® Sandy Bridge CPU. - Max. shared memory 1760MB with Intel® Ivy Bridge CPU. Max. shared memory 1759MB with Intel® Sandy Bridge CPU.

	- Dual VGA Output: support HDMI and D-Sub ports by independent display controllers - Supports HDMI Technology with max. resolution up to 1920x1200 @ 60Hz - Supports D-Sub with max. resolution up to 2048x1536 @ 75Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI Port (Compliant HDMI monitor is required) (see CAUTION 2) - Supports HDCP with HDMI Port - Supports Full HD 1080p Blu-ray (BD) playback with HDMI Port
Audio	- 5.1 CH HD Audio (VIA® VT1705 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Supports Wake-On-LAN - Supports LAN Cable Detection - Supports Energy Efficient Ethernet 802.3az - Supports PXE
Rear Panel I/O	- 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x D-Sub Port - 1 x HDMI Port - 6 x USB 2.0 Ports - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jacks: Line in/Front Speaker/Microphone
Storage	- 4 x SATA2 3.0 Gb/s Connectors, support NCQ, AHCI and Hot Plug
Connector	- 1 x IR Header - 1 x COM Port Header - 1 x CPU Fan Connector (4-pin) - 1 x Chassis Fan Connector (4-pin) - 1 x Power Fan Connector (4-pin) - 1 x 24 pin ATX Power Connector - 1 x 8 pin 12V Power Connector - 2 x SLI/XFire Power Connectors - 1 x Front Panel Audio Connector - 2 x USB 2.0 Headers (Support 4 USB 2.0 ports)
BIOS Feature	- 32Mb AMI UEFI Legal BIOS with GUI support - Supports "Plug and Play"

	- ACPI 1.1 Compliant wake up events - Supports jumperfree - SMBIOS 2.3.1 support - iGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltage multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), Google Chrome Browser and Toolbar
Hardware Monitor	- CPU temperature sensing - Chassis temperature sensing - CPU/Chassis/Power Fan Tachometer - CPU/Chassis Quiet Fan (Auto adjust chassis fan speed by CPU temperature) - CPU/Chassis Fan multi-speed control - Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant
Certifications	- FCC, CE, WHQL - ErP/EuP ready (ErP/EuP ready power supply is required)

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

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 third-party overclocking tools. Overclocking may affect your system's 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. Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® 8 / 7 / Vista™ / XP. For Windows® OS with 64-bit CPU, there is no such limitation. You can use ASRock XFast RAM to utilize the memory that Windows® cannot use.
2. xvYCC and Deep Color are only supported under Windows® 8 64-bit / 8 / 7 64-bit / 7. Deep Color mode will be enabled only if the display supports 12bpc in EDID. HBR is supported under Windows® 8 64-bit / 8 / 7 64-bit / 7 / Vista™ 64-bit / Vista™.

1.3 Unique Features

ASRock Extreme Tuning Utility (AXTU)

ASRock Extreme Tuning Utility (AXTU) is an all-in-one tool to ne-tune different system functions in a user-friendly interface, which includes Hardware Monitor, Fan Control, Overclocking, OC DNA, IES and XFast RAM. In Hardware Monitor, it shows the major readings of your system. In Fan Control, it shows the fan speed and temperature for you to adjust. In Overclocking, you are allowed to overclock CPU frequency for optimal system performance. In OC DNA, you can save your OC settings as a profile and share it with your friends. Your friends then can load the OC profile to their own system to get the same OC settings. In IES (Intelligent Energy Saver), the voltage regulator can reduce the number of output phases to improve efficiency when the CPU cores are idle without sacrificing computing performance. In XFast RAM, it fully utilizes the memory space that cannot be used under Windows® OS 32-bit CPU.

ASRock Instant Boot

ASRock Instant Boot allows you to turn on your PC in just a few seconds, provides a much more efficient way to save energy, time, money, and improves system running speed for your system. It leverages the S3 and S4 ACPI features which normally enable the Sleep/Standby and Hibernation modes in Windows® to shorten boot up time. By calling S3 and S4 at specific timing during the shutdown and startup process, Instant Boot allows you to enter your Windows® desktop in a few seconds.

ASRock Instant Flash

ASRock Instant Flash is a BIOS flash utility embedded in Flash ROM. This convenient BIOS update tool allows you to update system BIOS without entering operating systems first like MS-DOS or Windows®. With this utility, you can press the <F6> key during the POST or the <F2> key to enter into the BIOS setup menu to access ASRock Instant Flash. Just launch this tool and save the new BIOS file to your USB flash drive, floppy disk or hard drive, then you can update your BIOS only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system.

ASRock APP Charger

If you desire a faster, less restricted way of charging your Apple devices, such as iPhone/iPad/iPod Touch, ASRock has prepared a wonderful solution for you - ASRock APP Charger. Simply install the APP Charger driver, it makes your iPhone charge much quickly from your computer and up to 40% faster than before. ASRock APP Charger allows you to quickly charge many Apple devices simultaneously and even supports continuous charging when your PC enters into Standby mode (S1), Suspend to RAM (S3), hibernation mode (S4) or power off (S5). With APP Charger driver installed, you can easily enjoy the marvelous charging experience.

ASRock XFast USB

ASRock XFast USB can boost USB storage device performance. The performance may depend on the properties of the device.

ASRock XFast LAN

ASRock XFast LAN provides a faster internet access, which includes the benefits listed below. LAN Application Prioritization: You can configure your application's priority ideally and/or add new programs. Lower Latency in Game: After setting online game's priority higher, it can lower the latency in games. Traffic Shaping: You can watch Youtube HD videos and download simultaneously. Real-Time Analysis of Your Data: With the status window, you can easily recognize which data streams you are transferring currently.

ASRock XFast RAM

ASRock XFast RAM is a new function that is included into ASRock Extreme Tuning Utility (AXTU). It fully utilizes the memory space that cannot be used under Windows® OS 32-bit CPU. ASRock XFast RAM shortens the loading time of previously visited websites, making web surfing faster than ever. And it also boosts the speed of Adobe Photoshop 5 times faster. Another advantage of ASRock XFast RAM is that it reduces the frequency of accessing your SSDs or HDDs in order to extend their lifespan.

ASRock Crashless BIOS

ASRock Crashless BIOS allows users to update their BIOS without fear of failing. If power loss occurs during the BIOS update process, ASRock Crashless BIOS will automatically finish the BIOS update procedure after regaining power. Please note that BIOS files need to be placed in the root directory of your USB disk. Only USB2.0 ports support this feature.

ASRock OMG (Online Management Guard)

Administrators are able to establish an internet curfew or restrict internet access at specified times via OMG. You may schedule the starting and ending hours of internet access granted to other users. In order to prevent users from bypassing OMG, guest accounts without permission to modify the system time are required.

ASRock Internet Flash

ASRock Internet Flash searches for available UEFI firmware updates from our servers. In other words, the system can auto-detect the latest UEFI from our servers and flash them without entering Windows® OS. Please note that you must be running on a DHCP configured computer in order to enable this function.

ASRock Dehumidifier Function

Users may prevent motherboard damages due to dampness by enabling "Dehumidifier Function". When enabling Dehumidifier Function, the computer will power on automatically to dehumidify the system after entering S4/S5 state.

ASRock Fast Boot

With ASRock's exclusive Fast Boot technology, it takes less than 1.5 seconds to logon to Windows® 8 from a cold boot. No more waiting! The speedy boot will completely change your user experience and behavior.

ASRock Restart to UEFI

Windows® 8 brings the ultimate boot up experience. The lightning boot up speed makes it hard to access the UEFI setup. ASRock Restart to UEFI technology is designed for those requiring frequent UEFI access. It allows users to easily enter the UEFI automatically when turning on the PC next time. Just simply enable this function; the PC will be assured to access the UEFI directly in the very beginning.

ASRock Combo Cooler Option (C.C.O.)

Combo Cooler Option (C.C.O.) provides the flexible option to adopt three different CPU cooler types, Socket LGA 775, LGA 1155 and LGA 1156. Please be noticed that not all the 775 and 1156 CPU Fan can be used.

ASRock Good Night LED

ASRock Good Night LED technology can offer you a better environment by extinguishing the unessential LED. By enabling Good Night LED in BIOS, the Power / HDD / LAN LED will be switched off when system is on. Not only this, Good night LED will automatically switch off Power and Keyboard LED when the system enters into Standby / Hibernation mode as well.

2. Installation

This is an ATX form factor motherboard. Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it.



Make sure to unplug the power cord before installing or removing the motherboard. Failure to do so may cause physical injuries to you and damages to motherboard components.

2.1 Screw Holes

Place screws into the holes indicated by circles to secure the motherboard to the chassis.



Do not over-tighten the screws! Doing so may damage the motherboard.

2.2 Pre-installation Precautions

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

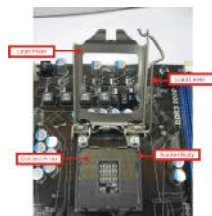
1. Unplug the power cord from the wall socket before touching any component.
2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before 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 antistatic pad or in the bag that comes with the component.



Before you install or remove any component, ensure that the power is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.

2.3 CPU Installation

For the installation of Intel 1155-Pin CPU, please follow the steps below.



1155-Pin Socket Overview



Before you insert the 1155-Pin CPU into the socket, please check if the CPU surface is unclear 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.

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.

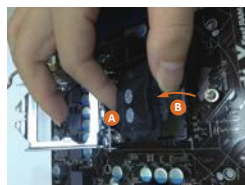
Step 1-3. Rotate the load plate to fully open position at approximately 100 degrees.



Step 2. Remove PnP Cap:

Step 2-1. Attach your index finger to the upper edge of the PnP Cap.

Step 2-2. Use your thumb to remove PnP Cap (Pick and Place Cap) from the CPU socket by lifting the cap tab.



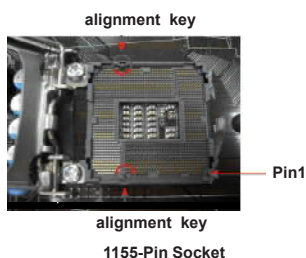
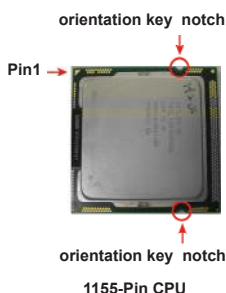
1. It is recommended to use the cap tab to handle and avoid kicking off the PnP cap.
2. This cap must be placed if returning the motherboard for after service.

Step 3. Insert the 1155-Pin CPU:

Step 3-1. Hold the CPU by the edge where is marked with black line.



Step 3-2. Orient the CPU with IHS (Integrated Heat Sink) up. Locate Pin1 and the two orientation key notches.



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

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

Step 3-4. Verify that the CPU is within the socket and properly mated to the orientation keys.



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.



Please be noticed that this motherboard supports Combo Cooler Option (C.C.O.), which provides the flexible option to adopt three different CPU cooler types, Socket LGA 775, LGA 1155 and LGA 1156. The white throughholes are for Socket LGA 1155/1156 CPU fan.



2.4 Installation of CPU Fan and Heatsink

This motherboard is equipped with 1155-Pin socket that supports Intel 1155-Pin CPU. Please adopt the type of heatsink and cooling fan compliant with Intel 1155-Pin CPU to dissipate heat. Before you installed the heatsink, you need to spray thermal interface material between the CPU and the heatsink to improve heat dissipation. Ensure that the CPU and the heatsink are securely fastened and in good contact with each other. Then connect the CPU fan to the CPU_FAN connector (CPU_FAN1, see page 2, No. 2).

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 1155-Pin CPU.

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

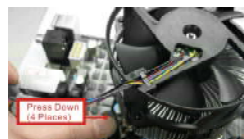


- Step 2. Place the heatsink onto the socket. Ensure fan cables are oriented on side closest to the CPU fan connector on the motherboard (CPU_FAN1, see page 2, No. 2).



- Step 3. Align fasteners with the motherboard through-holes.

- 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.

2.5 Installation of Memory Modules (DIMM)

This motherboard provides two 240-pin DDR3 (Double Data Rate 3) 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 DDR3 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 or DDR2 memory module into DDR3 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.
3. Some DDR3 1GB double-sided DIMMs with 16 chips may not work on this motherboard. It is not recommended to install them on this motherboard.

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.

2.6 Expansion Slots (PCI Express Slots)

There are 6 PCI Express slots on this motherboard.

PCIe slots:

PCIe1 / PCIe3 / PCIe4 / PCIe5 / PCIe6 (PCIe 2.0 x1 slot) is used for PCI Express cards with x1 lane width cards.

PCIe2 (PCIe 3.0 x16 slot) is used for PCI Express x16 lane width graphics cards.



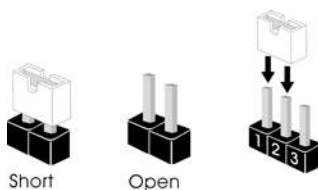
Only PCIe2 slot supports Gen 3 speed. To run the PCI Express in Gen 3 speed, please install an Ivy Bridge CPU. If you install a Sandy Bridge CPU, the PCI Express will run only at PCI Express Gen 2 speed.

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 system unit cover (if your motherboard is already installed in a chassis).
- Step 3. Remove the bracket facing the slot that you intend to use. Keep the screws for later use.
- Step 4. Align the card connector with the slot and press firmly until the card is completely seated on the slot.
- Step 5. Fasten the card to the chassis with screws.
- Step 6. Replace the system cover.

2.7 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.



Jumper	Setting	Description
Clear CMOS Jumper (CLRCMOS1) (see p.2, No. 9)	 1_2 Default	 2_3 Clear CMOS

Note: CLRCMOS1 allows you to clear the data in CMOS. 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 pin2 and pin3 on CLRCMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action. Please be noted that the password, date, time, user default profile, 1394 GUID and MAC address will be cleared only if the CMOS battery is removed.

2.8 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!

Serial ATAII Connectors

(SATA2_0: see p.2, No. 12)

(SATA2_1: see p.2, No. 15)

(SATA2_2: see p.2, No. 11)

(SATA2_3: see p.2, No. 14)



These four Serial ATAII (SATAII) connectors support SATA data cables 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 this motherboard.

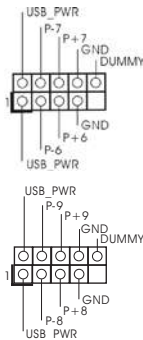
USB 2.0 Headers

(9-pin USB6_7)

(see p.2 No. 18)

(9-pin USB8_9)

(see p.2 No. 17)

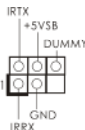


Besides six default USB 2.0 ports on the I/O panel, there are two USB 2.0 headers on this motherboard. Each USB 2.0 header can support two USB 2.0 ports.

Infrared Module Header

(5-pin IR1)

(see p.2 No. 13)

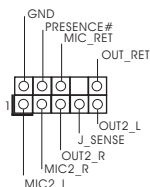


This header supports an optional wireless transmitting and receiving infrared module.

Front Panel Audio Header

(9-pin HD_AUDIO1)

(see p.2 No. 20)



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

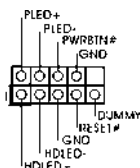


1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instruction in our manual and chassis manual to install your system.
2. If you use AC'97 audio panel, please install it to the front panel audio header as below:
 - 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.

System Panel Header

(9-pin PANEL1)

(see p.2 No. 16)



This header accommodates several system front panel functions.



Connect the power switch, reset switch and system status indicator on the chassis to this header according to the pin assignments below. Note the positive and negative pins before connecting the cables.

PWRBTN (Power Switch):

Connect to the power switch on the chassis front panel. You may configure the way to turn off your system using the power switch.

RESET (Reset Switch):

Connect to the reset switch on the chassis front panel. Press the reset switch to restart the computer if the computer freezes and fails to perform a normal restart.

PLED (System Power LED):

Connect to the power status indicator on the chassis front panel. The LED is on when the system is operating. The LED keeps blinking when the system is in S1 sleep state. The LED is off when the system is in S3/S4 sleep state or powered off (S5).

HDLED (Hard Drive Activity LED):

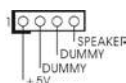
Connect to the hard drive activity LED on the chassis front panel. The LED is on when the hard drive is reading or writing data.

The front panel design may differ by chassis. A front panel module mainly consists of power switch, reset switch, power LED, hard drive activity LED, speaker and etc. When connecting your chassis front panel module to this header, make sure the wire assignments and the pin assignments are matched correctly.

Chassis Speaker Header

(4-pin SPEAKER 1)

(see p.2 No. 10)



Please connect the chassis speaker to this header.

Chassis and Power Fan Connectors

(4-pin CHA_FAN1)

(see p.2 No. 6)



Please connect the fan cables to the fan connectors and match the black wire to the ground pin.

(4-pin PWR_FAN1)

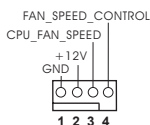
(see p.2 No. 28)



CPU Fan Connectors

(4-pin CPU_FAN1)

(see p.2 No. 2)



Please connect the CPU fan cable to the connector and match the black wire to the ground pin.



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.

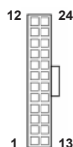
Pin 1-3 Connected ←
3-Pin Fan Installation



ATX Power Connector

(24-pin ATXPWR1)

(see p.2 No. 5)

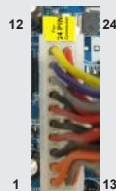


Please connect an ATX power supply to this connector.



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 Power Connector

(8-pin ATX12V1)

(see p.2 No. 3)



Please connect an ATX 12V power supply to this connector.



Though this motherboard provides 8-pin ATX 12V power connector, it can still work if you adopt a traditional 4-pin ATX 12V power supply. To use the 4-pin ATX power supply, please plug your power supply along with Pin 1 and Pin 5.

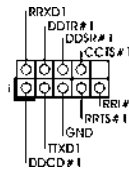


4-Pin ATX 12V Power Supply Installation

Serial Port Header

(9-pin COM1)

(see p.2 No. 19)



This COM1 header supports a serial port module.

SLI/XFire Power Connectors

(4-pin SLI/XFIRE_PWR1)

(see p.2 No. 29)



(4-pin SLI/XFIRE_PWR2)

(see p.2 No. 27)



Please connect these connectors to the power supply when three graphics cards are installed on this motherboard.

3. BIOS Information

The Flash Memory on the motherboard stores BIOS Setup Utility. When you start up the computer, please press <F2> or 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 pre-determined 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: 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 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 **H61 Pro BTC** 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 Handbuchs 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 **H61 Pro BTC** Motherboard (ATX-Formfaktor)

ASRock **H61 Pro BTC** Schnellinstallationsanleitung

ASRock **H61 Pro BTC** Support-CD

Zwei Serial ATA (SATA) -Datenkabel (optional)

Ein I/O Shield



ASRock erinnert...

Zur besseren Leistung unter Windows® 8 / 8 64 Bit / 7 / 7 64 Bit / Vista™ / Vista™ 64 Bit empfehlen wir, die Speicherkonfiguration im BIOS auf den AHCI-Modus einzustellen. Hinweise zu den BIOS-Einstellungen finden Sie in der Bedienungsanleitung auf der mitgelieferten CD.

1.2 Spezifikationen

Plattform	- ATX-Formfaktor - Alle Feste Kondensatordesign
CPU	- Unterstützt Intel® Core™ i7- / i5- / i3- / Xeon® - / Pentium® - / Celeron®-Prozessoren der 3ten und 2ten Generation im LGA1155-Package - Unterstützt Intel® Turbo Boost 2.0-Technologie - Unterstützt freigegebene CPU der K-Serie
Chipsatz	- Intel® H61 - Unterstützt Intel® Rapid Start Technology und Smart Connect Technology
Speicher	- Unterstützung von Dual-Kanal-Speichertechnologie - 2 x Steckplätze für DDR3 - Unterstützt DDR3 1600/1333/1066 non-ECC, ungepufferter Speicher (DDR3 1600 mit Intel® Ivy Bridge-Prozessor, DDR3 1333 mit Intel® Sandy Bridge-Prozessor) - Max. Kapazität des Systemspeichers: 16GB - Unterstützt Intel® Extreme Memory Profile (XMP) 1.3/1.2 mit Intel® Ivy Bridge-Prozessor
Erweiterungssteckplätze	- 1 x PCI Express 3.0 x16-Steckplatz (PCIe2 für x16-Modus) * PCIe 3.0 wird nur mit Intel® Ivy Bridge-Prozessor unterstützt. Mit Intel® Sandy Bridge-Prozessor wird nur PCIe 2.0 unterstützt. - 5 x PCI Express 2.0 x1-Steckplätze
Onboard-VGA	* Integrierte Intel® HD-Grafikdarstellungen und die VGA-Ausgänge können nur durch GPU-integrierte Prozessoren unterstützt werden. - Unterstützt hochauflösende integrierte Intel®-Grafiklösungen: Intel® Quick-Sync-Video 2.0, Intel® InTru™ 3D, Intel® Clear-Video-Technik (HD), Intel® Insider™, Intel® HD Graphics 2500/4000 mit Intel® Ivy Bridge-Prozessor - Unterstützt hochauflösende integrierte Intel®-Grafiklösungen: Intel® Quick-Sync-Video, Intel® InTru™ 3D, Intel® Clear-Video-Technik (HD), Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) mit Intel® Sandy Bridge-Prozessor - Pixel Shader 5.0, DirectX 11 mit Intel® Ivy Bridge-Prozessor, Pixel Shader 4.1, DirectX 10.1 mit Intel® Sandy Bridge-Prozessor

	- Maximal gemeinsam genutzter Speicher 1760MB mit Intel® Ivy Bridge-Prozessor. Maximal gemeinsam genutzter Speicher 1759MB mit Intel® Sandy Bridge-Prozessor. - Doppel-VGA Ausgabe: unterstützt HDMI und D-Sub Ports durch unabhängige Bildschirmanzeige Kontrollleure - Unterstützt HDMI mit einer maximalen Auflösung von 1920 x 1200 bei 60 Hz - Unterstützt D-Sub mit einer maximalen Auflösung von 2048 x 1536 bei 75 Hz - Unterstützt Auto Lip Sync, Deep Color (12bpc), xvYCC und HBR (High Bit Rate-Audio) mit HDMI (kompatibler HDMI-Bildschirm erforderlich) - Unterstützt HDCP-Funktion mit HDMI-Port - Unterstützt 1080p Blu-ray (BD) / HD-DVD-Wiedergabe mit HDMI-Port
Audio	- 5.1 CH HD Audio (VIA® VT1705 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Unterstützt Wake-On-LAN - Unterstützt LAN-Kabelerkennung - Unterstützt energieeffizientes Ethernet 802.3az - Unterstützt PXE
E/A-Anschlüsse an der Rückseite	- 1 x PS/2-Mausanschluss - 1 x PS/2-Tastaturanschluss - 1 x D-Sub port - 1 x HDMI port - 6 x Standard-USB 2.0-Anschlüsse - 1 x RJ-45 LAN Port mit LED (ACT/LINK LED und SPEED LED) - HD Audiobuchse: Audioeingang / Lautsprecher vorne / Mikrofon
Speichergerät	- 4 x SATA2 3,0 GB/s-Anschlüsse, unterstützen NCQ-, AHCI- und „Hot Plug“ (Hot-Plugging)- Funktionen
Anschlüsse	- 1 x Infrarot-Modul-Header - 1 x COM-Anschluss-Header - 1 x CPUlüfter-Anschluss (4-pin) - 1 x Gehäuselüfter-Anschluss (4-pin) - 1 x Stromlüfter-Anschluss (4-pin) - 1 x 24-pin ATX-Netz-Header - 1 x 8-pin anschluss für 12V-ATX-Netzteil - 2 x SLI/XFire-Netz-Header

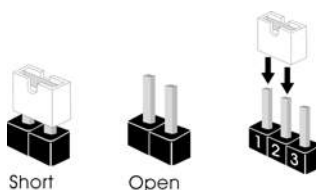
	- 1 x Anschluss für Audio auf der Gehäusevorderseite - 2 x USB 2.0-Anschlüsse (Unterstützung 4 zusätzlicher USB 2.0-Anschlüsse)
BIOS	- 32Mb AMIs Legal BIOS UEFI mit GUI-Unterstützung - Unterstützung für "Plug and Play" - ACPI 1.1-Weckfunktionen - JumperFree-Übertaktungstechnologie - SMBIOS 2.3.1 - IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Stromspannung Multianpassung
CD d'assistance	- Pilotes, utilitaires, logiciel anti-virus (version d'évaluation), Google Chrome Browser und Toolbar
Hardware Monitor	- Überwachung der CPU-Temperatur - Motherboardtemperaturerkennung - Drehzahlmessung für CPU/Gehäuse/Stromlüfter - Geräuscharmer CPU-/Gehäuselüfter (ermöglicht die automatische Anpassung der Gehäuselüftergeschwindigkeit durch CPU- Temperatur) - Mehrstufige Geschwindigkeitsteuerung für CPU-/Gehäuselüfter - Spannungsüberwachung: +12V, +5V, +3.3V, Vcore
Betriebssysteme	- Unterstützt Microsoft® Windows® 8 / 8 64-Bit / 7 / 7 64-Bit / Vista™ / Vista™ 64-Bit / XP / XP 64-Bit
Zertifizierungen	- FCC, CE, WHQL - Gemäß Ökodesign-Richtlinie (ErP/EuP) (Stromversorgung gemäß Ökodesign-Richtlinie (ErP/EuP) erforderlich)

* Für die ausführliche Produktinformation, besuchen Sie bitte unsere Website:

<http://www.asrock.com>

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 "Open". Die Abbildung zeigt einen 3-Pin Jumper dessen Pin1 und Pin2 "Gebrückt" sind, bzw. es befindet sich eine Jumper-Kappe auf diesen beiden Pins.



Jumper	Einstellung	Beschreibung
CMOS löschen (CLRCMOS1, 3-Pin jumper) (siehe S.2, No. 9)	1_2  Default-Einstellung	2_3  CMOS löschen

Hinweis: CLRCMOS1 ermöglicht Ihnen die Löschung der Daten im CMOS. Zum Löschen und Zurücksetzen der Systemparameter auf die Standardeinrichtung schalten Sie den Computer bitte aus und trennen das Netzkabel von der Stromversorgung. Warten Sie 15 Sekunden, schließen Sie dann Pin2 und Pin3 am CLRCMOS1 über einen Jumper fünf Sekunden lang kurz. Sie sollten das CMOS allerdings nicht direkt nach der BIOS-Aktualisierung löschen. Wenn Sie das CMOS nach Abschluss der BIOS-Aktualisierung löschen müssen, fahren Sie zuerst das System hoch. Fahren Sie es dann vor der CMOS-Löschung herunter. Bitte beachten Sie, dass Kennwort, Datum, Uhrzeit, benutzerdefiniertes Profil, 1394 GUID und MAC-Adresse nur gelöscht werden, wenn die CMOS-Batterie entfernt wird.

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!

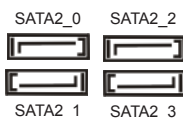
Seriell-ATAII-Anschlüsse

(SATA2_0: siehe S.2 - No. 12)

(SATA2_1: siehe S.2 - No. 15)

(SATA2_2: siehe S.2 - No. 11)

(SATA2_3: siehe S.2 - No. 14)



Diese vier Serial ATAII- (SATAII-) Verbinder unterstützten SATA-Datenkabel für interne Massenspeichergeräte. Die aktuelle SATAII-Schnittstelle ermöglicht eine Datenübertragungsrate bis 3,0 Gb/s.

Serial ATA- (SATA-) Datenkabel

(Option)



Jedes Ende des SATA Datenkabels kann an die SATA / SATAII Festplatte oder das SATAII Verbindungsstück auf dieser Hauptplatine angeschlossen werden.

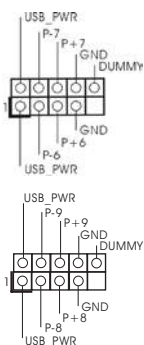
USB 2.0-Header

(9-pol. USB6_7)

(siehe S.2 - No. 18)

(9-pol. USB8_9)

(siehe S.2 - No. 17)

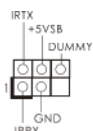


Zusätzlich zu den sechs üblichen USB 2.0-Ports an den I/O-Anschlüssen befinden sich zwei USB 2.0-Anschlüsseleisten am Motherboard. Pro USB 2.0-Anschlusseiste werden zwei USB 2.0-Ports unterstützt.

Infrarot-Modul-Header

(5-pin IR1)

(siehe S.2 - No. 13)

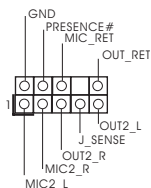


Dieser Header unterstützt ein optionales, drahtloses Send- und Empfangs-Infrarotmodul.

Anschluss für Audio auf der Gehäusevorderseite

(9-Pin HD_AUDIO1)

(siehe S.2 - No. 20)



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

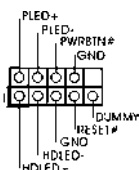


1. High Definition Audio unterstützt Jack Sensing (automatische Erkennung falsch angeschlossener Geräte), wobei jedoch die Bildschirmverdrahtung am Gehäuse HDA unterstützen muss, um richtig zu funktionieren. Beachten Sie bei der Installation im System die Anweisungen in unserem Handbuch und im Gehäusehandbuch.
2. Wenn Sie die AC'97-Audibleiste 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-Audibleiste angeschlossen werden.

System Panel-Header

(9-pin PANEL1)

(siehe S.2 - No. 16)



Dieser Header unterstützt mehrere Funktion der Systemvorderseite.



Schließen Sie die Ein-/Austaste, die Reset-Taste und die Systemstatusanzeige am Gehäuse an diesen Header an; befolgen Sie dabei die nachstehenden Hinweise zur Pinbelegung. Beachten Sie die positiven und negativen Pins, bevor Sie die Kabel anschließen.

PWRBTN (Ein-/Ausschalter):

Zum Anschließen des Ein-/Ausschalters an der Frontblende des Gehäuses. Sie können konfigurieren, wie das System mit Hilfe des Ein-/Ausschalters ausgeschaltet werden können soll.

RESET (Reset-Taste):

Zum Anschließen der Reset-Taste an der Frontblende des Gehäuses. Mit der Reset-Taste können Sie den Computer im Falle eines Absturzes neu starten.

PLED (Systembetriebs-LED):

Zum Anschließen der Betriebsstatusanzeige an der Frontblende des Gehäuses. Die LED leuchtet, wenn das System in Betrieb ist. Die LED blinkt, wenn sich das System im Ruhezustand S1 befindet. Die LED schaltet sich aus, wenn sich das System in den Modi S3/S4 befindet oder ausgeschaltet ist (S5).

HDLED (Festplattenaktivitäts-LED):

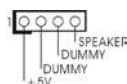
Zum Anschließen der Festplattenaktivitäts-LED an der Frontblende des Gehäuses. Die LED leuchtet, wenn die Festplatte Daten liest oder schreibt.

Das Design der Frontblende kann je nach Gehäuse variieren. Ein Frontblendenmodul besteht hauptsächlich aus einer Ein-/Austaste, einer Reset-Taste, einer Betriebs-LED, einer Festplattenaktivitäts-LED, Lautsprechern, etc. Stellen Sie beim Anschließen des Frontblendenmoduls Ihres Gehäuses an diesem Header sicher, dass die Kabel- und Pinbelegung korrekt übereinstimmen.

Gehäuselautsprecher-Header

(4-pin SPEAKER1)

(siehe S.2 - No. 10)



Schließen Sie den Gehäuselautsprecher an diesen Header an.

Gehäuse- und Stromlüfteranschlüsse

(4-pin CHA_FAN1)

(siehe S.2 - No. 6)



(4-pin PWR_FAN1)

(siehe S.2 - No. 28)

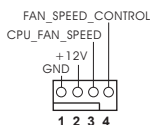


Verbinden Sie die Lüfterkabel mit den Lüfteranschlüssen, wobei der schwarze Draht an den Schutzleiterstift angeschlossen wird.

CPU-Lüfteranschluss

(4-pin CPU_FAN1)

(siehe S.2 - No. 2)



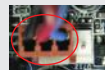
Verbinden Sie das CPU - Lüfterkabel mit diesem Anschluss und passen Sie den schwarzen Draht dem Erdungsstift an.



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-Lüfteranschluss dieses Motherboards anschließen möchten, verbinden Sie ihn bitte mit den Pins 1 – 3.

Pins 1–3 anschließen ←

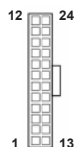
Lüfter mit dreipoligem Anschluss installieren



ATX-Netz-Header

(24-pin ATXPWR1)

(siehe S.2 - No. 5)

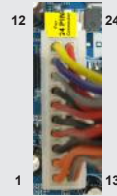


Verbinden Sie die ATX-Stromversorgung mit diesem Header.



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



ATX 12V Anschluss

(8-pin ATX12V1)

(siehe S.2 - No. 3)



Bitte schließen Sie an diesen Anschluss die ATX 12V Stromversorgung an.



Obwohl diese Hauptplatine 8-Pin ATX 12V Stromanschluss zur Verfügung stellt, kann sie noch arbeiten, wenn Sie einen traditionellen 4-Pin ATX 12V Energieversorgung adoptieren. Um die 4-Pin ATX Energieversorgung zu verwenden, stecken Sie bitte Ihre Energieversorgung zusammen mit dem Pin 1 und Pin 5 ein.

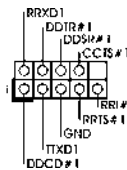
Installation der 4-Pin ATX 12V Energieversorgung



COM-Anschluss-Header

(9-pin COM1)

(siehe S.2 - No. 19)



Dieser COM-Anschluss-Header wird verwendet, um ein COM-Anschlussmodul zu unterstützen.

SLI/XFire-Stromanschluss

(4-pin SLI/XFIRE_PWR1)

(siehe S.2 - No. 29)



Bitte verbinden Sie diese Anschluss mit einem Netzteils, wenn drei Grafikkarten an diesem Motherboard installiert sind.

(4-pin SLI/XFIRE_PWR2)

(siehe S.2 - No. 27)



2. BIOS-Information

Das Flash Memory dieses Motherboards speichert das Setup-Utility. Drücken Sie <F2> oder 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 Reihe von Microsoft® Windows® Betriebssystemen: 8 / 8 64-Bit / 7 / 7 64-Bit / Vista™ / Vista™ 64-Bit / XP / XP 64-Bit. Die Ihrem Motherboard beigelegte 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 Willkommensbildschirm 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 **H61 Pro BTC**, 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 **H61 Pro BTC** (Facteur de forme ATX)

Guide d'installation rapide ASRock **H61 Pro BTC**

CD de soutien ASRock **H61 Pro BTC**

Deux câbles de données de série ATA (SATA) (en option)

Un I/O Panel Shield



ASRock vous rappelle...

Pour bénéficier des meilleures performances sous Windows® 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits, il est recommandé de paramétrer l'option BIOS dans Configuration de stockage en mode AHCI. Pour plus de détails sur l'installation BIOS, référez-vous au "Mode d'emploi" sur votre CD de support.

1.2 Spécifications

Format	- Facteur de forme ATX - Conception à condensateur robuste
CPU	- Prend en charge les processeurs Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 2ème et 3ème génération sur socket LGA1155 - Prend en charge la technologie Intel® Turbo Boost 2.0 - Prise en charge des unités centrales non verrouillées de série K
Chipsets	- Intel® H61 - Prend en charge les technologies Intel® Rapid Start et Smart Connect
Mémoire	- Compatible avec la Technologie de Mémoire à Canal Double - 2 x slots DIMM DDR3 - Supporter DDR3 1600/1333/1066 non-ECC, sans amortissement mémoire (DDR3 1600 avec CPU Intel® Ivy Bridge, DDR3 1333 avec CPU Intel® Sandy Bridge) - Capacité maxi de mémoire système: 16GB - Prend en charge le profil de mémoire extrême Intel® (XMP) 1.3/1.2 avec processeur Intel® Ivy Bridge CPU
Slot d'extension	- 1 x slot PCI Express 3.0 x16 (PCIe2 @ mode x16) * PCIe 3.0 n'est pris en charge qu'avec le processeur Intel® Ivy Bridge. Avec le processeur Intel® Sandy Bridge, seul PCIe 2.0 est pris en charge. - 5 x slot PCI Express 2.0 x1
VGA sur carte	* Intel® HD Graphics avec visuels intégrés (Built-in Visuals) et les sorties VGA sont uniquement pris en charge par les processeurs à GPU intégré. - Supporte Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 avec processeur Intel® Ivy Bridge CPU - Supporte Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) avec processeur Intel® Sandy Bridge CPU - Pixel Shader 5.0, DirectX 11 avec CPU Intel® Ivy Bridge, Pixel Shader 4.1, DirectX 10.1 avec CPU Intel® Sandy

	Bridge - Mémoire partagée max 1760MB avec processeur Intel® Ivy Bridge CPU. Mémoire partagée max 1759MB avec processeur Intel® Sandy Bridge CPU. - Output de VGA Dual: supporter HDMI et D-Sub ports par les controleurs de display independents - Prend en charge le HDMI avec une résolution maximale jusqu'à 1920x1200 @ 60Hz - Prend en charge le D-Sub avec une résolution maximale jusqu'à 2048x1536 @ 75Hz - Prend en charge Lip Sync, Deep Color (12bpc), xvYCC et HBR (High Bit Rate Audio : Audio à haut débit binaire) avec HDMI (Moniteur compatible HDMI requis) - Prise en charge de la fonction HDCP avec port HDMI - Supporter 1080p Blu-ray(BD)/ lecteur de HD-DVD avec port HDMI
Audio	- 5.1 Son haute définition de CH (codec audio VIA® VT1705)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Support du Wake-On-LAN - Prise en charge de la détection de câble LAN - Prend en charge la norme Energy Efficient Ethernet (Ethernet à efficacité énergétique) 802.3az - Supporte PXE
Panneau arrière	- 1 x port souris PS/2 - 1 x port clavier PS/2 - 1 x port D-Sub - 1 x port HDMI - 6 x ports USB 2.0 par défaut - 1 x port LAN RJ-45 avec LED (ACT/LED CLIGNOTANTE et LED VITESSE) - Prise HD Audio: Entrée Ligne / Haut-parleur frontal / Microphone
Stockage	- 4 x connecteurs SATA2, prennent en charge un taux de transfert de données pouvant aller jusqu'à 3.0Go/s, supporte NCQ, AHCI et « Hot Plug » (Branche ment à chaud)
Connecteurs	- 1 x En-tête du module infrarouge - 1 x En-tête de port COM - 1 x Connecteur pour ventilateur de CPU (br. 4) - 1 x Connecteur pour ventilateur de Châssis (br. 4)

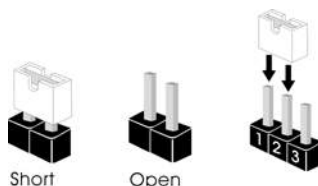
	- 1 x Connecteur pour ventilateur de pouvoir (br. 4) - 1 x br. 24 connecteur d'alimentation ATX - 1 x br. 8 connecteur d'alimentation 12V ATX - 2 x Connecteur d'alimentation SLI/XFire - 1 x Connecteur audio panneau avant - 2 x En-tête USB 2.0 (prendre en charge 4 ports USB 2.0 supplémentaires)
BIOS	- 32Mb AMI UEFI Legal BIOS avec support GUI - Support du "Plug and Play" - Compatible pour événements de réveil ACPI 1.1 - Gestion jumperless - Support SMBIOS 2.3.1 - IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Tension Multi-ajustement
CD d'assistance	- Pilotes, utilitaires, logiciel anti-virus (version d'évaluation), Google Chrome Browser et Toolbar
Surveillance système	- Contrôle de la température CPU - Mesure de température de la carte mère - Tachéomètre ventilateur processeur/châssis/ventilateur - Ventilateur silencieux pour unité centrale/châssis (permet le réglage automatique de la vitesse du ventilateur pour châssis, selon la température de l'unité centrale) - Commande de ventilateur CPU/châssis à plusieurs vitesses - Monitoring de la tension: +12V, +5V, +3.3V, Vcore
OS	- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Certifications	- FCC, CE, WHQL - Prêt pour ErP/EuP (alimentation Prêt pour ErP/EuP requise)

* Pour de plus amples informations sur les produits, s'il vous plaît visitez notre site web:

<http://www.asrock.com>

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.



Le cavalier

Description

Effacer la CMOS

(CLR CMOS1)

(voir p.2 fig. 9)



Paramètres
par défaut



Effacer la
CMOS

Remarque : CLRCMOS1 vous permet d'effacer les données du CMOS. Pour effacer et réinitialiser les paramètres du système à la configuration originale, veuillez éteindre l'ordinateur et débrancher le cordon d'alimentation de la prise de courant. Après 15 secondes, utilisez un couvercle de jumper pour court-circuiter les broches pin2 et pin3 de CLRCMOS1 pendant 5 secondes. Veuillez cependant ne pas effacer le CMOS immédiatement après avoir mis à jour le BIOS. Si vous avez besoin d'effacer le CMOS après avoir mis à jour le BIOS, vous devez allumer en premier le système, puis l'éteindre avant de continuer avec l'opération d'effacement du CMOS. Veuillez noter que le mot de passe, la date, l'heure, le profil par défaut de l'utilisateur, 1394 GUID et l'adresse MAC seront effacés seulement si la batterie du CMOS est enlevée.

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!

Connecteurs Série ATAII

(SATA2_0: voir p.2 No. 12)

(SATA2_1: voir p.2 No. 15)

(SATA2_2: voir p.2 No. 11)

(SATA2_3: voir p.2 No. 14)



Ces quatre connecteurs Série ATAII (SATAII) prennent en charge les câbles SATA pour les périphériques de stockage internes. L'interface SATAII actuelle permet des taux transferts de données pouvant aller jusqu'à 3,0 Gb/s.

Câble de données Série ATA (SATA)

(en option)

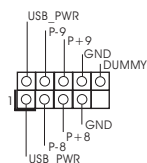


Toute cote du câble de data SATA peut être connectée au disque dur SATA / SATAII / ou au connecteur SATAII sur la carte mère.

En-tête USB 2.0

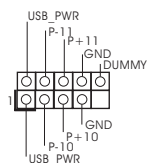
(USB6_7 br.9)

(voir p.2 No. 18)



(USB8_9 br.9)

(voir p.2 No. 17)

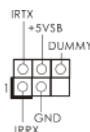


A côté des six ports USB 2.0 par défaut sur le panneau E/S, il y a deux embases USB 2.0 sur cette carte mère. Chaque embase USB 2.0 peut prendre en charge 2 ports USB 2.0.

En-tête du module infrarouge

(IR1 br.5)

(voir p.2 No. 13)

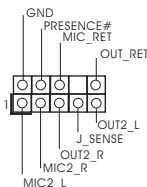


Cet en-tête supporte un module infrarouge optionnel de transfert et de réception sans fil.

Connecteur audio panneau

(HD_AUDIO1 br. 9)

(voir p.2 No. 20)



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

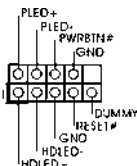


1. L'audio à haute définition (HDA) prend en charge la détection de fiche, mais le fil de panneau sur le châssis doit prendre en charge le HDA pour fonctionner correctement. Veuillez suivre les instructions dans notre manuel et le manuel de châssis afin d'installer votre système.
2. Si vous utilisez 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.

En-tête du panneau système

(PANEL1 br.9)

(voir p.2 No. 16)



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



Connectez l'interrupteur d'alimentation, l'interrupteur de réinitialisation et l'indicateur d'état du système du châssis sur cette barrette en respectant l'affectation des broches décrite ci-dessous. Faites attention aux broches positives et négatives avant de connecter les câbles.

PWRBTN (Interrupteur d'alimentation):

Connectez ici le connecteur d'alimentation sur le panneau avant du châssis. Vous pouvez configurer la façon de mettre votre système hors tension avec l'interrupteur d'alimentation.

RESET (Interrupteur de réinitialisation):

Connectez ici le connecteur de réinitialisation sur le panneau avant du châssis. Appuyez sur l'interrupteur de réinitialisation pour redémarrer l'ordinateur s'il se bloque ou s'il n'arrive pas à redémarrer normalement.

PLED (DEL alimentation système):

Connectez ici l'indicateur d'état de l'alimentation sur le panneau avant du châssis. Ce voyant DEL est allumé lorsque le système est en marche. Le voyant DEL clignote lorsque le système est en mode veille S1. Le voyant DEL est éteint lorsque le système est en mode veille S3/S4 ou lorsqu'il est éteint (S5).

HDLED (DEL activité du disque dur):

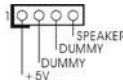
Connectez ici le voyant DEL d'activité du disque dur sur le panneau avant du châssis. Ce voyant DEL est allumé lorsque le disque dur est en train de lire ou d'écrire des données.

Le design du panneau avant peut varier en fonction du châssis. Un module de panneau avant consiste principalement en : interrupteur d'alimentation, interrupteur de réinitialisation, voyant DEL d'alimentation, voyant DEL d'activité du disque dur, haut-parleur, etc. Lorsque vous connectez le panneau avant de votre châssis sur cette barrette, vérifiez bien à faire correspondre les fils et les broches.

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 pour châssis et ventilateur

(CHA_FAN1 br. 4)

(voir p.2 No. 6)



(PWR_FAN1 br. 4)

(voir p.2 No. 28)

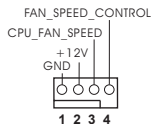


Branchez les câbles du ventilateur aux connecteurs pour ventilateur et faites correspondre le fil noir à la broche de terre.

Connecteur du ventilateur de l'UC

(CPU_FAN1 br. 4)

(voir p.2 No. 2)



Veuillez connecter le câble de ventilateur d'UC sur ce connecteur et brancher le fil noir sur la broche de terre.



Bien 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

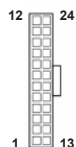
Broches 1-3 connectées



En-tête d'alimentation ATX

(ATXPWR1 br. 24)

(voir p.2 No. 5)

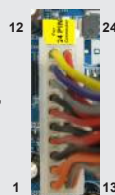


Veuillez connecter l'unité d'alimentation ATX sur cet en-tête.



Bien que cette carte mère fournisse un connecteur de courant ATX 24 broches, elle peut encore fonctionner si vous adoptez 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.8)

(voir p.2 No. 3)



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



Bien que cette carte mère possède 8 broches connecteur d'alimentation ATX 12V, il peut toujours travailler si vous adoptez une approche traditionnelle à 4 broches ATX 12V alimentation. Pour utiliser l'alimentation des 4 broches ATX, branchez votre alimentation avec la broche 1 et la broche 5.

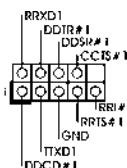
4-Installation d'alimentation à 4 broches ATX 12V



En-tête de port COM

(COM1 br.9)

(voir p.2 No. 19)



Cette en-tête de port COM est utilisée pour prendre en charge un module de port COM.

Connecteur d'alimentation SLI/XFire

(SLI/XFIRE_PWR1 br. 4)

(voir p.2 No. 29)



Veuillez brancher ce connecteur avec un connecteur d'alimentation lorsque trois cartes graphiques sont installées sur la carte mère.

(SLI/XFIRE_PWR2 br. 4)

(voir p.2 No. 27)



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> ou 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® : 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits / XP / XP 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 **H61 Pro BTC**, 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 **H61 Pro BTC** (ATX Form Factor)

Guida di installazione rapida ASRock **H61 Pro BTC**

CD di supporto ASRock **H61 Pro BTC**

Due cavi dati Serial ATA (SATA) (opzionali)

Un I/O Shield



ASRock vi ricorda...

Per ottenere migliori prestazioni in Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit, si consiglia di impostare l'opzione BIOS in Storage Configuration (Configurazione di archiviazione) sulla modalità AHCI. Per l'impostazione BIOS, fare riferimento a "User Manual" (Manuale dell'utente) nel CD di supporto per dettagli.

1.2 Specifiche

Piattaforma	- ATX Form Factor - Design condensatore robusto
Processore	- Supporta Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® di 3a e 2a generazione in un pacchetto LGA1155 - Supporto della tecnologia Intel® Turbo Boost 2.0 - Supporta CPU unlocked serie K
Chipset	- Intel® H61 - Supporta tecnologia Intel® Rapid Start Technology e Smart Connect Technology
Memoria	- Supporto tecnologia Dual Channel Memory - 2 x slot DDR3 DIMM - Supporto DDR3 1600/1333/1066 non-ECC, memoria senza buffer (DDR3 1600 con CPU Intel® Ivy Bridge, DDR3 1333 con CPU Intel® Sandy Bridge) - Capacità massima della memoria di sistema: 16GB - Supporto di Intel® XMP (Extreme Memory Profile) 1.3/1.2 con CPU Intel® Ivy Bridge
Slot di espansione	- 1 x Alloggi PCI Express 3.0 x16 (PCI-E2 a modalità x16) * PCIE 3.0 è supportato soltanto con la CPU Intel® Ivy Bridge. Con la CPU Intel® Sandy Bridge, supporta solamente PCIE 2.0. - 5 x Alloggi PCI Express 2.0 x1
VGA su scheda	* Le uscite Intel® HD Graphics Built-in Visuals e VGA possono essere supportate solo con processori dotati di GPU integrata. - Supporta Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 con CPU Intel® Ivy Bridge - Supporta Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) con CPU Intel® Sandy Bridge - Pixel Shader 5.0, DirectX 11 con CPU Intel® Ivy Bridge, Pixel Shader 4.1, DirectX 10.1 con CPU Intel® Sandy Bridge - Memoria massima condivisa 1760MB con CPU Intel® Ivy Bridge. Memoria massima condivisa 1759MB con CPU Intel® Sandy Bridge. - Uscita VGA Doppia: supporto porte HDMI e D-Sub tramite

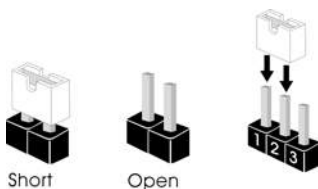
	verifikatore display indipendente - Supporta HDMI con risoluzione massima fino a 1920x1200 @ 60Hz - Supporta D-Sub con risoluzione massima fino a 2048x1536 @ 75Hz - Supporto delle funzioni Auto Lip Sync, Deep Color (12bpc), xvYCC e HBR (High Bit Rate Audio) con HDMI (è necessario un monitor compatibile HDMI) - Supporto della funzione HDCP con le porte HDMI - Supporto 1080p Blu-ray (BD) / HD-DVD riproduzione con le porte HDMI
Audio	- 5.1 Audio HD CH (VIA® VT1705 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Supporta Wake-On-LAN - Supporta il rilevamento cavo LAN - Supporto di Energy Efficient Ethernet 802.3az - Supporta PXE
Pannello posteriore I/O	- 1 x porta PS/2 per mouse - 1 x porta PS/2 per tastiera - 1 x porta D-Sub - 1 x porta HDMI - 6 x porte USB 2.0 già integrate - 1 x porte LAN RJ-45 con LED (LED azione/collegamento e LED velocità) - Connettore HD Audio: ingresso linea / cassa frontale / microfono
Interfaccia di storage	- 4 x connettori SATA2 3.0Go/s, supporta delle funzioni NCQ, AHCI e "Hot Plug"
Connettori	- 1 x Collettore modulo infrarossi - 1 x collettore porta COM - 1 x Connettore CPU ventola (4-pin) - 1 x Connettore Chassis ventola (4-pin) - 1 x Connettore Alimentazione ventola (4-pin) - 1 x 24-pin collettore alimentazione ATX - 1 x 8-pin connettore ATX 12V - 2 x Collettore alimentazione SLI/XFire - 1 x Connettore audio sul pannello frontale - 2 x Collettore USB 2.0 (supporta 4 porte USB 2.0)
BIOS	- 32Mb AMI UEFI Legal BIOS con interfaccia di supporto - Supporta "Plug and Play"

	- Compatibile con ACPI 1.1 wake up events - Supporta jumperfree - Supporta SMBIOS 2.3.1 - Regolazione multi-voltaggio IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA
CD di supporto	- Driver, Utilità, Software AntiVirus (versione di prova), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser e Toolbar
Monitoraggio Hardware	- Sensore per la temperatura del processore - Sensore temperatura scheda madre - Indicatore di velocità per la ventola del CPU/Chassis/Alimentazione - Ventola CPU/Chassis silenziosa (permette la regolazione automatica della ventola dello chassis in base alla temperatura della CPU madre) - Ventola CPU/Chassis con controllo di varie velocità - Voltaggio: +12V, +5V, +3.3V, Vcore
Compatibilità SO	- Microsoft® Windows® 8 / 8 64 bit / 7 / 7 64 bit / Vista™ / Vista™ 64 bit / XP / XP 64 bit
Certificazioni	- FCC, CE, WHQL - Predisposto ErP/EuP (è necessaria l'alimentazione predisposta per il sistema ErP/EuP)

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

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.



Jumper	Settaggio del Jumper
--------	----------------------

Resettare la CMOS	
-------------------	--

(CLRCMOS1)	
------------	--

(vedi p.2 item 9)	
-------------------	--



Nota: CLRCMOS1 permette di azzerare i dati nella CMOS. Per cancellare e ripristinare i parametri del sistema sulla configurazione iniziale, spegnere il computer e scollegare il cavo d'alimentazione dalla presa di corrente. Attendere 15 secondi, poi usare un cappuccio jumper per cortocircuitare il pin 2 ed il pin 3 su CLRCMOS1 per 5 secondi. Tuttavia, si consiglia di non cancellare la CMOS subito dopo avere aggiornato il BIOS. Se si deve azzerare la CMOS quando si è completato l'aggiornamento del BIOS, è necessario per prima cosa avviare il sistema e poi spegnerlo prima di eseguire l'azzeramento della CMOS. Notare che password, data, ore, profilo utente predefinito, 1394 GUID e indirizzo MAC saranno cancellati solo se è rimossa la batteria della CMOS.

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!

Connettori Serial ATAII

(SATA2_0: vedi p.2 Nr. 12)

(SATA2_1: vedi p.2 Nr. 15)

(SATA2_2: vedi p.2 Nr. 11)

(SATA2_3: vedi p.2 Nr. 14)



Questi quattro connettori Serial ATAII (SATAII) supportano cavi dati SATA per dispositivi di immagazzinamento interni. ATAII (SATAII) supportano cavi SATA 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)

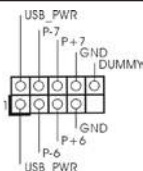


Una o altra estremità del cavo di dati SATA può essere collegata al disco rigido SATA / SATAII o al connettore di SATAII su questa cartolina base.

Collettore USB 2.0

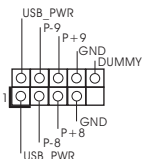
(9-pin USB6_7)

(vedi p.2 Nr. 18)



(9-pin USB8_9)

(vedi p.2 Nr. 17)

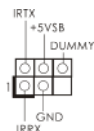


Oltre alle sei porte USB 2.0 predefinite nel pannello I/O, la scheda madre dispone di due intestazioni USB 2.0. Ciascuna intestazione USB 2.0 supporta due porte USB 2.0.

Collettore modulo infrarossi

(5-pin IR1)

(vedi p.2 Nr. 13)

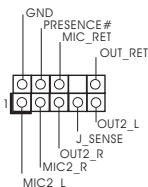


Questo collettore supporta moduli ad infrarossi optional per la trasmissione e la ricezione senza fili.

Connettore audio sul pannello frontale

(9-pin HD_AUDIO1)

(vedi p.2 Nr. 20)



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

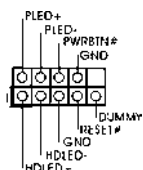


1. La caratteristica HDA (High Definition Audio) supporta il rilevamento dei connettori, però il pannello dei cavi sul telaio deve supportare la funzione HDA (High Definition Audio) per far sì che questa operi in modo corretto. Attenersi alle istruzioni del nostro manuale e del manuale del telaio per installare il sistema.
2. Se si utilizza un pannello audio AC'97, installarlo nell'installazione 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.

Collettore pannello di sistema

(9-pin PANEL1)

(vedi p.2 Nr. 16)



Questo collettore accomoda diverse funzioni di sistema pannello frontale.



Collegare l'interruttore d'alimentazione, l'interruttore di ripristino, l'indicatore di stato del sistema del pannello frontale del telaio a questo header in base all'assegnazione dei pin definita di seguito. Determinare i pin positivi e negativi prima di collegare i cavi.

PWRBTN (interruttore d'alimentazione):

Va collegato all'interruttore d'alimentazione del pannello frontale del telaio. Usando l'interruttore d'alimentazione si può configurare il modo in cui si spegne il sistema.

RESET (interruttore di ripristino):

Va collegato all'interruttore di ripristino del pannello frontale del telaio. Premere l'interruttore di ripristino per riavviare il sistema se il computer si blocca e non riesce ad eseguire un normale riavvio.

PLED (LED alimentazione del sistema):

Va collegato all'indicatore di stato d'alimentazione del pannello frontale del telaio. Il LED è acceso quando il sistema è operativo. Il LED continua a lampeggiare quando il sistema è in stato di standby S1. Il LED è spento quando il sistema è in stato di sospensione /ibernazione S3/S4 oppure spento (S5).

HDLED (LED attività disco rigido):

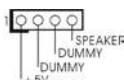
Va collegato al LED attività disco rigido del pannello frontale del telaio. Il LED è acceso quando disco rigido legge e scrive i dati.

Il design del pannello frontale può variare in base ai telai. Il modulo di un pannello frontale può consistere di: interruttore d'alimentazione, interruttore di ripristino, LED d'alimentazione, LED attività disco rigido, casse, eccetera. Quando si collega il modulo del pannello frontale a questo header, assicurarsi che l'assegnazione dei fili e dei pin sia fatta corrispondere in modo appropriato.

Collettore casse telaio

(4-pin SPEAKER1)

(vedi p.2 Nr. 10)



Collegare le casse del telaio a questo collettore.

Collettori Chassis ed alimentazione ventola

(4-pin CHA_FAN1)

(vedi p.2 Nr. 6)



(4-pin PWR_FAN1)

(vedi p.2 Nr. 28)

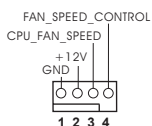


Collegare i cavi della ventola ai corrispondenti connettori facendo combaciare il cavo nero col pin di terra.

Connettore ventolina CPU

(4-pin CPU_FAN1)

(vedi p.2 Nr. 2)



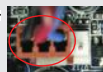
Collegare il cavo della ventolina CPU a questo connettore e far combaciare il filo nero al pin terra.



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

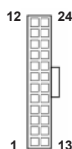
Installazione della ventola a 3 piedini



Connettore alimentazione ATX

(24-pin ATXPWR1)

(vedi p.2 Nr. 5)

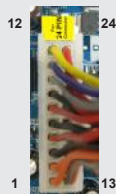


Collegare la sorgente d'alimentazione ATX a questo connettore.



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 12 V

(8-pin ATX12V1)

(vedi p.2 Nr. 3)



Collegare un alimentatore ATX 12 V a questo connettore.

Sebbene questa schedamadre fornisca un connettore elettrico 8-pin ATX 12V, l'unità può ancora essere funzionante se viene utilizzata una fornitura elettrica tradizionale a 4-pin ATX 12V. Per usare tale fornitura elettrica 4-pin ATX 12V, prego collegare la presa elettrica al Pin 1 e Pin 5.

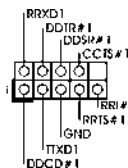
Installazione elettrica 4-Pin ATX 12V



Collettore porta COM

(9-pin COM1)

(vedi p.2 Nr. 19)



Questo collettore porta COM è utilizzato per supportare il modulo porta COM.

Connettore alimentazione SLI/XFire

(4-pin SLI/XFIRE_PWR1)

(vedi p.2 Nr. 29)



(4-pin SLI/XFIRE_PWR2)

(vedi p.2 Nr. 27)



Collegare questo connettore al connettore di alimentazione di un'alimentazione quando le tre schede grafiche sono installate su questa scheda madre.

2. Informazioni sul BIOS

La Flash Memory sulla scheda madre contiene le Setup Utility. Quando si avvia il computer, premi <F2> o 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®: 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 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 **H61 Pro BTC** 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 **H61 Pro BTC** (Factor forma ATX)

Guía de instalación rápida de ASRock **H61 Pro BTC**

CD de soporte de ASRock **H61 Pro BTC**

Dos cables de datos Serial ATA (SATA) (Opcional)

Una protección I/O



ASRock le recuerda...

Para mejorar el rendimiento en Windows® 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits, es recomendable establecer la opción del BIOS de la configuración de almacenamiento en el modo AHCI. Para obtener detalles sobre la configuración del BIOS, consulte el "Manual del usuario" que se encuentra en nuestro CD de soporte.

1.2 Especificación

Plataforma	- Factor forma ATX - Todo diseño de Capacitor Sólido
Procesador	- Admite procesadores Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® de la 3ª y 2ª generación en el paquete LGA1155 - Admite la tecnología Intel® Turbo Boost 2.0 Technology - Admite procesador desbloqueado de la serie K
Chipset	- Intel® H61 - Admite las tecnologías Intel® Rapid Start y Smart Connect
Memoria	- Soporte de Tecnología de Memoria de Doble Canal - 2 x DDR3 DIMM slots - Apoya DDR3 1600/1333/1066 non-ECC, memoria de un-buffered (DDR3 1600 con CPU Intel® Ivy Bridge, DDR3 1333 con CPU Intel® Sandy Bridge) - Máxima capacidad de la memoria del sistema: 16GB - Compatible con Intel® Extreme Memory Profile (XMP) 1.3/1.2 con la CPU Intel® Ivy Bridge
Ranuras de Expansión	- 1 x ranura PCI Express 3.0 x16 (PCI-E2 @ modo x16) * PCIe 3.0 solamente se admite con una CPU Intel® Ivy Bridge. Con una CPU Intel® Sandy Bridge, solamente admite PCIe 2.0. - 5 x ranura PCI Express 2.0 x1
VGA OnBoard	* Los efectos visuales incorporados con gráficos de alta definición Intel® y las salidas VGA sólo se soportan con procesadores con GPU integrada. - Admite Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 con la CPU Intel® Ivy Bridge - Admite Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000 e Intel® Advanced Vector Extensions (AVX) con la CPU Intel® Sandy Bridge - Pixel Shader 5.0, DirectX 11 con CPU Intel® Ivy Bridge, Pixel Shader 4.1, DirectX 10.1 con CPU Intel® Sandy Bridge - 1760MB de Memoria máxima compartida con la CPU Intel® Ivy Bridge. 1759MB de Memoria máxima compartida con la CPU Intel® Sandy Bridge. - Salida de VGA dual: apoya los puertos de HDMI y de D-Sub

	por los reguladores independientes de la exhibición - Admite HDMI con una resolución máxima de 1920x1200 a 60 Hz - Admite D-Sub con una resolución máxima de 2048x1536 a 75 Hz - Admite Sincronización automática entre audio y vídeo, Deep Color (12 bpc), xvYCC y HBR (audio de alta tasa de bits) con HDMI (se necesita un monitor compatible con HDMI) - Admite la función HDCP con puertos HDMI - Apoya la reproducción de Blu-ray de 1080p (BD) / HD-DVD con puertos HDMI
Audio	- Sonido HD de 5.1 Canales (Códex de sonido VIA® VT1705)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Soporta Wake-On-LAN - Admite detección de conexión de cable LAN - Compatible con Ethernet 802.3az de bajo consumo energético - Compatible con PXE
Entrada/Salida de Panel Trasero	- 1 x puerto de ratón PS/2 - 1 x puerto de teclado PS/2 - 1 x puerto D-Sub - 1 x puerto HDMI - 6 x puertos USB 2.0 predeterminados - 1 x Puerto LAN RJ-45 con LED (LED de ACCIÓN/ENLACE y LED de VELOCIDAD) - Conexión de audio: Entrada de línea / Altavoz frontal / Micrófono
Interfaz de almacenamiento	- 4 x conexiones SATA2, admiten una velocidad de transferencia de datos de hasta 3,0Gb/s, soporta NCQ, AHCI y "Conexión en caliente"
Conectores	- 1 x Cabezal de Módulo Infrarrojos - 1x En-tête de port COM - 1 x Conector de ventilador de CPU (4-pin) - 1 x Conector de ventilador de chasis (4-pin) - 1 x Conector de ventilador de alimentación (4-pin) - 1 x 24-pin cabezal de alimentación ATX - 1 x 8-pin conector de ATX 12V power - 2 x Cabezal de alimentación SLI/XFire - 1 x Conector de audio de panel frontal - 2 x Cabezal USB 2.0 (admite 4 puertos USB 2.0 adicionales)

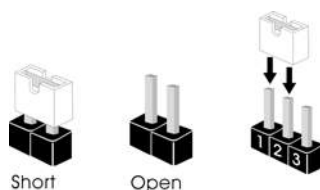
BIOS	- 32Mb AMI BIOS legal UEFI AMI compatible con GUI - Soporta "Plug and Play" - ACPI 1.1 compliance wake up events - Soporta "jumper free" - Soporta SMBIOS 2.3.1 - Múltiple ajuste de IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltage
CD de soport	- Controladores, utilidades, software de antivirus (versión de prueba), Google Chrome Browser y Toolbar
Monitor Hardware	- Sensibilidad a la temperatura del procesador - Sensibilidad a la temperatura de la placa madre - Taquímetros de los ventiladores del procesador y del CPU / chasis / alimentación - Ventilador silencioso del procesador y el chasis (ajuste automático de la velocidad del ventilador del chasis en función de la temperatura del procesador) - Control de ajuste de la velocidad del ventilador de la CPU / chasis - Monitor de Voltaje: +12V, +5V, +3.3V, Vcore
OS	- En conformidad con Microsoft® Windows® 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits / XP / XP 64 bits
Certificaciones	- FCC, CE, WHQL - Cumple con la directiva ErP/EuP (se requiere una fuente de alimentación que cumpla con la directiva ErP/EuP)

* Para más información sobre los productos, por favor visite nuestro sitio web:

<http://www.asrock.com>

1.3 Setup de Jumpers

La ilustración muestra como los jumpers son configurados. Cuando haya un jumper cap sobre los pins, se dice que el jumper está "Short". No habiendo jumper cap sobre los pins, el jumper está "Open". La ilustración muestra un jumper de 3 pins cuyo pin 1 y pin 2 están "Short".



Jumper

Setting

Limpiar CMOS

(CLRCMOS1, jumper de 3 pins)
(ver p.2, No. 9)



Valor predeterminado



Restablecimiento de la CMOS

Nota: CLRCMOS1 permite borrar los datos de la memoria CMOS. Para borrar los parámetros del sistema y restablecer la configuración predeterminada de los mismos, apague el equipo y desenchufe el cable de alimentación de la toma de corriente eléctrica. Deje que transcurran 15 segundos y, después, utilice un puente para cortocircuitar los contactos 2 y 3 de CLRCMOS1 durante 5 segundos. No borre la memoria CMOS justamente después de actualizar el BIOS. Si necesita borrar la memoria CMOS justamente después de actualizar el BIOS, debe iniciar primero el sistema y, a continuación, cerrarlo antes de llevar a cabo el borrado de dicha memoria. Tenga en cuenta que la contraseña, la fecha, la hora, el perfil predeterminado del usuario, el GUID 1394 y la dirección MAC solamente se borrará si la batería CMOS se quita.

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.

Conexiones de serie ATAII

(SATA2_0: vea p.2, N. 12)

(SATA2_1: vea p.2, N. 15)

(SATA2_2: vea p.2, N. 11)

(SATA2_3: vea p.2, N. 14)



Estas cuatro conexiones de serie ATAII (SATAII) admiten cables SATA para dispositivos de almacenamiento internos. La interfaz SATAII actual permite una velocidad de transferencia de 3.0 Gb/s.

Cable de datos de serie ATA (SATA)

(Opcional)

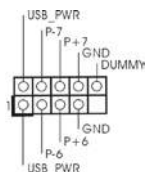


Cualquier extremo del cable de los datos de SATA puede ser conectado con el disco duro de SATA / SATAII o el conector de SATAII en esta placa base.

Cabezal USB 2.0

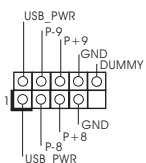
(9-pin USB6_7)

(vea p.2, N. 18)



(9-pin USB8_9)

(vea p.2, N. 17)

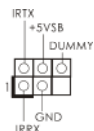


Además de seis puertos USB 2.0 predeterminados en el panel de E/S, hay dos bases de conexiones USB 2.0 en esta placa base. Cada una de estas bases de conexiones admite dos puertos USB 2.0.

Cabezal de Módulo Infrarrojos

(5-pin IR1)

(vea p.2, N. 13)

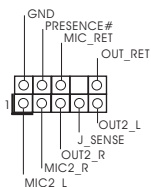


Este cabezal soporta un módulo infrarrojos de transmisión y recepción wireless opcional.

Conector de audio de panel frontal

(9-pin HD_AUDIO1)

(vea p.2, N. 20)



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

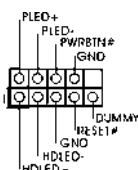


1. El Audio de Alta Definición soporta la detección de conector, pero el cable de panel en el chasis debe soportar HDA para operar correctamente. Por favor, siga las instrucciones en nuestro manual y en el manual de chasis para instalar su sistema.
2. Si utiliza el panel de sonido AC'97, instálelo en 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.

Cabezal de panel de sistema

(9-pin PANEL1)

(vea p.2, N. 16)



Este cabezar acomoda varias funciones de panel frontal de sistema.



Conecte el interruptor de alimentación, el interruptor de restablecimiento y el indicador de estado del sistema situados en el chasis con esta cabecera en función de las siguientes asignaciones de contacto. Preste atención a los contactos positivos y negativos antes de conectar los cables.

PWRBTN (interruptor de alimentación):

Conecte el interruptor de encendido situado en el panel frontal del chasis. Puede configurar la forma de apagar su sistema mediante el interruptor de alimentación.

RESTABLECER (interruptor de restablecimiento):

Conecte el interruptor de restablecimiento situado en el panel frontal del chasis. Pulse el interruptor de restablecimiento para restablecer el equipo si se bloquea y no se reinicia con normalidad.

PLED (LED de alimentación del sistema):

Conecte el indicador de estado de alimentación situado en el panel frontal del chasis. El LED se enciende cuando el sistema esté en funcionamiento. El LED parpadea cuando el sistema se encuentre en estado de suspensión S1. El LED se apaga cuando el sistema se encuentre en estado de suspensión S3/S4 o se apaga (S5).

HDLED (LED de actividad del disco duro):

Conecte el LED de actividad de disco duro situado en el panel frontal del chasis. El LED se enciende cuando el disco duro esté leyendo o escribiendo datos.

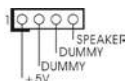
Es posible que el diseño del panel frontal varíe en función del chasis. Un módulo del panel frontal consiste principalmente de interruptor de alimentación, interruptor de restablecimiento, LED de alimentación, LED

de actividad del disco duro, altavoz, etc. Al conectar el módulo del panel frontal del chasis a esta cabecera, asegúrese de que las asignaciones de cables y las asignaciones de contactos coincidan correctamente.

Cabezal del altavoz del chasis

(4-pin SPEAKER1)

(vea p.2, N. 10)



Conecte el altavoz del chasis a su cabezal.

Conectores de ventilador de chasis

y alimentación

(4-pin CHA_FAN1)

(vea p.2, N. 6)



(4-pin PWR_FAN1)

(vea p.2, N. 28)

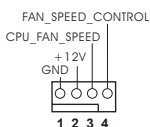


Por favor, conecte los cables del ventilador a los conectores de ventilador, haciendo coincidir el cable negro con la patilla de masa.

Conector del ventilador de la CPU

(4-pin CPU_FAN1)

(vea p.2, N. 2)



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 ←

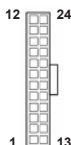
Instalación del ventilador de 3 contactos



Cabezal de alimentación ATX

(24-pin ATXPWR1)

(vea p.2, N. 5)

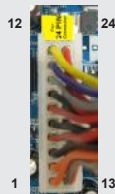


Conecte la fuente de alimentación ATX a su cabezal.



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

Instalación de una Fuente de Alimentación ATX de 20 Pines



Conector de ATX 12V power

(8-pin ATX12V1)

(vea p.2, N. 3)



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.



Aunque esta placa base proporciona un conector de energía de 8-pin ATX 12V, puede todavía trabajar si usted adopta un fuente tradicional de energía de 4-pin ATX 12V. Para usar el fuente de energía de 4-pin ATX 12V, por favor conecte su fuente de energía junto con Pin 1 y Pin 5.

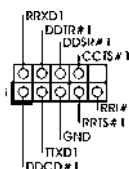
Instalación de Fuente de Energía de 4-Pin ATX 12V



Cabezal del puerto COM

(9-pin COM1)

(vea p.2, N. 19)



Este cabezal del puerto COM se utiliza para admitir un módulo de puerto COM.

Conector de alimentación SLI/XFire

(4-pin SLI/XFIRE_PWR1)

(vea p.2, N. 29)



(4-pin SLI/XFIRE_PWR2)

(vea p.2, N. 27)



Conecte este conector con un conector de alimentación de alimentación cuando haya tres tarjetas gráficas instaladas en esta placa base.

2. BIOS Información

El Flash Memory de la placa madre deposita SETUP Utility. Durante el Power-Up (POST) apriete <F2> o para entrar en la BIOS. Si usted no oprime ninguna tecla, el POST continúa con sus rutinas de prueba. Si usted desea entrar en la BIOS después del POST, por favor reinicie el sistema apretando <Ctl> + <Alt> + <Borrar>, o apretando el botón Reset en el panel del ordenador. Para información detallada sobre como configurar la BIOS, por favor refiérase al Manual del Usuario (archivo PDF) contenido en el CD.

3. Información de Software Support CD

Esta placa-base soporta diversos tipos de sistema operativo Windows®: 8 / 8 64 bits / 7 / 7 64 bits / Vista™ / Vista™ 64 bits / XP / XP 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.

1. Введение

Благодарим вас за покупку материнской платы ASRock **H61 Pro BTC** надежной материнской платы, изготовленной в соответствии с постоянно предъявляемыми ASRock жесткими требованиями к качеству. Она обеспечивает превосходную производительность и отличается отличной конструкцией, которые отражают приверженность ASRock качеству и долговечности.

Данное руководство по быстрой установке включает вводную информацию о материнской плате и пошаговые инструкции по ее установке. Более подробные сведения о плате можно найти в руководстве пользователя на компакт-диске поддержки.



Спецификации материнской платы и программное обеспечение BIOS иногда изменяются, поэтому содержание этого руководства может обновляться без уведомления. В случае любых модификаций руководства его новая версия будет размещена на веб-сайте ASRock без специального уведомления. Кроме того, самые свежие списки поддерживаемых модулей памяти и процессоров можно найти на сайте ASRock.

Адрес веб-сайта ASRock <http://www.asrock.com>

При необходимости технической поддержки по вопросам данной материнской платы посетите наш веб-сайт для получения информации об используемой модели.

www.asrock.com/support/index.asp

1.1 Комплектность

Материнская плата ASRock **H61 Pro BTC** (форм-фактор ATX)

Руководство по быстрой установке ASRock **H61 Pro BTC**

Компакт-диск поддержки ASRock **H61 Pro BTC**

2 x кабель данных Serial ATA (SATA) (дополнительно)

1 x I/O Щит Группы ввода / вывода



ASRock напоминает...

Для обеспечения максимальной производительности ОС Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit рекомендуется в BIOS выбрать для параметра Storage Configuration (Конфигурация запоминающего устройства) режим AHCI. Подробные сведения о настройке BIOS см. в руководстве пользователя на прилагаемом компакт-диске.

1.2 Спецификации

Платформа	- форм-фактор ATX - Весь Твердый Конденсаторный проект
Процессор	- Поддержка процессора Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 3-го и 2-го поколения с помощью разъема для процессоров LGA 1155 - Поддержка технологии Intel® Turbo Boost 2.0 - Поддержка разблокированного ЦП серии K
Набор микросхем	- Intel® H61 - Поддержка технологии Intel® Rapid Start Technology и Smart Connect Technology
Память	- Поддержка технологии Dual Channel DDR3 Memory Technology - 2 x гнезда DDR3 DIMM - Поддержите DDR3 1600/1333/1066 не- ECC, безбуферная память (DDR3 1600 с процессором Intel® Ivy Bridge, DDR3 1333 с процессором Intel® Sandy Bridge) - Максимальный объем системной памяти: 16 ГБ - поддержка профиля Intel® Extreme Memory Profile (XMP) 1.3/1.2 с помощью процессора Intel® Ivy Bridge
Гнезда расширения	- 1 x PCI Express 3.0 x16 (PCIe2 в режиме x16) * PCIe 3.0 поставляется только в комплекте с ЦП Intel® Ivy Bridge. В комплекте с ЦП Intel® Sandy Bridge поставляется только модель PCIe 2.0. - 5 x PCI Express 2.0 x1
Графика	* Встроенный видеоадаптер Intel® HD Graphics и выходы VGA поддерживаются только с процессорами, оснащенными интегрированным графическим процессором. - Поддержка функций встроенных видеоадаптеров Intel® HD: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, технологии Intel® Clear Video HD, Intel® Insider™, Intel® HD Graphics 2500/4000 с помощью процессора Intel® Ivy Bridge - Поддержка функций встроенных видеоадаптеров Intel® HD: Intel® Quick Sync Video, Intel® InTru™ 3D, технологии Intel® Clear Video HD, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) с помощью процессора Intel® Sandy Bridge - Pixel Shader 5.0, DirectX 11 с процессором Intel® Ivy Bridge, Pixel Shader 4.1, DirectX 10.1 с процессором Intel® Sandy Bridge - Макс. объем разделяемой памяти 1760Мб с помощью процессора Intel® Ivy Bridge. Макс. объем разделяемой памяти 1759Мб с помощью процессора Intel® Sandy Bridge. - Двойственное VGA выходное устройство: поддерживает HDMI и D-Sub порты через независимый контроллер дисплея - Поддержка HDMI с максимальным разрешением до 1920x1200 @ 60 Гц - Поддержка D-Sub с максимальным разрешением до 2048x1536 @ 75 Гц

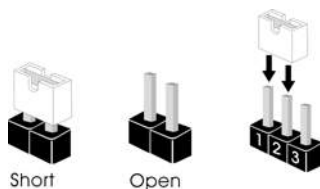
	- Поддержка Auto Lip Sync, Deep Color (12 бит на цветовой канал), xvYCC и HBR (High Bit Rate Audio) через HDMI (необходим монитор с разъемом HDMI) - Поддержка функции HDCP через разъемы HDMI - Поддержат Blu-луч 1080p (КОММУТАЦИОННАЯ ДОСКА) / воспроизведение HD-DVD через разъемы HDMI
ЛВС	- PCIe x 1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - поддержка Wake-On-LAN - Поддержка определения кабеля ЛВС - Поддержка энергосберегающего интерфейса Ethernet 802.3az - Поддержка PXE
Разъемы ввода-вывода на задней панели	- 1 x порт мыши PS/2 - 1 x порт клавиатуры PS/2 - 1 x D-Sub порт - 1 x HDMI порт - 6 x порта USB 2.0 на задней панели в стандартной конфигурации - Разъем 1 x RJ-45 LAN с светодиодным индикатором (индикатор ACT/LINK и индикатор SPEED) - Соединитель звуковой подсистемы: линейный вход / передняя колонка / микрофон
Интерфейсы накопителей	- 4 x разъемы SATA2 3,0 Гбит/с, поддержка функций NCQ, AHCI и «горячего подключения»
Колодки и плате	- 1 x Разъем порта печати - 1 x Колодка COM - 1 x соединитель CPU FAN (4-контактный) - 1 x соединитель Chassis FAN (4-контактный) - 1 x соединитель Power FAN (4-контактный) - 1 x 24-контактный Колодка питания ATX - 1 x 8-контактный Разъем ATX 12 V - 2 x Разъем питания SLI/XFire - 1 x Аудиоразъем передней панели - 2 x Колодка USB 2.0 (одна колодка для поддержки 4 дополнительных портов USB 2.0)
BIOS	- 32Mb AMI UEFI Legal BIOS с поддержкой графического интерфейса поль зователя - поддержка "Plug and Play" - ACPI 1.1, включение по событиям - поддержка режима настройки без перемычек - поддержка SMBIOS 2.3.1 - центральный IGPU, DRAM, Мультирегулирование Напряжения PCH, CPU PLL, VTT, VCCSA
Компактдиск поддержки	- Драйверы, служебные программы, антивирусное программное обеспечение (пробная версия), Google Chrome Browser и Toolbar

Контроль оборудования	- Датчики температуры процессора - Датчики температуры корпуса - Тахометры вентиляторов CPU/Chassis/Power FAN - Бесшумный вентилятор ЦП/системного блока (возможность автоматической настройки скорости вентилятора системного блока в соответствии с температурой центрального процессора) - Мультиконтроль скорости вентилятора ЦП/системного - Контроль напряжения: +12V, +5V, +3.3V, Vcore
Операционные системы	- Совместимость с Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Поддержка 64-разрядной версии Vista™ / XP / XP 64-bit
Сертификаты	- FCC, CE, WHQL - Совместимость с ErP/EuP Ready (требуется блок питания совместимый с ErP/EuP)

* Для детальной информации продукта, пожалуйста посетите наш вебсайт:
<http://www.asrock.com>

1.3 Установка перемычек

Конфигурация перемычек иллюстрируется на рисунке. Когда перемычка надета на контакты, они называются “замкнутыми” (short). Если на контактах перемычки нет, то они называются “разомкнутыми” (open). На иллюстрации показана 3-контактная перемычка, у которой контакты 1 и 2 замкнуты.



Перемычка	Установка	Описание
Очистка CMOS (CLRCMOS1, 3-контактная перемычка) (см. стр. 2, п. 9)	 Стандартные	 Очистка CMOS

Примечание. Контактная колодка CLRCMOS1 позволяет очистить данные CMOS. Для очистки данных и восстановления заводских системных параметров сначала выключите компьютер и отсоедините сетевую вилку кабеля питания от электророзетки. Выждите не менее 15 секунд и колпачковой перемычкой на 5 секунд перемкните штырьки 2 и 3 контактной колодки CLRCMOS1. Однако не производите очистку CMOS непосредственно после обновления BIOS. Если необходимо очистить CMOS сразу же после окончания обновления BIOS, то, перед очисткой CMOS, необходимо сначала выполнить загрузку системы, а затем завершить ее работу. Примите во внимание, что пароль, дата, время, профиль пользователя по умолчанию, идентификатор 1394 GUID и MAC-адрес будут очищены только тогда, когда будет извлечена из своего гнезда батарейка CMOS.

1.4 Колодки и разъемы на плате



Имеющиеся на плате колодки и разъемы НЕ ЯВЛЯЮТСЯ контактами для перемычек. НЕ УСТАНАВЛИВАЙТЕ перемычки на эти колодки и разъемы – это приведет к необратимому повреждению материнской платы!

Разъемы Serial ATAII

(SATA2_0, см. стр. 2, п. 12)

(SATA2_1, см. стр. 2, п. 15)

(SATA2_2, см. стр. 2, п. 11)

(SATA2_3, см. стр. 2, п. 14)



Четыре соединителя Serial ATAII предназначены для подключения внутренних устройств хранения с использованием интерфейсных кабелей SATAII. В настоящее время интерфейс SATA допускает скорость передачи данных до \ 3,0 Гбит/с.

Информационный кабель Serial ATA (SATA)
(дополнительно)

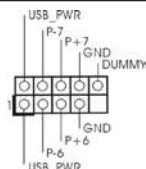


Информационный кабель интерфейса SATA / SATAII не является направленным. Любой из его соединителей может быть подключен либо к жесткому диску интерфейса SATAII либо к материнской плате.

Колодка USB 2.0

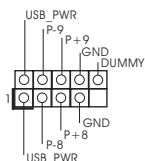
(9-контактный USB6_7)

(см. стр. 2, п. 18)



(9-контактный USB8_9)

(см. стр. 2, п. 17)

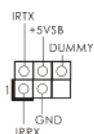


Помимо шести стандартных портов USB 2.0 на панели ввода-вывода, на данной материнской плате предусмотрено два разъема USB 2.0. Каждый разъем USB 2.0 поддерживает два порта USB 2.0.

Колодка инфракрасного модуля

(5-контактный IR1)

(см. стр. 2, п. 13)

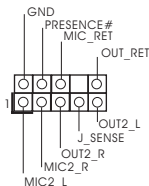


Данная колодка позволяет подключить дополнительный модуль беспроводного инфракрасного приемопередатчика.

Аудиоразъем передней панели

(9-контактный HD_AUDIO1)

(см. стр. 2, п. 20)



Этот интерфейс предназначен для присоединения аудиокабеля передней панели, обеспечивающего удобное подключение аудиоустройств и управление ими.

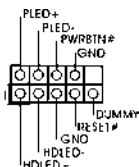


1. Система High Definition Audio поддерживает функцию автоматического обнаружения разъемов (Jack Sensing), однако для ее правильной работы кабель панели в корпусе должен поддерживать HDA. При сборке системы следуйте инструкциям, приведенным в нашем руководстве и руководстве пользователя для корпуса.
2. Если вы используете аудиопанель AC'97, подключите ее к колодке аудиоинтерфейса передней панели следующим образом:
 - A. Подключите выводы Mic_IN (MIC) к контактам MIC2_L.
 - B. Подключите выводы Audio_R (RIN) к контактам OUT2_R, а выводы Audio_L (LIN) к контактам OUT2_L.
 - C. Подключите выводы Ground (GND) к контактам Ground (GND).
 - D. Контакты MIC_RET и OUT_RET предназначены только для аудиопанели HD. При использовании аудиопанели AC'97 подключать их не нужно.

Колодка системной панели

(9-контактный PANEL1)

(см. стр. 2, п. 16)



Данная колодка обеспечивает работу нескольких функций передней панели системы.



Подключите к этому разъему кнопку питания, кнопку сброса и индикатор состояния системы на корпусе в соответствии с указанным ниже назначением контактов. При подключении кабелей необходимо соблюдать полярность положительных и отрицательных контактов.

PWRBTN (кнопка питания):

Подключите к этим контактам кнопку питания на передней панели корпуса. Способ выключения системы с помощью кнопки питания можно настроить.

RESET (кнопка сброса):

Подключите к этим контактам кнопку сброса на передней панели корпуса. Нажмите кнопку сброса для перезагрузки компьютера, если компьютер «завис» и нормальную перезагрузку выполнить не удастся.

PLED (индикатор питания системы):

Подключите к этим контактам индикатор состояния питания на передней панели корпуса. Этот индикатор светится, когда система работает. Индикатор мигает, когда система находится в режиме ожидания S1. Этот индикатор не светится, когда система находится в режиме ожидания S3 или S4, либо выключена (S5).

HDLED (индикатор активности жесткого диска):

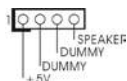
Подключите к этим контактам индикатор активности жесткого диска на передней панели корпуса. Этот индикатор светится, когда осуществляется считывание или запись данных на жестком диске.

Конструкция передней панели может различаться в зависимости от корпуса. Модуль передней панели в основном состоит из кнопки питания, кнопки сброса, индикатора питания, индикатора активности жесткого диска, динамика и т.п. При подключении к этому разъему модуля передней панели корпуса удостоверьтесь, что провода подключаются к соответствующим контактам.

Колодка динамика корпуса

(4-контактный SPEAKER1)

(см. стр. 2, п. 10)



Подключите к этой колодке кабель от динамика на корпусе компьютера.

Chassis и Power Fan-соединители

(4-контактный CHA_FAN1)

(см. стр. 2, п. 6)



Подключите кабели вентилятора к соединителям и присоедините черный шнур к штырю заземления.

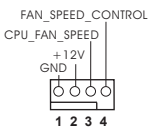
(4-контактный PWR_FAN1)

(см. стр. 2, п. 28)

**Разъем вентилятора процессора**

(4-контактный CPU_FAN1)

(см. стр. 2, п. 2)



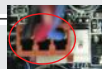
Подключите к этому разъему кабель вентилятора процессора так, чтобы черный провод соответствовал контакту земли.



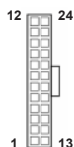
Данная материнская плата поддерживает вентиляторы процессора с 4-контактным разъемом (функция тихого режима вентилятора), однако вентиляторы с 3-контактным разъемом также будут успешно работать, хотя функция управления скоростью вращения вентилятора окажется недоступной. Если вы хотите подключить вентилятор процессора с 3-контактным разъемом к разъему вентилятора процессора на данной материнской плате, для этого следует использовать контакты 1-3.

Контакты 1-3 подключены

Установка вентилятора с 3-контактным разъемом



Колодка питания ATX
(24-контактный ATXPWR1)
(см. стр. 2, п. 5)

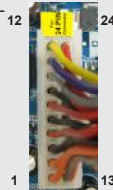


Подключите к этой колодке кабель питания ATX.



Несмотря на то, что эта материнская плата предусматривает 24-штыревой разъем питания ATX, работа будет продолжаться, даже если адаптируется традиционный 20-штыревой разъем питания ATX. Для использования 20-штыревого разъема питания ATX вставьте источник питания вместе со штекером 1 и штекером 13.

Установка 20-штыревого разъема питания ATX



Колодка питания 12V-ATX
(8-контактный ATX12V1)
(см. стр. 2, п. 3)

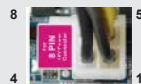


Обратите внимание, что к этому разъему необходимо подключить вилку блока питания ATX 12 В, чтобы обеспечить достаточную мощность электропитания. В противном случае включение системы будет невозможно.

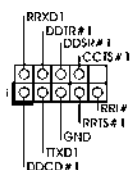


Хотя эта объединительная плата обеспечивает ATX с 8 булавками 12V соединитель власти, это может все еще работать, если Вы принимаете традиционный ATX с 4-Pin 12V электропитание. Чтобы использовать электропитание ATX с 4-Pin, пожалуйста включите ваше электропитание наряду с Булавкой 1 и Прикрепите 5.

ATX C 4-Pin 12V Установка Электропитания



Колодка COM-порта
(9-контактный COM1)
(см. стр. 2, п. 19)



Данная колодка COM-порта позволяет подключить модуль порта COM.

Разъем питания SLI/XFire
(4-контактный SLI/XFIRE_PWR1)
(см. стр. 2, п. 29)



Этот разъем предназначен для подключения разъема питания при установке на материнскую плату три видеокарт.

(4-контактный SLI/XFIRE_PWR2)
(см. стр. 2, п. 27)



2. Информация о BIOS

Утилита настройки BIOS (BIOS Setup) хранится во флэш-памяти на материнской плате. Чтобы войти в программу настройки BIOS Setup, при запуске компьютера нажмите <F2> или во время самопроверки при включении питания (Power-On-Self-Test – POST). Если этого не сделать, то процедуры тестирования POST будут продолжаться обычным образом. Если вы захотите вызвать BIOS Setup уже после POST, перезапустите систему с помощью клавиш <Ctrl> + <Alt> + <Delete> или нажатия кнопки сброса на корпусе системы. Подробную информацию о программе BIOS Setup вы найдете в Руководстве пользователя (в формате PDF) на компакт-диске поддержки.

3. Информация о компакт-диске поддержки с программным обеспечением

Данная материнская плата поддерживает различные операционные системы Microsoft® Windows® : 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. Поставляемый вместе с ней компакт-диск поддержки содержит необходимые драйверы и полезные утилиты, которые расширяют возможности материнской платы.

Чтобы начать работу с компакт-диском поддержки, вставьте его в дисковод CD-ROM. Если в вашем компьютере включена функция автозапуска (AUTORUN), то на экране автоматически появится главное меню компакт-диска (Main Menu). Если этого не произошло, найдите в папке BIN на компакт-диске поддержки файл ASSETUP.EXE и дважды щелкните на нем, чтобы открыть меню.

1. Introdução

Gratos por comprar nossa placa-mãe **H61 Pro BTC** um produto confiável feito com ASRock um estrito controle de qualidade consistente. Com um excelente desempenho, essa placa é dotada de um projeto robusto que atende a ASRock de compromisso com a qualidade e durabilidade.

Este Guia de Instalação Rápida apresenta a placa-mãe e o guia de instalação passo a passo. Mais informações detalhadas sobre a placa-mãe podem ser encontradas no manual do usuário do CD de suporte.



Porque as especificações da placa mãe e o software de BIOS poderiam ser atualizados, o conteúdo deste manual pode ser cambiado sem aviso. Em caso de qualquer modificação deste manual, a versão atualizada estará disponível no website de ASRock sem prévio aviso. Pode também encontrar as listas das mais recentes placas VGA e das CPUs suportadas no site da web da ASRock.

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

Se precisar de apoio técnico em relação a este placa-mãe, por favor visite o nosso sítio da internet para informação específica acerca do modelo que está a utilizar.

www.asrock.com/support/index.asp

1.1 Este pacote contém

Placa-mãe ASRock **H61 Pro BTC** (Formato ATX)

Guia de instalação rápida da ASRock **H61 Pro BTC**

CD de suporte da placa ASRock **H61 Pro BTC**

Dois cabo de dados ATA Serial (SATA) (Opcional)

Uma proteção I/O



A ASRock recorda-lhe...

Para obter melhor desempenho em Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit, recomendamos que defina a opção Configuração de Armazenamento na BIOS para o modo AHCI. Para mais detalhes acerca da configuração da BIOS consulte o “Manual de utilizador” no nosso CD de suporte.

1.2 Especificações

Plataforma	- Formato ATX - Design de condensadores banhados a ouro de alta qualidade
CPU	- Suporta Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® de 3ª e 2ª geração no pacote LGA1155 - Suporta a tecnologia Intel® Turbo Boost 2.0 - Suporta K-Series desbloqueado CPU
Chipsets	- Intel® H61 - Suporta a tecnologia Rapid Start da Intel® e a tecnologia Smart Connect
Memória	- Suporte à tecnologia de memória de duplo canal - 2 x slots de DDR3 DIMM - Suporte para memória não intermédia DDR3 1600/1333/1066, não ECC (DDR3 1600 com Intel® Ivy Bridge CPU, DDR3 1333 com processadores Intel® Sandy Bridge CPU) - Capacidade máxima de memória do sistema: 16GB - Suporta Extreme Memory Profile (XMP) 1.3/1.2 da Intel® com CPU Ivy Bridge da Intel®
Slots de Expansão	- 1 x slot de PCI Express 3.0 x16 (modo PCIe2 @ x16) * O modo PCIe 3.0 apenas é suportado com a CPU Ivy Bridge da Intel®. A CPU Sandy Bridge da Intel® apenas suporta o modo PCIe 2.0. - 5 x slot de PCI Express 2.0 x1
VGA integrado	* As saídas Intel® HD Graphics Built-in Visuals e VGA são suportadas apenas por processadores com GPU integrada. - Suporta Intel® HD Graphics Embutido Visuals: Intel® Quick Sync Video 2.0, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 com CPU Ivy Bridge da Intel® - Suporta Intel® HD Graphics Embutido Visuals: Intel® Quick Sync Video, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) com CPU Sandy Bridge da Intel® - Pixel Shader 5.0, DirectX 11 com Intel® Ivy Bridge CPU, Pixel Shader 4.1, DirectX 10.1 com processadores Intel® Sandy Bridge CPU - Memória partilhada máxima 1760MB com CPU Ivy Bridge da Intel®. Memória partilhada máxima 1759MB com CPU Sandy Bridge da Intel®. - Porta de saída VGA dupla: suporta portas HDMI e D-Sub

	através de controladores de visualização independentes - Suporta HDMI Tecnologia com resolução máxima até 1920x1200 @ 60Hz - Suporta D-Sub com resolução máxima até 2048x1536 @ 75Hz - Suporta as funções Auto Lip Sync (Sincronização automática do som), Deep Color (Profundidade da cor) (12bpc), xvYCC e HBR (áudio de taxa de bits elevada) com HDMI (é necessário um monitor compatível com a norma HDMI) - Suportar HDCP função com HDMI porta - Suportar 1080p Blu-ray (BD) / HD-DVD playback com HDMI porta
Áudio	- Áudio de alta definição de canal 5.1 (Codec de áudio VIA® VT1705)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Suporta Wake-On-LAN - Suporta Detecção de cabo LAN - Suporta Ethernet com Eficiência Energética 802.3az - Suporta PXE
Entrada/Saída pelo painel traseiro	- 1 x porta para mouse PS/2 - 1 x porta para teclado PS/2 - 1 x porta D-Sub - 1 x porta HDMI - 6 x portas USB 2.0 padrão - 1 x porta LAN RJ-45 com LED (LED ACT/LIG e LED VELOCIDADE) - Áudio Jack: saída / entrada de linha / microfone + porta de jogos
Interface de Armazenamento	- 4 x conectores SATA2, suporte a taxa de transferência de dados de até 3,0 Gb/s, suporte NCQ, AHCI e "conexão a quente"
Conectores	- 1 x Conector do módulo de infravermelho - 1 x conector da porta COM - 1 x Conector do ventilador da CPU (4 pinos) - 1 x Conector do ventilador da chassi (4 pinos) - 1 x Conector do ventilador da energia (4 pinos) - 1 x Conector de força do ATX de 24 pinos - 1 x Conector ATX 12 V de 8 pinos - 2 x Conector de alimentação SLI/XFire - 1 x Conector Áudio do painel frontal - 2 x cabezal USB 2.0 (suporta 4 portas USB 2.0)

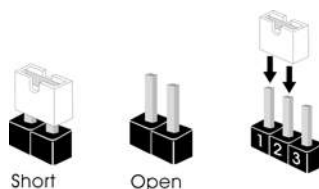
BIOS	- 32Mb BIOS UEFI oficial da AMI com suporte para GUI - Suporta dispositivos "Plug and Play" - ACPI 1.1 atendendo a eventos de "wake up" - Suporta dispositivos sem jumper - Suporte para SMBIOS 2.3.1 - IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltage Multi-adjustment
CD de suporte	- Controladores, utilitários, software antivírus (Experimentacao Versao), Navegador Google Chrome e Barra de Ferramentas
Monitor do HW	- Sensores de temperature do procesador - Medição de temperatura da placa-mãe - Tacômetros de ventilador do Processador/chassis/energia - Ventoinha silenciosa para a CPU/chassis (Permitir velocidade Chassis Auto-Ajuste de temperatura da CPU) - CPU/Chassis Fan Controle Multi-Velocidade - Monitoramento de voltagem : +12 V, +5 V, +3.3 V, Vcore
Sistema Operacional	- Microsoft® Windows® 8 / 8 de 64 bits / 7 / 7 de 64 bits / Vista™ / Vista™ de 64 bits / XP / XP de 64 bits
Certificações	- FCC, CE, WHQL - "ErP/EuP Ready" (é necessária alimentação eléctrica "ErP/ EuP Ready")

* Para informações mais detalhadas por favor visite o nosso sítio Web:

<http://www.asrock.com>

1.3 Configuração dos Jumpers

A ilustração mostra como os jumpers são configurados. Quando há uma capa de jumpers sobre os pinos, diz-se que o jumper está “curto”. Não havendo capa sobre os pinos, o jumper está “aberto”. A ilustração mostra um jumper de 3 pinos em que os pinos 1 e 2 estão “curtos” quando a capa de jumper estiver colocada sobre esses 2 pinos.



Jumper

Configuração

Restaurar CMOS

(CLRCMOS1, jumper de 3 pinos)

(veja a folha 2, No. 9)



Configuração-padrão



Limpar o CMOS

Nota: CLRCMOS1 permite você limpar os dados em CMOS. Os dados em CMOS incluem informações da configuração do sistema como: por exemplo a senha do sistema, data, tempo, e os parâmetros da configuração do sistema. Para limpar e reconfigurar os parâmetros do sistema a configuração inicial da fábrica, por favor desligue o cabo de força, ponha em curto-circuito os pin 2 e pin 3 de CLRCMOS1 por mais de 5 segundos para limpar o CMOS usando um jumper. Por favor lembrese de remover o jumper depois de limpar o CMOS. Se precisar limpar o CMOS ao concluir a atualização do BIOS, deverá reiniciar o sistema primeiro e, em seguida, desligá-lo antes de executar a ação de limpeza o CMOS.

1.4 Conectores



Os conectores NÃO SÃO jumpers. NÃO coloque capas de jumper sobre estes conectores. A colocação de pontos de jumper sobre os conectores causará danos irreversíveis à placa-mãe.

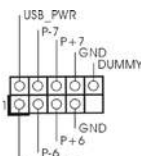
Conector	Figura	Descrição
Conectores ATAII Serial (SATA2_0: veja a folha 2, No. 12) (SATA2_1: veja a folha 2, No. 15) (SATA2_2: veja a folha 2, No. 11) (SATA2_3: veja a folha 2, No. 14)		Estes quatro conectores Serial ATA (SATAII) suportam unidades de disco rígido SATA ou SATAII como dispositivos de armazenamento internos. A atual interface SATAII permite uma taxa de transferência de dados de até 3.0 Gb/s.

Cabo de dados
ATA (SATA)
(opcional)

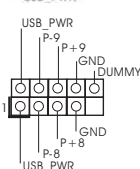


Tanto a saída do cabo de Serial dados SATA pode ser conectado ao disco rígido SATA / SATAII quanto o conector SATAII na placa mãe.

Cabezal USB 2.0
(USB6_7 de 9 pinos)
(veja a folha 2, No. 18)

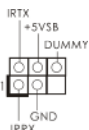


(USB5_6 de 9 pinos)
(veja a folha 2, No. 17)



Além das seis portas USB 2.0 por defeito no painel de entrada/saída, há dois ligações USB 2.0 nesta placa-mãe. Cada ligação USB 2.0 pode suportar duas portas USB 2.0.

Conector do módulo de infravermelho
(IR1 de 5 pinos)
(veja a folha 2, No. 13)

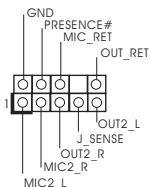


Este conector suporta um módulo de infravermelho para transmissão e recepção sem fio, opcional.

Conector Áudio do painel frontal

(HD_AUDIO1 de 9 pinos)

(veja a folha 2, No. 20)



Esta é uma interface para o cabo de áudio no painel frontal, que permite uma conexão e controle convenientes dos dispositivos de áudio.

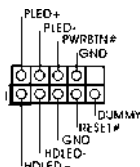


1. Áudio de elevada definição que suporta a sensibilidade da tomada, mas o fio do painel existente no chassis tem de suportar HDA para funcionar correctamente. Siga s instruções que aparecem no manual e no manual do chassis para instalar o sistema.
2. Se utilizar o painel de áudio AC'97, instale-o no cabeçalho de áudio do painel frontal, como a figura abaixo mostra:
 - A. Ligue o Mic_IN (MIC) ao MIC2_L.
 - B. Ligue o Audio_R (RIN) ao OUT2_R e o Audio_L (LIN) ao OUT2_L.
 - C. Ligue o Ground (GND) ao Ground (GND).
 - D. MIC_RET e OUT_RET são apenas para o painel de áudio HD. Não necessita de os ligar para o painel de áudio AC'97.

Conector do painel do sistema

(PANEL1 de 9 pinos)

(veja a folha 2, No. 16)



Este conector acomoda várias funções do painel frontal do sistema.



Ligue o botão de alimentação, o botão de reposição e o indicador do estado do sistema no chassis a este conector de acordo com a descrição abaixo. Tenha em atenção os pinos positivos e negativos antes de ligar os cabos.

PWRBTN (Botão de alimentação):

Ligue ao botão de alimentação no painel frontal do chassis. Pode configurar a forma para desligar o seu sistema através do botão de alimentação.

RESET (Botão de reposição):

Ligue ao botão de reposição no painel frontal do chassis. Prima o botão de reposição para reiniciar o computador caso este bloqueie e não seja possível reiniciar normalmente.

PLED (LED de alimentação do sistema):

Ligue ao indicador do estado da alimentação no painel frontal do chassis. O LED ficará acesso quando o sistema estiver em funcionamento. O LED ficará intermitente quando o sistema estiver no estado de suspensão S1. O LED ficará desligado quando o sistema estiver nos estados de suspensão S3/S4 ou desligado (S5).

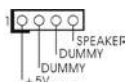
HDLED (LED de actividade do disco rígido):

Ligue ao LED de actividade do disco rígido no painel frontal do chassis. O LED ficará acesso quando o disco rígido estiver a ler ou a escrever dados.

O design do painel frontal poderá variar dependendo do chassis. Um módulo de painel frontal consiste principalmente em um botão de alimentação, um botão de reposição, um LED de alimentação, um LED de actividade do disco rígido, um altifalante, etc. Ao ligar o seu módulo de painel frontal do chassis a este conector, certifique-se que os fios e os pinos têm uma correspondência exacta.

Conector do alto-falante do chassi

(SPEAKER1 de 4 pinos)
(veja a folha 2, No. 10)



Ligue o alto-falante do chassi neste conector.

Conector do ventilador do chassis/energia

(CHA_FAN1 de 4 pinos)
(veja a folha 2, No. 6)



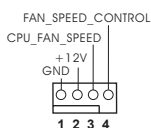
(PWR_FAN1 de 4 pinos)
(veja a folha 2, No. 28)



Ligue o cabo do ventilador neste conector, coincidindo o fio preto com o pino de aterramento.

Conector do ventilador da CPU

(CPU_FAN1 de 4 pinos)
(veja a folha 2, No. 2)



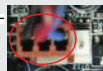
Ligue o cabo do ventilador da CPU, coincidindo o fio preto com o pino de aterramento.



Apesar de esta placa-mãe possuir 4 apoios para uma ventoinha de CPU (Ventoinha silenciosa), uma ventoinha de 3 pinos para CPU poderá funcionar mesmo sem a função de controlo de velocidade da ventoinha. Se pretender ligar uma ventoinha de 3 pinos para CPU ao conector de ventoinha do CPU nesta placa-mãe, por favor, ligue-a aos pinos 1-3.

Pinos 1-3 ligados ←

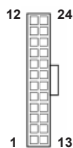
Instalação de Ventoinha de 3 pinos



Conector de força do ATX

(ATXPWR1 de 24 pinos)

(veja a folha 2, No. 5)

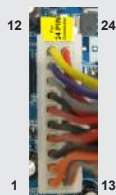


Ligue a fonte de alimentação ATX neste conector.



Embora esta placa-mãe providencie um conector de energia ATX de 24 pinos, pode apesar disso funcionar com a adaptação de uma fonte de energia tradicional de 20 pinos. Para usar a fonte de alimentação de 29 pinos, por favor ligue a sua fonte de alimentação com o Pino 1 e o Pino 13.

Instalação da Fonte de alimentação ATX de 20 Pinos



Conector de força do ATX 12V

(ATX12V1 de 8 pinos)

(veja a folha 2, No. 3)



Ligue a fonte de alimentação ATX 12V neste conector.



Embora esta placa-mãe providencie um conector de energia ATX 12V de 8 pinos, pode apesar disso funcionar com a adaptação de uma fonte de energia tradicional de 4 pinos. Para usar a fonte de alimentação de 4 pinos, por favor ligue a sua fonte de alimentação com o Pino 1 e o Pino 5.

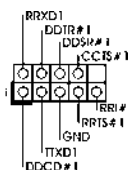
Instalação da Fonte de alimentação ATX 12V de 4 Pinos



Conector da porta COM

(COM1 de 9 pinos)

(veja a folha 2, No. 19)



Este conector é usado para suportar um módulo de porta COM.

Conector de alimentação SLI/XFire

(SLI/XFIRE_PWR1 de 4 pinos)

(veja a folha 2, No. 29)



(SLI/XFIRE_PWR2 de 4 pinos)

(veja a folha 2, No. 27)



Ligue este conector a um conector de alimentação do alimentação quando existirem três placas gráficas instaladas nesta placa principal.

2. Informações da BIOS

O Utilitário de Configuração do BIOS está armazenado no chip FWH do BIOS. Ao iniciar o computador, pressione <F2> ou durante o Autoteste de iniciação (POST) para acessar o Utilitário de Configuração do BIOS; caso contrário, o POST continuará com as rotinas de teste. Se desejar acessar o Utilitário de Configuração do BIOS depois do POST, reinicie o sistema pressionando <Ctl> + <Alt> + , ou pressionando o botão de reinício no chassi do sistema. Para as informações detalhadas sobre o Utilitário de Configuração do BIOS, consulte o Manual do Usuário (arquivo PDF) no CD de suporte.

3. Informações do CD de Suporte

Esta placa Mãe suporta vários sistemas operacionais: Microsoft® Windows®: 8 / 8 de 64 bits / 7 / 7 de 64 bits / Vista™ / Vista™ de 64 bits / XP / XP de 64 bits. O CD de instalação que acompanha a placa Mãe contém: drivers e utilitários necessários para um melhor desempenho da placa Mãe. Para começar a usar o CD de instalação, introduza o CD na leitora de CD-ROM do computador. Automaticamente iniciará o menu principal, caso o AUTORUN esteja ativado. Se o menu principal não aparecer automaticamente, explore o CD e execute o “ASSETUP.EXE” localizado na pasta BIN.

1. Giriş

ASRock'ın kesintisiz titiz kalite denetimi altında üretilen güvenilir bir anakart olan ASRock **H61 Pro BTC** anakartını satın aldığınız için teşekkür ederiz. ASRock'ın kalite ve dayanıklılık konusundaki kararlılığına uygun güçlü tasarımıyla mükemmel bir performans sunar.

Bu Hızlı Takma Kılavuzu anakarta giriş ve adım adım takma kılavuzu içerir. Anakart hakkında daha ayrıntılı bilgiyi Destek CD'sinde sunulan kullanıcı kılavuzunda bulabilirsiniz.



Anakart özellikleri ve BIOS yazılımı güncelleştirilebileceğinden bu kılavuzun içeriği önceden haber verilmeksizin değişebilir. Bu belgede değişiklik yapılması durumunda, güncelleştirilmiş sürüm ayrıca haber verilmeksizin ASRock web sitesinde sunulur. En son VGA kartlarını ve CPU destek listelerini de ASRock web sitesinde bulabilirsiniz. ASRock web sitesi <http://www.asrock.com>

Bu anakartla ilgili teknik desteğe ihtiyacınız olursa, kullandığınız modele özel bilgiler için lütfen web sitemizi ziyaret edin.
www.asrock.com/support/index.asp

1.1 Paket İçindekiler

ASRock **H61 Pro BTC** Anakart (ATX Form Faktörü)

ASRock **H61 Pro BTC** Hızlı Takma Kılavuzu

ASRock **H61 Pro BTC** Destek CD'si

2 x Seri ATA (SATA) Veri Kablosu (İsteğe Bağlı)

1 x G/Ç Panel Kalkanı



ASRock Size Şunu Hatırlatır...

Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit ile daha iyi performans elde etmek için, Depolama Konfigürasyonundaki BIOS seçeneğini AHCI moduna ayarlamanız tavsiye edilir. BIOS ayarı için, ayrıntıları öğrenmek üzere lütfen destek CD'mizdeki "Kullanıcı Kılavuzu"na bakın.

1.2 Özellikler

Platform	- ATX Form Faktörü - Tüm Katı Kapasitör tasarımı
CPU	- LGA1155 Paketi'deki 3. ve 2. Nesil Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron®'yi destekler - Intel® Turbo Boost 2.0 Teknolojisini destekler - K-Serisi kilidi kaldırılmış işlemciyi destekler
Yonga seti	- Intel® H61 - Intel® Rapid Start Teknolojisini ve Smart Connect Teknolojisi'ni destekler
Bellek	- Çift Kanallı DDR3 Belleği Teknolojisi - 2 x DDR3 DIMM yuva - DDR3 1600/1333/1066 ECC olmayan, ara belleksiz bellek (Intel® Ivy Bridge işlemciye sahip DDR3 1600, Intel® Sandy Bridge işlemciye sahip DDR3 1333) - Sistem belleğinin maks. kapasitesi: 16 GB - Intel® Ivy Bridge İşlemci ile Intel® Extreme Bellek Profilini (XMP) 1.3/1.2 destekler
Genişletme Yuvası	- 1 x PCI Express 3.0 x16 yuva (PCI-E2 @ x16 modu) * PCI-E 3.0, sadece Intel® Ivy Köprü İşlemcisiyle desteklenir. Intel® Sandy Köprü İşlemciyle, sadece PCI-E 2.0'ı destekler. - 5 x PCI Express 2.0 x1 yuva
Grafikler	* Intel® HD Grafik Yerleşik Görselleri ve VGA çıkışları, yalnızca GPU entegre işlemciler tarafından desteklenmektedir. - Intel® Ivy Bridge İşlemci ile Intel® HD Graphics Dahili Görselleri: Intel® Hızlı Eşitleme Videosu 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Teknolojisi, Intel® Insider™, Intel® HD Graphics 2500/4000 - Intel® Sandy Bridge İşlemci ile Intel® HD Graphics Dahili Görselleri: Intel® Hızlı Eşitleme Videosu, Intel® InTru™ 3D, Intel® Clear Video HD Teknolojisi, Intel® HD Graphics 2000/3000, Intel® Gelişmiş Vektör Uzantıları (AVX) - Pixel Shader 5.0, Intel® Ivy Bridge işlemciye sahip DirectX 11. Pixel Shader 4.1, Intel® Sandy Bridge işlemciye sahip DirectX 10.1 - Intel® Ivy Bridge İşlemci ile Maks. paylaşılan bellek 1760 MB. Intel® Sandy Bridge İşlemci ile Maks. paylaşılan bellek 1759 MB. - Çift VGA Çıkış: desteği HDMI ve bağımsız görüntü

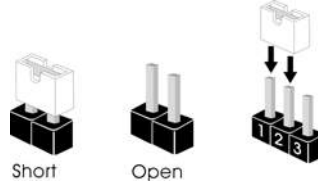
	denetleyiciler tarafından D-Sub bağlantı noktaları - 60Hz'de 1920x1200'e kadar maks. зұзънырлықle HDMI Teknolojisini destekler - 75Hz'de 2048x1536'ya kadar maks. зұзънырлықle D-Sub'a destekler - Auto Lip Sync, Deep Color (12bpc), HDMI ile xvYCC ve HBR'yi (Yüksek Bit Hızlı Ses) destekler (Uyumlu HDMI monitör gerekir) - HDMI portlarıyla HDCP işlevini destekler - HDMI portlarıyla Tam HD 1080p Blu-ray (BD) / HD-DVD oynatımına destekler
Ses	- (VIA® VT1705 Ses Codec'i) 5,1 Kanal HD Ses
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/sn - Realtek RTL8111E - LAN'da Uyan özelliğini destekler - LAN Kablo Algılama'yı destekler - Enerji Verimli Ethernet 802.3az desteği - PXE'yi destekler
Arka Panel G/3	- 1 x PS/2 Fare Portu - 1 x PS/2 Klavye Portu - 1 x D-Sub Portu - 1 x HDMI Portu - 6 x Kullanıma Hazır USB 2.0 Portu - 1 x RJ-45 LAN Portu, LED'li (AKT/LGNK LED'i ve HIZ LED'i) - HD Ses Jakı: Hat Girişi/Ön Hoparlör/Mikrofon
Depolama Ara yüzü	- 4 x SATA2 3,0Gb/sn, donanım NCQ, AHCI ve "Sistem Açırken Bileşen Takma" işlevlerini
Konektör	- 1 x KÖ fişi - 1 x COM portu fişi - 1 x Conector do ventilador da CPU (4 pinos) - 1 x Conector do ventilador da chassis (4 pinos) - 1 x Conector do ventilador da energia (4 pinos) - 1 x 24 pin ATX güç konektörü - 1 x 8 pin 12V güç konektörü - 2 x SLI/XFire güç konektörü - 1 x Ön panel ses konektörü - 2 x USB 2.0 fiş (4 USB 2.0 portu destekler)
BIOS Özelliği	- 32 Mb GUI destekli AMI UEFI Geçerli BIOS - "Tak Çalıştır"ı destekler - ACPI 1.1 Uyumlu Uyandırma Olayları - Jumpersiz ayarlamayı destekler

	- AMBIOS 2.3.1 Desteđi - IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA Voltaj Çoklu ayarı
Destek CD'si	- Sürücüler, Yardımcı Programlar, AntiVirüs Yazılımı (Deneme Sürümü), Google Chrome Browser ve Toolbar
Donanım Monitör	- CPU Sıcaklık Duyarlılığı - Kasa Sıcaklık Duyarlılığı - CPU/Kasa/Güç Fan Takometresi - İşlemci/Kasa Sessiz Fanı (Kasa Fan Hızı'nın İşlemci sıcaklığı ile Otomatik Ayar'ına izin verir) - CPU/Kasa Fan Çoklu-Hız Kontrolü - Voltaj İzleme: +12V, +5V, +3,3V, CPU Vcore
İS	- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit uyumlu
Sertifikalar	- FCC, CE, WHQL - ErP/EuP Hazır (ErP/EuP hazır güç kaynağı gerekli)

* Ayrıntılı ürün bilgileri için lütfen web sitemizi ziyaret edin: <http://www.asrock.com>

1.3 Jumper'ların Ayarı

Şekilde jumper'ların nasıl ayarlandıkları gösterilmektedir. Jumper kapağı pinler üzerine yerleştirildiğinde jumper "Kapalı" dır. Jumper kapağı pinler üzerindeyken jumper "Açık" tır. Şekilde pin1 ve pin2'si "Kapalı" olan jumper kapağı bu 2 pine yerleştirilmiş 3-pinli jumper gösterilmektedir.



Jumper

Ayar

CMOS'u temizleme

(CLRCMOS1, 3-pinli jumper)

(bkz. s.2 No. 9)



Default



Clear CMOS

Not: CLRCMOS1, CMOS'daki verilerinizi temizlemenize olanak sağlar. Sistem parametrelerini temizlemek ve varsayılan ayara sıfırlamak için lütfen bilgisayarı kapatın ve güç kablosunun fişini güç kaynağından çekin. 15 saniye bekledikten sonra, pin2 ve pin3'ü CLRCMOS1'de 5 saniye kısaltmak için bir atlatıcı şapkası kullanın. Ancak, BIOS'u güncelledikten hemen sonra lütfen CMOS'u temizlemeyin. BIOS'u güncellemeyi tamamladığınızda CMOS'u temizlemeniz gerekirse, ilk olarak sistemi başlatmanız ve ardından CMOS temizleme işlemini gerçekleştirmeden önce kapatmanız gereklidir. Parola, tarih, saat, kullanıcı varsayılan profili, 1394 GUID ve MAC adresinin yalnızca CMOS pili çıkarıldığında temizleneceğini lütfen aklınızda bulundurunuz.

1.4 Yerleşik Fişler ve Konektörler

Yerleşik fişler ve konektörler jumper DEĞİLDİR. Bu fişlerin ve konektörlerin üzerine jumper kapakları YERLEŞTİRMEYİN. Fişlerin ve konektörlerin üzerine jumper kapakları yerleştirmek anakartın kalıcı olarak zarar görmesine neden olabilir!

Seri ATAII Konektörler

(SATA2_0: bkz. s.2, No. 12)

(SATA2_1: bkz. s.2, No. 15)

(SATA2_2: bkz. s.2, No. 11)

(SATA2_3: bkz. s.2, No. 14)



Bu dört Seri ATAII (SATAII) konektör, dahili depolama cihazları için SATA veri kablolarını destekler. Geçerli SATAII arayüzü 3,0 Gb/sn veri aktarım hızına izin verir.

Seri ATA (SATA)

Veri Kablosu

(İsteğe bağlı)

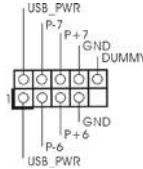


SATA veri kablosunu her iki ucu da SATA / SATAII sabit diskine veya anakarttaki SATAII konektörüne bağlanabilir.

USB 2.0 Fişleri

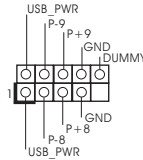
(9-pinli USB6_7)

(bkz. s.2 No. 18)



(9-pinli USB8_9)

(bkz. s.2 No. 17)

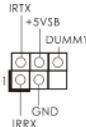


G/Ç panelindeki varsayılan altı USB 2.0 portundan başka, bu anakartta iki USB 2.0 fişi bulunur. Her USB 2.0 fişi iki USB 2.0 portunu destekler.

Kızılötesi Modülü Fişi

(5-pinli IR1)

(bkz. s.2 No. 13)

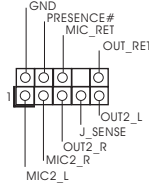


Bu fiş, isteğe bağlı bir kablosuz aktarma ve alma kızılötesi modülünü destekler.

Ön Panel Ses Fişi

(9-pinli HD_SES1)

(bkz. s.2 No. 20)



Bu, panel ses kablosu için uygun bağlantı sağlayan ve ses cihazlarını kontrol etmeyi sağlayan bir arayüzdür.

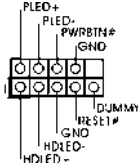


1. Yüksek Tanımlı Ses Jak Duyarlılığını destekler, ancak kasadaki panel kablosunun HDA'nın düzgün çalışmasını desteklemesi gerekir. Lütfen sisteminizi yüklemek için kılavuzumuzdaki ve kasa kılavuzundaki talimatları izleyin.
2. AC'97 ses paneli kullanıyorsanız, lütfen ön panel ses fişine aşağıdaki gibi takın:
 - A. Mic_IN'i (MIC) MIC2_L'ye bağlayın.
 - B. Audio_R'yi (RIN) OUT2_R'ye ve Audio_L'yi (LIN) OUT2_L'ye bağlayın.
 - C. Ground'u (GND) Ground'a (GND) bağlayın.
 - D. MIC_RET ve OUT_RET yalnızca HD ses paneli içindir. Bunları AC'97 ses paneli için bağlamanız gerekmez.

Sistem Paneli Fişi

(9-pinli PANEL1)

(bkz. s.2 No. 16)



Bu fiş, birçok sistem ön paneli işlevini barındırır.



Kasa üzerindeki güç anahtarını, sıfırlama anahtarını ve sistem durumu göstergesini aşağıdaki pin atamalarına göre bu bağlantıya bağlayın. Kabloları bağlamadan önce pozitif ve negatif pinlere dikkat edin.

PWRBTN (Güç Anahtarı):

Kasa üzerindeki güç anahtarını ön panele bağlayın. Güç anahtarını kullanarak sisteminizi kapatma şeklinizi yapılandırabilirsiniz.

RESET (Sıfırlama Anahtarı):

Kasa üzerindeki sıfırlama anahtarını ön panele bağlayın. Bilgisayar donarsa veya normal bir yeniden başlatma gerçekleştirilemezse, bilgisayarı yeniden başlatmak için sıfırlama anahtarına basın.

PLED (Sistem Gücü LED'i):

Kasa üzerindeki güç durumu göstergesini ön panele bağlayın. Sistem çalışırken LED yanar. Sistem S1 uykusu modunda iken LED yanıp sönmeye devam eder. Sistem S3/S4 uykusu modunda veya kapalı (S5) iken LED söner.

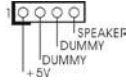
HDLED (Sabit Disk Çalışma LED'i):

Kasa üzerindeki sabit disk çalışma LED'ini ön panele bağlayın. Sabit disk veri okurken veya yazarken LED yanar.

Ön panel tasarımı kasaya göre değişiklik gösterebilir. Ön panel modülünde temel olarak güç anahtarı, sıfırlama anahtarı, güç LED'i, sabit disk çalışma LED'i, hoparlör vb. bulunur. Kasa ön panel modülünüzü bu bağlantıya bağlarken, kablo atamalarının ve pin atamalarının doğru biçimde eşleştirildiğinden emin olun.

Kasa Hoparlörü Fişi

(4-pinli SPEAKER1)
(bkz. s.2 No. 10)



Lütfen kasa hoparlörünü bu fişe bağlayın.

Kasa/güç Fan Konektörü

(4-pinli CHA_FAN1)
(bkz. s.2 No. 6)



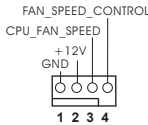
Lütfen kasa fan kablolarını fanına bu konektöre bağlayın ve siyah kabloyu toprak pinine bağlayın.

(4-pinli PWR_FAN1)
(bkz. s.2 No. 28)



CPU Fan Konektörü

(4-pinli CPU_FAN1)
(bkz. s.2 No. 2)



Lütfen fan kablolarını CPU fanına bu konektöre bağlayın ve siyah kabloyu toprak pinine bağlayın.



Bu anakart 4-Pinli CPU fan (Sessiz Fan) desteği sağlasa da, 3-Pinli CPU fan hızı kontrol işlevi olmadan bile hala başarılı bir şekilde çalışabilir. 3-Pinli CPU fanı bu konektördeki CPU fan konektörüne bağlamayı planlıyorsanız, lütfen Pin 1-3'e bağlayın.

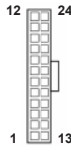
Pin 1-3 Bağlı ←

3-Pinli Fanı Takma



ATX Güç Konektörü

(24-pinli ATXPWR1)
(bkz. s.2 No. 5)

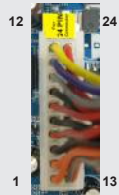


Lütfen bir ATX güç kaynağını bu konektöre bağlayın.



Bu anakart 24-pinli ATX güç konektörü sağlasa da geleneksel bir 20-pinli ATX güç kaynağı bağlarsanız da çalışabilir. 20-pinli ATX güç kaynağını kullanmak için, lütfen güç kaynağınızı Pin 1 ve Pin 13'le birlikte takın.

20-Pinli ATX Güç Kaynağını Takma



ATX 12V Güç Konektörü

(8-pinli ATX12V1)

(bkz. s.2 No. 3)



Lütfen bir ATX 12V güç kaynağını bu konektöre bağlayın.

Bu anakart 8-pinli ATX 12V güç konektörü sağlasa da geleneksel bir 4-pinli ATX 12V güç kaynağı bağlarsanız da çalışabilir. 4-pinli ATX güç kaynağını kullanmak için, lütfen güç kaynağınızı Pin 1 ve Pin 5'le birlikte takın.

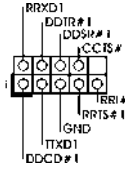
4-Pinli ATX 12V Güç Kaynağını Takma



Seri port Fişi

(9-pinli COM1)

(bkz. s.2 No. 19)



Bu COM1 fişi bir seri port modülünü destekler.

SLI/XFire Güç Konektörü

(4-pinli SLI/XFIRE_PWR1)

(bkz. s.2 No. 29)

(4-pinli SLI/XFIRE_PWR2)

(bkz. s.2 No. 27)



Üç grafik kartı bu anakarta takılıyken lütfen bu bağlayıcıyı güç beslemesi güç bağlayıcısına bağlayın.

2. BIOS Bilgileri

Anakarttaki Flash Bellek BIOS Ayarları Yardımcı Programını içerir. Bilgisayarı başlattığınızda, lütfen Otomatik Güç Sınaması (POST) sırasında BIOS Ayarları yardımcı programına girmek için <F2> veya tuşuna basın; aksi halde, POST test rutinlerine devam eder. BIOS Ayarlarına POST'tan sonra girmek istiyorsanız, lütfen <Ctl> + <Alt> + <Delete> tuşlarına basarak veya sistem kasasındaki sıfırlama düğmesine basarak sistemi yeniden başlatın. BIOS Ayarları programı kullanıcı dostu olacak şekilde tasarlanmıştır. Çeşitli alt menüler arasında dolaşmanıza ve önceden belirlenen seçenekler arasından seçim yapmanıza izin veren menü tabanlı bir programdır. BIOS Ayarları hakkında ayrıntılı bilgi için, lütfen Destek CD'sinde bulunan Kullanıcı Kılavuzu'na (PDF dosyası) başvurun.

3. Yazılım Destek CD'si bilgileri

Bu anakart çeşitli Microsoft® Windows® işletim sistemleri destekler: 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit. Anakartla birlikte gelen Destek CD'si anakart özelliklerini genişleten gerekli sürücüler ve kullanışlı yardımcı programları içerir. Destek CD'sini kullanmaya başlamak için, CD'yi CDROM sürücünüze takın. Bilgisayarınızda "OTOMATİK KULLAN" özelliği etkinleştirilmişse, Ana Menüü otomatik olarak görüntüler. Ana Menü otomatik olarak görüntülenmezse, menüleri görüntülemek için Destek CD'sinin "BIN" klasöründeki "ASSETUP.EXE" dosyasını bulun ve çift tıklayın.

1. 제품소개

ASRock의 **H61 Pro BTC** 메인 보드를 구매하여 주신것에 대하여 감사 드립니다. 이 메인보드는 엄격한 품질관리 하에 생산되어진 신뢰성 있는 메인보드입니다. 이 제품은 고 품격 디자인과 함께 ASRock의 우수한 품질과 최고의 안정성을 자랑하고 있습니다. 이 빠른 설치 안내서에는 마더보드에 대한 설명과 단계별 설치 방법이 실려 있습니다. 마더보드에 대한 보다 자세한 내용은 지원 CD의 사용 설명서에서 확인할 수 있습니다.



메인보드의 사양이나 바이오스가 업데이트 되기 때문에 이 사용자 설명서의 내용은 예고 없이 변경되거나 바뀔 수가 있습니다. 만일을 생각해서 이 사용자 설명서의 어떤 변경이 있으면 ASRock의 웹사이트에서 언제든지 업데이트를 하실 수 있습니다. 웹사이트에서 최신 VGA 카드와 CPU 지원 목록을 확인할 수 있습니다. ASRock의 웹사이트 주소는 <http://www.asrock.com> 입니다. 본 마더보드와 관련하여 기술 지원이 필요한 경우 당사 웹사이트를 방문하여 사용 중인 모델에 대한 특정 정보를 얻으십시오. www.asrock.com/support/index.asp

1.1 패키지 내용

ASRock **H61 Pro BTC** 마더보드 (ATX 폼 팩터)

ASRock **H61 Pro BTC** 퀵 설치 가이드

ASRock **H61 Pro BTC** 지원 CD

시리얼 ATA (SATA) 데이터 케이블 2 개 (선택 사양)

I/O 차폐 1 개



ASRock은사용자에게 알립니다...

Windows® 8 / 8 64-비트 / 7 / 7 64-비트 / Vista™ / Vista™ 64-비트의 성능을 향상시키기 위해서 Storage Configuration(스토리지 구성)에서 BIOS 옵션을 AHCI 모드로 설정하는 것이 좋습니다. BIOS 설정과 관련하여 자세한 내용은 지원 CD에 포함된 “사용 설명서”를 참조하십시오.

1.2 설명서

플랫폼	- ATX 폼 팩터 - 완전 교체 축전지 디자인
CPU	- LGA1155 패키지에서 3 세대 및 2 세대 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 을 지원합니다 - Intel® Turbo Boost 2.0 기술 지원 - K- 시리즈 잠금 해제 CPU 지원 - 하이퍼 - 스레딩 기술 지원
칩셋	- Intel® H61 - Intel® Rapid Start 기술과 Smart Connect 기술을 지원합니다
메모리	- 듀얼 채널 메모리 기술 지원 - DDR3 DIMM 슬롯 2 개 - DDR3 1600/1333/1066 비 -ECC, 언버퍼드 메모리를 지원 (Intel® Ivy Bridge CPU 를 탑재한 DDR3 1600, Intel® Sandy Bridge CPU 를 탑재한 DDR3 1333) - 최대 시스템 메모리 용량 : 16GB - Intel® Ivy Bridge CPU 에서 Intel® 익스트림 메모리 프로파일 (XMP) 1.3/1.2 지원
확장 슬롯	- PCI Express 3.0 x16 슬롯 (x16 모드의 경우 PCIE2) 1 개 * PCIE 3.0 은 Intel® Ivy Bridge CPU 에서만 지원됩니다 . Intel® Sandy Bridge CPU 는 PCIE 2.0 만 지원합니다 . - PCI Express 2.0 x1 슬롯 5 개
온보드 VGA	* Intel® HD Graphics 내장 비주얼 및 VGA 출력은 GPU 통합된 프로세서의 경우에만 지원됩니다 . - Intel® Ivy Bridge CPU 에서 Intel® HD 그래픽 내장 비주얼 프로그램 : Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 - Intel® Sandy Bridge CPU 에서 Intel® HD 그래픽 내장 비주얼 프로그램 : Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) - Intel® Ivy Bridge CPU 를 탑재한 DirectX 11, Pixel Shader 5.0. Intel® Sandy Bridge CPU 를 탑재한 DirectX 10.1, Pixel Shader 4.1 - Intel® Ivy Bridge CPU 에서 최대 공유 메모리 1760MB. Intel® Sandy Bridge CPU 에서 최대 공유 메모리 1759MB. - 더블 VGA 수출 : HDMI 와 D-Sub 포트 독립 디스플레이 컨트롤러를 지원 - 최대 해상도 1920x1200 @ 60Hz 까지 HDMI 지원

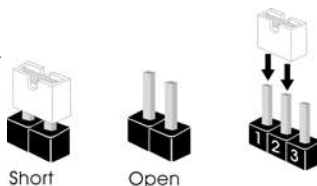
	- 최대 해상도 2048x1536 @ 75Hz 까지 D-Sub 지원 - 자동 립 싱크 (Auto Lip Sync), 딥 컬러 (Deep Color)(12bpc), xvYCC, HBR(고비트율 오디오), HDMI 지원 (HDMI 호환 모니터 필요) - HDMI 포트를 이용한 HDCP 기능 지원 - HDMI 포트를 이용한 1080p Blu-ray (BD) / HD-DVD 재생을 지원
오디오	- 5.1 CH HD Audio (VIA® VT1705 Audio Codec)
랜	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - 웨이크 - 온 - 랜 지원 - LAN 케이블 감지 지원 - 절전형 이더넷 802.3az 지원 - PXE 지원
후면판 I/O	- 1 개 PS/2 마우스 포트 - 1 개 PS/2 키보드 포트 - 1 개의 D-Sub 포트 - 1 개의 HDMI 포트 - 6 개디폴트 USB 2.0 포트 - 1 개 LED(ACT/LINK LED 및 SPEED LED) 가 있는 RJ-45 LAN 포트 - 오디오 잭 : 라인 인 / 전방 스피커 / 마이크
스토리지 인터페이스	- 4 개 의 SATA2 3.0Gb/s 커넥터 , NCQ, AHCI 및 “핫 플러그” 기능 지원
온보드 헤더 및 커넥터	- 적외선 모듈 헤더 1 개 - COM 포트 헤더 1 개 - CPU 팬 커넥터 1 개 (4 핀) - 새시 팬 커넥터 1 개 (4 핀) - 전원 팬 커넥터 1 개 (4 핀) - 24 핀 ATX 전원 헤더 1 개 - 8 핀 ATX 12V 파워 콘넥터 1 개 - SLI/XFire 전원 헤더 2 개 - 전면부 오디오 콘넥터 1 개 - USB 2.0 헤더 2 개 (4 개의 추가 USB 2.0 포트를 지원하는 헤더 2 개)
BIOS	- 32Mb AMI BIOS - GUI 지원을 제공하는 AMI UEFI 적합형 BIOS - “플러그 앤 플레이” 지원 - ACPI 1.1 웨이크 - 업 이벤트와의 호환 - 점퍼 프리 지원 - SMBIOS 2.3.1 지원

	- IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA 전압 멀티 조절
지원 CD	- 드라이버 , 유틸리티 , 백신 소프트웨어 (시험판), Google Chrome Browser 및 Toolbar
하드웨어 모니터	- CPU 온도 감지 - 마더보드 온도 감지 - CPU/ 새시 / 전원 팬 회전 속도계 : 샤프트 (케이스) 팬 회전 속도계 - CPU/ 새시 저소음 팬 (CPU 온도에 의한 새시 팬속도 자동 조정 가능) - CPU/ 새시팬 멀티스피드 컨트롤 - 전압 감시 기능 : +12V,+5V,+3.3V,Vcore
OS	- 마이크로 소프트 Windows® 8/8 64 비트 /7/7 64 비트 /Vista™/ Vista™ 64 비트 / XP/XP 64 비트 와 호환
인증서	- FCC, CE, WHQL - ErP/EuP 지원 (ErP/EuP 지원 전원 공급기가 요구됨)

* 상세한 제품정보는 당사의 웹사이트를 방문할수있습니다 . <http://www.asrock.com>

1.3 점퍼 셋팅

그림은 점퍼를 어떻게 셋업 하는지를 보여줍니다.
점퍼 캡이 핀 위에 있을 때, 점퍼는 “쇼트”입니다.
점퍼 캡이 핀 위에 없을 때 점퍼는 “오픈”입니다.
그림은 3 개의 핀 중 1-2 번 핀이 “쇼트”임을
보여주는 것이며, 점퍼 캡이 이 두 핀 위에 있음을
보여주는 것입니다.



점퍼

세팅

CMOS 초기화

(CLRCMOS1, 3 핀 점퍼)
(2 페이지, 9 번 항목 참조)



참고 : CLRCMOS1 을 사용하여 CMOS 에 들어 있는 데이터를 삭제할 수 있습니다.
시스템 매개변수를 삭제하고 기본 설정으로 복원하려면, 컴퓨터를 끄고 전원
공급장치에서 플러그를 뽑으십시오. 15 초를 기다린 다음 점퍼 캡을 사용하여
CLRCMOS1 의 핀 2 와 핀 3 을 5 초 동안 단락하십시오. 그러나 BIOS 업데이트
직후에는 CMOS 를 삭제하지 마십시오. BIOS 를 업데이트하자마자 CMOS 를
삭제해야 하는 경우 먼저 시스템을 부팅하고 CMOS 를 종료하고 삭제 작업을 해
야 합니다. CMOS 배터리를 제거할 경우에만 암호, 날짜, 시간, 사용자 기본 프
로파일, 1394 GUID, MAC 주소가 삭제됩니다.

1.4 온보드 헤더 및 커넥터



주의 !

이 콘넥터는 점퍼가 아닙니다. 이 콘넥터 위에 점퍼 캡을 사용하지마
세요. 커넥터에 점퍼 캡을 설치하면 마더보드가 영구적으로 손상됩니다 !

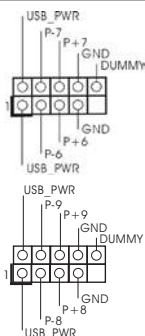
콘넥터	그림	설명
시리얼 ATAII 커넥터 (SATA2_0: 2 페이지, 12 번 항목 참조) (SATA2_1: 2 페이지, 15 번 항목 참조) (SATA2_2: 2 페이지, 11 번 항목 참조) (SATA2_3: 2 페이지, 14 번 항목 참조)	   	4 개의 시리얼 ATAII (SATA) 커넥터는 내부 저장 장 치용 SATA 데이터 케이블을 지원합니다. 커넥터가 내부 기억 장치용 SATA 케이블을 지원합니다. 현재의 SATAII 인터페이스는 최고 3.0 Gb/s 의 데이터 전송 속도를 지원합니다.

시리얼 ATA(SATA)
데이터 케이블
(선택 사양)



SATA 데이터 케이블의 임의
적인 측을 마더보드의 SATA /
SATAII 하드 디스크
혹은 SATAII 커넥터
에 연결합니다.

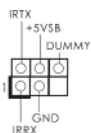
USB 2.0 헤더
(9 핀 USB6_7)
(2 페이지, 18 번 항목 참조)



(9 핀 USB8_9)
(2 페이지, 17 번 항목 참조)

본 머더보드에는 I/O 패널에 있
는 6 개의 기본 USB 2.0 포트
외에도 USB 2.0 헤더가 2 개 있
습니다. 각각의 USB 2.0 헤더
는 2 개의 USB 2.0 포트를 지원
할 수 있습니다.

적외선 모듈 헤더
(5 핀 IR1)
(2 페이지, 13 번 항목 참조)

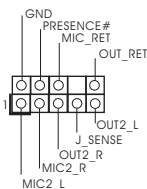


이 헤더는 선택품목인 무선
적외선 송수신 모듈을
지원합니다.

전면부 오디오 콘넥터

(9 편 HD_AUDIO1)

(2 페이지, 20 번 항목 참조)



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

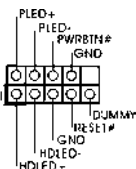


1. High Definition Audio(고음질 오디오)는 잭 센스 기능을 지원하나, 제대로 작동하려면 새시의 패널 와이어가 HAD를 지원해야 합니다. 이 설명서 및 새시 설명서의 지침을 따라 시스템을 설치하십시오.
2. AC' 97 오디오 패널을 사용하는 경우, 이를 아래와 같이 프론트 패널의 오디오헤더에 설치하십시오.
 - A. Mic_IN (MIC)을 MIC2_L에 연결합니다.
 - B. Audio_R (RIN)을 OUT2_R에 연결하고, Audio_L (LIN)을 OUT2_L에 연결합니다.
 - C. Ground (GND)을 Ground (GND)에 연결합니다.
 - D. MIC_RET 및 OUT_RET는 HD 오디오 패널 전용입니다. 이들을 AC' 97 오디오 패널에 연결하지 않아도 됩니다.

시스템 콘넥터

(9 편 PANEL1)

(2 페이지, 16 번 항목 참조)



이 콘넥터는 시스템 전면 패널 기능을 지원하기 위한 것입니다.



새시의 전원 스위치, 리셋 스위치, 시스템 상태 표시등을 아래의 핀 할당에 따라 이헤더에 연결합니다. 케이블을 연결하기 전에 양극 핀과 음극 핀을 기록합니다.

PWRBTN(전원 스위치):

새시 전면 패널의 전원 스위치에 연결합니다. 전원 스위치를 이용해 시스템을 끄는 방법을 구성할 수 있습니다.

RESET(리셋 스위치):

새시 전면 패널의 리셋 스위치에 연결합니다. 컴퓨터가 정지하고 정상적 재시작을 수행하지 못할 경우 리셋 스위치를 눌러 컴퓨터를 재시작합니다.

PLED(시스템 전원 LED):

새시 전면 패널의 전원 상태 표시등에 연결합니다. 시스템이 작동하고 있을 때는 LED가 켜져 있습니다. 시스템이 S1 대기 상태에 있을 때는 LED가 계속 깜박입니다. 시스템이 S3/S4 대기 상태 또는 전원 꺼짐 (S5) 상태에 있을 때는 LED가 꺼져 있습니다.

HDLED(하드 드라이브 동작 LED):

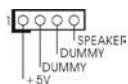
새시 전면 패널의 하드 드라이브 동작 LED에 연결합니다. 하드 드라이브가 데이터를 읽거나 쓰고 있을 때 LED가 켜져 있습니다.

전면 패널 디자인은 새시별로 다를 수 있습니다. 전면 패널 모듈은 주로 전원 스위치, 리셋 스위치, 전원 LED, 하드 드라이브 동작 LED, 스피커 등으로 구성되어 있습니다. 새시 전면 패널 모듈을 이 헤더에 연결할 때 와이어 할당과 핀 할당이 정확히 일치하는지 확인합니다.

새시 스피커 헤더

(4 핀 SPEAKER 1)

(2 페이지, 10 번 항목 참조)



새시 스피커를 이 헤더에 연결하십시오.

새시 및 전원 팬 커넥터

(4 핀 CHA_FAN1)

(2 페이지, 6 번 항목 참조)



팬 케이블을 팬 커넥터에 연결하고 접지 핀에는 검은색 전선을 연결하십시오.

(4 핀 PWR_FAN1)

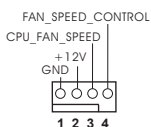
(2 페이지, 28 번 항목 참조)



CPU 팬 커넥터

(4 핀 CPU_FAN1)

(2 페이지, 2 번 항목 참조)



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



본 머더보드가 4 핀 CPU 팬 (저소음 팬) 지원을 제공하지는 않지만 팬 속도 제어기능없이도 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

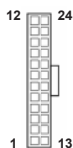
3 핀 팬 설치



ATX 전원 헤더

(24 핀 ATXPWR1)

(2 페이지, 5 번 항목 참조)

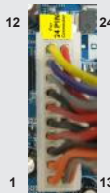


ATX 전원 공급기를 이 헤더에 연결하십시오.



이 마더보드는 24 핀 ATX 전원 커넥터를 제공하지만, 종래의 20 핀 ATX 전원 공급장치를 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

(8 핀 ATX12V1)

(2 페이지, 3 번 항목 참조)



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



비록 본 마더보드는 8- 핀 ATX 12V 전원 연결기를 제공하지만 이것은
여전히작업할수있습니다. 만약 전통적인 4- 핀 ATX 12V 전원공급을 채
용하여 4- 핀 ATX 전력을 사용하는경우, 반드시 전원 공급을 핀 1 과 핀
5 에전원공급을 삽입해야합니다.

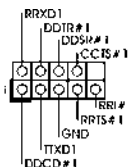
4- 핀 ATX 12V 전원공급장치



시리얼포트 콘넥터

(9 핀 COM1)

(2 페이지, 19 번 항목 참조)



이 콘넥터는 시리얼 포트
모듈을 지원합니다.

SLI/XFire 전원 커넥터

(4 핀 SLI/XFIRE_PWR1)

(2 페이지, 29 번 항목 참조)



(4 핀 SLI/XFIRE_PWR2)

(2 페이지, 27 번 항목 참조)



이 마더보드에 그래픽 카드 세
개를 설치할 때 이 커넥터를 전
원공급장치를 전원 커넥터와 연
결하십시오.

2. 시스템 바이오스 정보

메인보드의 플래쉬 메모리에는 바이오스 셋업 유틸리티가 저장되어 있습니다. 컴퓨터를 사용하실 때, “자가진단 테스트” (POST) 가 실시되는 동안 <F2> 또는 키를 눌러 바이오스 셋업으로 들어가세요; 만일 그렇게 하지 않으면 POST 는 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 CD 안의 포함된 사용자 매뉴얼 (PDF 파일) 을 따라 주시기 바랍니다.

3. 소프트웨어 지원 CD 정보

이 메인보드는 여러 가지 마이크로소프트 윈도우 운영 체계를 지원합니다: 8/8 64 비트 /7/7 64 비트 /Vista™/Vista™ 64 비트 /XP/XP 64 비트. 메인보드에 필요한 드라이버와 사용자 편의를 위해 제공되는 보조 CD 는 메인보드의 기능을 향상시켜 줄 것입니다. 보조 CD 를 사용하여 시작하시려면, CD-ROM 드라이브에 CD 를 넣어주시기 바랍니다. 만일 고객님의 컴퓨터가 “AUTORUN” 이 가능하다면 자동으로 메인 메뉴를 모니터에 디스플레이 시켜 줄 것입니다. 만일 자동으로 메인 메뉴가 나타나지 않는다면, 보조 CD 의 디스플레이 메뉴 안에 있는 BIN 폴더 ASSETUP.EXE 파일을 더블 클릭하여 주시기 바랍니다.

(D: \BIN\ASSETUP.EXE, D: 는 CD-ROM 드라이브)

1、はじめに

ASRock **H61 Pro BTC** マザーボードをお買い上げいただきありがとうございます。本製品は、弊社の厳しい品質管理の下で製作されたマザーボードです。本製品は、弊社の品質と耐久性の両立という目標に適合した堅牢な設計により優れた性能を実現します。このクイックインストールガイドには、マザーボードの説明および段階的に説明したインストールの手引きが含まれています。マザーボードに関するさらに詳しい情報は、「サポートCD」のユーザーマニュアルを参照してください。



マザーボードの仕様および BIOS ソフトウェアは、アップデートされることがありますので、マニュアルの内容は、予告なしに変更されることがあります。本マニュアルに変更があった場合は、弊社のウェブサイトへ通告なしに最新版のマニュアルが掲載されます。最新の VGA カードおよび CPU サポートリストもウェブサイトでご覧になれます。ASRock 社ウェブサイト：
<http://www.asrock.com>
このマザーボードに関連する技術サポートが必要な場合、当社の Web サイトにアクセスし、使用しているモデルについての特定情報を見つけてください。
www.asrock.com/support/index.asp

1.1 パッケージ内容

ASRock **H61 Pro BTC** マザーボード (ATX フォームファクター)

ASRock **H61 Pro BTC** クイックインストールガイド

ASRock **H61 Pro BTC** サポート CD

2 x シリアル ATA (SATA) データケーブル (オプション)

1 x I/O パネルシールド



ASRockからのお知らせ...

Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit でより良い性能を得るには、ストレージ構成の BIOS オプションを AHCI モードに設定することを推奨します。BIOS のセットアップについての詳細は、サポートCDの「ユーザーマニュアル」を参照してください。

1.2 仕様

プラットフォーム	- ATX フォームファクター - 全ソリッド・キャパシタ設計
CPU	- LGA1155 パッケージで、第三世代および第二世代 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® をサポートします - Intel® Turbo 2.0 ブーストテクノロジーをサポート - K シリーズのアンロック CPU - ハイパースレッドテクノロジーをサポート
エッジセット	- Intel® H61 - Intel® Rapid Start テクノロジーおよび Smart Connect テクノロジーをサポートします
メモリー	- デュアルチャネル DDR3 メモリーテクノロジー - DDR3 DIMM スロット x 2 - DDR3 1600/1333/1066 non-ECC, un-buffered メモリーに対応 (Intel® Ivy Bridge CPU を搭載した DDR3 1600、Intel® Sandy Bridge CPU を搭載した DDR3 1333) - システムメモリの最大容量: 16GB - Intel® Ivy Bridge CPU で Intel® Extreme Memory Profile (XMP)1.3/1.2 をサポート
拡張スロット	- 1 x PCI Express 3.0 x16 スロット (PCIe2 @ x16 モード) * PCIe 3.0 は、Intel® Ivy Bridge CPU でのみサポートされます。Intel® Sandy Bridge CPU では、PCIe 2.0 のみをサポートします。 - 5 x PCI Express 2.0 x1 スロット
グラフィック	* Intel® HD Graphics Built-in Visuals および VGA 出力に対応するのは、GPU が内蔵されているプロセッサを使用する場合だけです。 - Intel® Ivy Bridge CPU で Intel® HD グラフィックス内蔵ビジュアルのサポート: Intel® Quick Sync Video 2.0、Intel® InTru™ 3D、Intel® Clear Video HD Technology、Intel® Insider™、Intel® HD Graphics 2500/4000 - Intel® Sandy Bridge CPU で Intel® HD グラフィックス内蔵ビジュアルのサポート: Intel® Quick Sync Video、Intel® InTru™ 3D、Intel® Clear Video HD Technology、Intel® HD Graphics 2000/3000、Intel® Advanced Vector Extensions (AVX) - Intel® Ivy Bridge CPU を搭載した DirectX 11、Pixel Shader 5.0。Intel® Sandy Bridge CPU を搭載した DirectX 10.1、Pixel Shader 4.1。

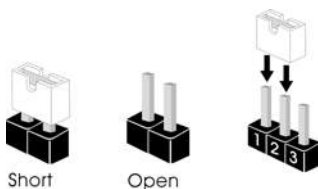
	- Intel® Ivy Bridge CPU で 最大の共有メモリ1760MB。 - Intel® Sandy Bridge CPU で 最大の共有メモリ1759MB。 - デュアル VGA 出力：独立型ディスプレイコントローラによる HDMI および D-Sub ポートサポート - 1920x1200 @ 60Hz の最大解像度で HDMI をサポート - 2048x1536 @ 75Hz の最大解像度で D-Sub をサポート - オート・リップシンク、ディープカラー(12bpc)、xvVCC、HBR(High Bit Rate)オーディオ、HDMI (HDMI 準拠モニタが必要)をサポート - HDCP 機能、HDMI ポートをサポート - 1080p Blu-ray (BD) / HD-DVD 再生サポート、HDMI ポートをサポート
オーディオ	- 5.1 CH HD オーディオ (VIA® VT1705 オーディオ Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Wake-On-LAN をサポート - LAN ケーブル検出をサポート - Energy Efficient Ethernet 802.3az をサポート - PXE をサポート
リアパネル I/O	- PS/2 マウスポート x 1 - PS/2 キーボードポート x 1 - D-Sub ポート x 1 - HDMI ポート x 1 - Ready-to-Use USB 2.0 ポート x 6 - LED(ACT/LINK LED および SPEED LED)付き RJ-45 LAN ポート x 1 - オーディオジャック:入力、前部スピーカー、マイク入力
ストレージインターフェース	- 4 x SATA2 3.0Gb/ 秒コネクタが、NCQ、AHCI および “Hot Plug” (ホットプラグ) 機能
コネクタ	- IR ヘッダー x 1 - COM ポートヘッダ x 1 - CPU ファンコネクタ x 1 (4 ピン) - シャーシファンコネクタ x 1 (4 ピン) - 電源ファンコネクタ x 1 (4 ピン) - 24 ピン ATX 電源コネクタ x 1 - 8 ピン 12V 電源コネクタ x 1 - SLI/XFire 電源コネクタ x 2 - フロントパネルオーディオコネクタ x 1 - USB 2.0 ヘッダー (USB 2.0 用 4 ポートをサポート) x 2
BIOS 関連機能	- 32Mb AMI BIOS

	- AMI UEFI Legal BIOS(GUIサポート) - プラグ&プレイをサポート - ACPI 1.1 準拠ウェイクアップイベント - jumperfree モードサポート - SMBIOS 2.3.1 サポート - IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA 電圧のマルチ調整
サポート CD	- ドライバ、ユーティリティ、AntiVirus ソフトウェア (試用バージョン)、Google Chrome Browser および Toolbar
モニター	- CPU 温度検知 - マザーボード温度検知 - CPU/ シャーシ / 電源ファンタコメータ - CPU/ シャーシ静音ファン(CPU 温度によりシャーシファン速度の自動調整が可能) - CPU/ シャーシファンマルチ速度制御 - 電源モニター: +12V, +5V, +3.3V, Vcore
OS	- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit compliant
認証	- FCC, CE, Microsoft® WHQL 認証済み - ErP/EuP 対応(ErP/EuP 対応の電源装置が必要です)

* 製品の詳細については、<http://www.asrock.com> を御覧ください。

1.3 ジャンパ設定

右の図はジャンパがどのように設定されているかを示します。ジャンパキャップがピンに置かれている場合、ジャンパは“ショート”になります。ジャンパキャップがピンに置かれていない場合、ジャンパは“オープン”になります。右の図で、3ピンジャンパで、1-2 ピンを“ショート”の場合、これらの2つのピンにジャンパキャップを置きます。



ジャンパ	設定	説明
CMOS の消去ジャンパ (CLR_CMOS1) (ページ2 アイテム 9 参照)	 デフォルト設定	 CMOS の消去

注： CLR_CMOS1 により、CMOS のデータをクリアできます。システムパラメータをクリアしデフォルト設定にリセットするには、コンピュータの電源をオフにし、電源装置から電源コードを抜いてください。15 秒待ってから、ジャンパキャップを使用して CLR_CMOS1 のピン 2 とピン 3 を 5 秒間ショートしてください。ただし、BIOS 更新の後すぐには CMOS をクリアしないでください。BIOS の更新の終了後直ちに CMOS をクリアする必要がある場合、まずシステムを起動してからシャットダウンし、その後クリア CMOS アクションを実行する必要があります。パスワード、日付、時刻、ユーザーデフォルトのプロファイルを忘れずにメモしてください。1394 GUID と MAC アドレスは、CMOS バッテリを取り外した場合のみ消去されます。

1.4 オンボードのヘッダとコネクタ類



オンボードのヘッダとコネクタ類はジャンパではありません。それらのヘッダやコネクタにジャンパキャップをかぶせないでください。ヘッダやコネクタにジャンパキャップをかぶせると、マザーボードに深刻な影響を与える場合があります。

シリアル ATAII コネクタ

SATA2_0: ページ 2, アイテム 12 を参照

SATA2_1: ページ 2, アイテム 15 を参照

SATA2_2: ページ 2, アイテム 11 を参照

SATA2_3: ページ 2, アイテム 14 を参照



これら 4 本のシリアル ATAII (SATAII) コネクタは内蔵ストレージデバイスに使用する SATA データケーブルに対応しています。現在の SATAII インタフェースの最大データ転送速度は 3.0 Gb/s です。

シリアル ATA(SATA) データケーブル(オプション)



SATA データケーブルのどちらかの端をマザーボードの SATA /SATAII ハードディスク、または SATAII コネクタに接続できます。

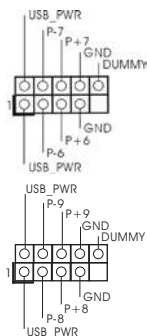
USB 2.0 ヘッダ

(9 ピン USB6_7)

ページ 2, アイテム 18 を参照

(9 ピン USB8_9)

ページ 2, アイテム 17 を参照

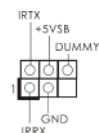


I/O パネルには、デフォルトの 6 つの USB 2.0 ポート以外に、このマザーボードに 2 つの USB 2.0 ヘッダが搭載されています。それぞれの USB 2.0 ヘッダは 2 つの USB 2.0 ポートをサポートできます。

赤外線モジュールコネクタ

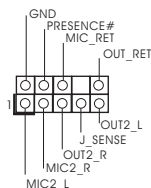
(5 ピン IR1)

ページ 2, アイテム 13 を参照



このコネクタは赤外線の無線送受信モジュールに対応します。

フロントオーディオパネルコネクタ
(9ピン HD_AUDIO1)
ページ2, アイテム 20 を参照

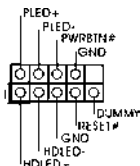


このコネクタは、オーディオ機器との便利な接続とコントロールを可能にするフロントオーディオパネルのためのインターフェイスです。



1. ハイディフィンションオーディオはジャックセンシングをサポートしますが、正しく機能するためにシャーシのパネルワイヤがHADをサポートする必要があります。このマニュアルとシャーシのマニュアルの指示に従って、システムを取り付けてください。
2. AC'97 オーディオパネルを使用する場合、次のように前面パネルのオーディオヘッダに取り付けてください。
 - A. Mic_IN (MIC) を MIC2_L に接続します。
 - B. Audio_R (RIN) を OUT2_R に、Audio_L (LIN) を OUT2_L に接続します。
 - C. Ground (GND) を Ground (GND) に接続します。
 - D. MIC_RETと OUT_RET はオーディオパネル専用です。AC'97 オーディオパネルに接続する必要はありません。

システムパネルコネクタ
(9ピン PANEL1)
ページ2, アイテム 16 を参照



このコネクタは数種類のシステムフロントパネルの機能を提供します。



シャーシに付いている電源スイッチ、リセットスイッチ、システムステータスインジケータを下記のピン割り当て指示に従ってこのヘッダに接続します。ケーブルを接続する前にピンの正負極性にご注意ください。

PWRBTN (電源スイッチ):

前面パネルに付いている電源スイッチに接続します。電源スイッチによるシステム電源オフ方法を設定して変更することも可能です。

RESET (リセットスイッチ):

シャーシの前面パネルに付いているリセットスイッチに接続します。コンピュータがフリーズし、正常な再起動をしない場合は、リセットスイッチを押してコンピュータを再起動します。

PLED (システム電源 LED):

シャーシの前面パネルに付いている電源ステータスインジケータに接続します。LED は、システムが動作しているときに点灯します。LED はシステムが S1 スリープ状態のときに点滅します。システムが S3 または S4 スリープ状態になるか、電源オフ (S5) になると、LED は消灯します。

HDLED (ハードドライブアクティビティ LED):

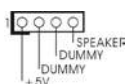
シャーシの前面パネルに付いているハードドライブアクティビティ LED に接続します。LED は、ハードドライブがデータの読み込みまたは書き込み動作をしているときに点灯します。

前面パネルのデザインはシャーシによって異なります。前面パネルモジュールは、主に電源スイッチ、リセットスイッチ、電源 LED、ハードドライブアクティビティ LED、スピーカーなどから構成されています。シャーシの前面パネルモジュールをこのヘッダに接続する際は、ワイヤとピンの割り当てが正しく対応していることを確認してください。

シャーシスピーカーヘッダ

(4 ピン SPEAKER1)

ページ2, アイテム 10 を参照



シャーシのスピーカーとこのヘッダを接続してください。

シャーシおよび電源ファンコネクタ

(4 ピン CHA_FAN1)

ページ2, アイテム 6 を参照



ファンケーブルをファンコネクタに接続し、黒いワイヤをアースピンに合わせてください。

(4 ピン PWR_FAN1)

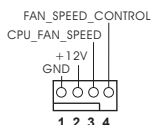
ページ2, アイテム 28 を参照



CPU ファンコネクタ

(4 ピン CPU_FAN1)

ページ2, アイテム 2 を参照

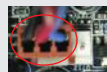


このコネクタには CPU ファンケーブルを接続します。黒いコードはアースピンに接続してください。



このマザーボードでは 4 ピン CPU ファン (クワイエットファン) がサポートされていますが、ファン速度コントロール機能がない場合でも、3 ピン CPU ファンは正常に作動します。3 ピン CPU ファンをこのマザーボードの CPU ファンコネクタに接続しようとしている場合、ピン 1-3 に接続してください。

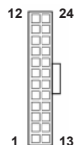
接続されたピン 1-3
3 ピンファンのインストール



ATX パワーコネクタ

(24 ピン ATXPWR1)

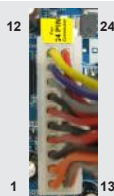
ページ2, アイテム 5 を参照



ATX 電源コネクタを接続します。



このマザーボードには 24 ピン ATX 電源コネクタが装備されており、従来の 20 ピン ATX 電源装置を採用している場合でも作動します。20 ピン ATX 電源を使用するには、ピン 1 およびピン 13 と共に電源装置にプラグを差し込みます。



20 ピン ATX 電源装置の取り付け

ATX 12V コネクタ

(8 ピン ATX12V1)

ページ2, アイテム 3 を参照



このコネクタには CPU に Vcore 電源を供給できるように、ATX 12V プラグを備えたサワーサプライを接続する必要があることに注意してください。接続に問題があると、電源は正しく供給されません。



このマザーボードで 8-pin ATX 12V 電源コネクタが提供されたが、従来の 4-pin ATX 12V 電源でも動作できます。4-pin ATX 電源を使用する場合、電源を Pin 1 と Pin 5 とともに差し込んでください。

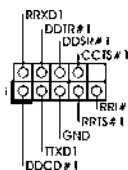


4-Pin ATX 12V 電源の取り付け

シリアルポートヘッダ

(9 ピン COM1)

ページ2, アイテム 19 を参照



この COM1 ヘッダは、シリアルポートモジュールをサポートします。

SLI/XFire 電源コネクタ

(4 ピン SLI/XFIRE_PWR1)

ページ2, アイテム 29 を参照



このマザーボードに 3 枚のグラフィックスカードを取り付ける場合は、このコネクタを電源コネクタと接続してください。

(4 ピン SLI/XFIRE_PWR2)

ページ2, アイテム 27 を参照



2. BIOS 情報

BIOS セットアップユーティリティはマザーボードのフラッシュメモリに保存されています。コンピュータを起動させた後、POST(パワーオンセルフテスト)中に〈F2〉または〈Del〉を押し、BIOS セットアップユーティリティに入ってください。押さない場合、POST はテストルーチンを続けます。テストを実行した後に BIOS セットアップユーティリティに入りたい場合、POST 終了後〈Ctrl〉+〈Alt〉+〈Delete〉を押すか、ケースのリセットスイッチを押してシステムを再起動してください。BIOS セットアップユーティリティは、ユーザーフレンドリであることを目指しています。これはメニュー方式のプログラムです。スクロールさせることで様々なサブメニューを表示し、かつあらかじめ定義した選択肢から選択することが可能です。BIOS セットアップの詳細な情報については、サポート CD 内のユーザーズマニュアル (PDF ファイル) をごらんください。

3. ソフトウェア サポート CD 情報

このマザーボードは Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit といった様々なマイクロソフト ウィンドウズ オペレーティングシステムをサポートします。マザーボードに付属しているサポート CD はマザーボードの特徴を有効にするために必要なドライバやユーティリティを含んでいます。サポート CD を使用するには、CDROM ドライブに CD を挿入してください。AUTORUN 機能が有効な場合、自動的にメインメニューが立ち上がります。AUTORUN 機能が無効な場合、サポート CD 内の BIN フォルダにある ASSETUP.EXE をダブルクリックすることにより、メインメニューが立ち上がります。

1. 主板简介

谢谢你采用了华擎 **H61 Pro BTC** 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 **H61 Pro BTC** 主板 (ATX 规格)

华擎 **H61 Pro BTC** 快速安装指南

华擎 **H61 Pro BTC** 支持光盘

两条 Serial ATA (SATA) 数据线 (选配)

一块 I/O 挡板



ASRock提醒您...

为了在 Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit 系统中取得更好的性能，建议您在 BIOS 中将 Storage Configuration (存储配置) 选项设成 AHCI 模式。关于 BIOS 设置程序，请参见支持光盘中的 “User Manual” 以了解详细信息。

1.2 主板规格

架构	- ATX 规格 - 全固态电容设计
处理器	- 支持第三代和二代 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 处理器 (LGA1155 针脚) - 支持 Intel® Turbo Boost 2.0 技术 - 支持 K- 系列解锁的 CPU - 支持 Hyper-Threading 超线程技术
芯片组	- Intel® H61 - 支持 Intel® 快速启动技术和 Intel® 智能连接技术
系统内存	- 支持双通道 DDR3 内存技术 - 配备 2 个 DDR3 DIMM 插槽 - 支持 DDR3 1600/1333/1066 non-ECC、un-buffered 内存 (Intel® Ivy Bridge CPU 支持 DDR3 1600, Intel® Sandy Bridge CPU 支持 DDR3 1333) - 最高支持 16GB 系统容量 - 通过 Intel® Ivy Bridge CPU 支持 Intel® Extreme Memory Profile(XMP)1.3/1.2)
扩展插槽	- 1 x PCI Express 3.0 x16 插槽 (PCIe2 ® x16 模式) - * 使用 Intel® Ivy Bridge CPU 方可支持 PCIe 3.0。若使用 Intel® Sandy Bridge CPU, 仅支持 PCIe 2.0。 - 5 x PCI Express x1 插槽
板载显卡	- * 仅内置 GPU 的处理器可支持 Intel® HD Graphics 内置视觉特性与 VGA 输出。 - 通过 Intel® Ivy Bridge CPU 支持 Intel® HD Graphics 内置视觉特性: Intel® Quick Sync Video 2.0、Intel® InTru™ 3D、Intel® Clear Video HD 技术、Intel® Insider™、Intel® HD Graphics 2500/4000 - 通过 Intel® Sandy Bridge CPU 支持 Intel® HD Graphics 内置视觉特性: Intel® Quick Sync Video、Intel® InTru™ 3D、Intel® Clear Video HD 技术、Intel® HD Graphics 2000/3000、Intel® Advanced Vector Extensions(AVX) - Intel® Ivy Bridge CPU 支持 Pixel Shader 5.0、DirectX 11 技术。Intel® Sandy Bridge CPU 支持 Pixel Shader 4.1、DirectX 10.1 技术。 - 通过 Intel® Ivy Bridge CPU 支持最大共享内存 1760MB。通过 Intel® Sandy Bridge CPU 支持最大共享内存 1759MB。 - 双 VGA 输出: 通过独立显示控制器提供 HDMI 和 D-Sub 接口 - 支持 HDMI, 最高分辨率达 1920x1200 @ 60Hz - 支持 D-Sub, 最高分辨率达 2048x1536 @ 75Hz

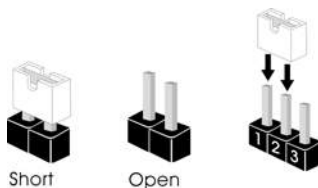
	- 支持 HDMI, 可支持 Auto Lip Sync、Deep Color (12bpc)、xvYCC 与 HBR (高位速音频) (需配备兼容 HDMI 的显示器) - 通过 HDMI 接口支持 HDCP 功能 - 通过 HDMI 接口可播放 10800 线蓝光光盘 (BD) / HD-DVD 光盘
音效	- 5.1 声道高保真音频 (VIA® VT1705 音频编解码器)
板载 LAN 功能	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - 支持网路唤醒 (Wake-On-LAN) - 支持网路线侦测功能 - 支持 Energy Efficient Ethernet 802.3az - 支持 PXE
Rear Panel I/O (后面板输入 / 输出接口)	- 1 个 PS/2 鼠标接口 - 1 个 PS/2 键盘接口 - 1 个 D-Sub 接口 - 1 个 HDMI 接口 - 6 个可直接使用的 USB 2.0 接口 - 1 个 RJ-45 局域网接口与 LED 指示灯 (ACT/LINK LED 和 SPEED LED) - 高保真音频插孔: 音频输入 / 前置喇叭 / 麦克风
储存装置接口	- 4 x SATA2 3.0Gb/s 连接头, 支持 NCQ, AHCI 和热插拔功能
连接头	- 1 x 红外线模块接头 - 1 x 串行接口 - 1 x CPU 风扇接头 (4 针) - 1 x 机箱风扇接头 (4 针) - 1 x 电源风扇接头 (4 针) - 1 x 24 针 ATX 电源接头 - 1 x 8 针 12V 电源接头 - 2 x SLI/XFire 电源接头 - 1 x 前置音频面板接头 - 2 x USB 2.0 接口 (可支持 4 个额外的 USB 2.0 接口)
BIOS	- 32Mb AMI BIOS - AMI UEFI Legal BIOS, 支持 GUI - 支持即插即用 (Plug and Play, PnP) - ACPI 1.1 电源管理 - 支持唤醒功能 - 支持 jumperfree 免跳线模式 - IGPU、DRAM、PCH、CPU PLL、VTT、VCCSA 电压多功能调节器
支持光盘	- 驱动程序, 工具软件, 杀毒软件 (测试版本), Chrome 谷歌浏览器和工具栏

硬件监控器	- CPU 温度侦测 - 主板温度侦测 - CPU/ 机箱 / 电源风扇转速计 - CPU/ 机箱静音风扇（允许根据 CPU 温度自动调整机箱风扇速度） - CPU/ 机箱风扇多速控制 - 电压范围：+12V, +5V, +3.3V, 核心电压
操作系统	- Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/ Vista™ 64 位元 /XP/XP 64 位元适用于此主板
认证	- FCC, CE, WHQL - 支持 ErP/EuP (需要同时使用支持 ErP/EuP 的电源供应

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

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”。



接脚

设定

清除 CMOS

(CLRCMOS1, 3 针脚跳线)

(见第 2 页第 9 项)



默认设置



清除 CMOS

注意： CLRCMOS1 允许您清除 CMOS 中的数据。如要清除并将系统参数恢复至默认设置，请关闭计算机，然后从电源插座上拔掉电源线。等待 15 秒后，使用跳线帽将 CLRCMOS1 上的插针 2 和插针 3 短接 5 秒。但是，请勿在更新 BIOS 后立即清除 CMOS。如果需要在更新 BIOS 后立即清除 CMOS，必须在执行 CMOS 清除操作之前，先启动然后关闭系统。请注意，只有取出 CMOS 电池，密码、日期、时间、用户默认配置文件、1394 GUID 和 MAC 地址才会被清除。

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！

Serial ATAII 接口

(SATA2_0: 见第 2 页第 12 项)

(SATA2_1: 见第 2 页第 15 项)

(SATA2_2: 见第 2 页第 11 项)

(SATA2_3: 见第 2 页第 14 项)



这里有四组 Serial ATAII (SATAII) 接口支持 Serial (SATA) 数据线作为内部储存设置。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。

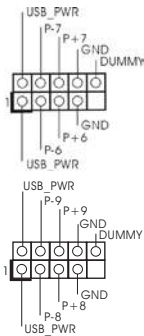
USB 2.0 扩展接头

(9 针 USB6_7)

(见第 2 页第 18 项)

(9 针 USB8_9)

(见第 2 页第 17 项)

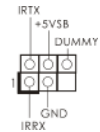


除了位于 I/O 面板的六个默认 USB 2.0 接口之外，这款主板有两组 USB 2.0 接针。这组 USB 2.0 接针可以支持两个 USB 2.0 接口。

红外线模块接头

(5 针 IR1)

(见第 2 页第 13 项)

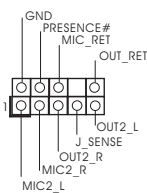


这个接头支持一个选配的无线发送和接受红外线的模块。

前置音频面板接头

(9 针 HD_AUDIO1)

(见第 2 页第 20 项)



可以方便连接音频设备。

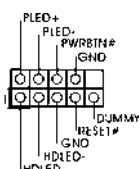


1. 高保真音频 (High Definition Audio, HDA) 支持智能音频接口检测功能 (Jack Sensing), 但是机箱面板的连线必须支持 HDA 才能正常使用。请按我们提供的手册和机箱手册上的使用说明安装您的系统。
2. 如果您使用 AC' 97 音频面板, 请按照下面的步骤将它安装到前面板音频接针:
 - A. 将 Mic_IN(MIC) 连接到 MIC2_L。
 - B. 将 Audio_R(RIN) 连接到 OUT2_R, 将 Audio_L(LIN) 连接到 OUT2_L。
 - C. 将 Ground(GND) 连接到 Ground(GND)。
 - D. MIC_RET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

系统面板接头

(9 针 PANEL1)

(见第 2 页第 16 项)



这个接头提供数个系统前面板功能。



根据下面的针脚说明连接机箱上的电源开关、重启按钮与系统状态指示灯到这个排针。根据之前请注意针脚的正负极。

PWRBTN (电源开关):

连接机箱前面板的电源开关。您可以设置用电源键关闭系统的方式。

RESET (重启开关):

连接机箱前面板的重启开关。当电脑死机且无法正常重新启动时, 可按下重启开关重新启动电脑。

PLED (系统电源指示灯):

连接机箱前面板的电源状态指示灯。当系统运行时, 此指示灯亮起。当系统处于 S1 待机模式时, 此指示灯保持闪烁。当系统处于 S3/S4 待机模式或关机 (S5) 模式时, 此指示灯熄灭。

HD LED (硬盘活动指示灯):

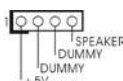
连接机箱前面板的硬盘动作指示灯。当硬盘正在读取或写入数据时, 此指示灯亮起。

前面板设计因机箱不同而有差异。前面板模块一般由电源开关、重启开关、电源指示灯、硬盘动作指示灯、喇叭等构成。将您的机箱前面板连接到此排针时, 请确认连接线 with 针脚上的说明相对应。

机箱喇叭接头

(4 针 SPEAKER1)

(见第 2 页第 10 项)



请将机箱喇叭连接到这个接头。

机箱，电源风扇接头

(4 针 CHA_FAN1)

(见第 2 页第 6 项)



请将风扇连接线接到这个接头，并让黑线与接地的针脚相接。

(4 针 PWR_FAN1)

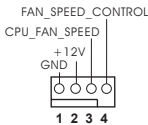
(见第 2 页第 28 项)



CPU 风扇接头

(4 针 CPU_FAN1)

(见第 2 页第 2 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。



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

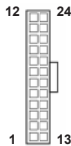
3-Pin 风扇的安装



ATX 电源接头

(24 针 ATXPWR1)

(见第 2 页第 5 项)

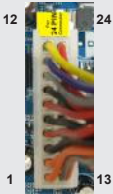


请将 ATX 电源供应器连接到这个接头。



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 13 插上电源接头。

20-Pin ATX 电源安装说明



ATX 12V 接头

(8 针 ATX12V1)

(见第 2 页第 3 项)



请将一个 ATX 12V 电源供应器接到这个接头。



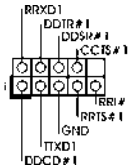
虽然此主板提供 8-pin ATX 12V 电源接口，但是您仍然可以使用传统的 4-pin ATX 12V 电源。为了使用 4-pin ATX 12V 电源，请顺著 Pin 1 和 Pin 5 插上电源接头。

4-Pin ATX 12V 电源安装说明



串行接口连接器

(9 针 COM1)
(见第 2 页第 19 项)



这个 COM1 端口支持一个串行接口的外设。

SLI/XFire 电源接头

(4 针 SLI/XFIRE_PWR1)
(见第 2 页第 29 项)



当此主板上安装三个图形卡时，
请通过电源连接此接口。

(4 针 SLI/XFIRE_PWR2)
(见第 2 页第 27 项)



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> 或 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

本主板支持各种微视视窗操作系统：Microsoft®Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/Vista™ 64 位元 /XP/XP 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。

1. 主機板簡介

謝謝你採用了華擎 **H61 Pro BTC** 主機板，本主機板由華擎嚴格製造，品質可靠，穩定性好，能夠獲得卓越的性能。此快速安裝指南包括了主機板介紹和分步驟安裝指導。您可以查看支持光碟裡的使用手冊了解更詳細的資料。



由於主機板規格和 BIOS 軟體將不斷更新，本手冊之相關內容變更恕不另行通知。請留意華擎網站上公布的更新版本。你也可以在華擎網站找到最新的顯示卡和 CPU 支援列表。

華擎網址：<http://www.asrock.com>

如果您需要與此主機板有關的技術支援，請參觀我們的網站以了解您使用機種的規格訊息。

www.asrock.com/support/index.asp

1.1 包裝盒內物品

華擎 **H61 Pro BTC** 主機板 (ATX 規格)

華擎 **H61 Pro BTC** 快速安裝指南

華擎 **H61 Pro BTC** 支援光碟

兩條 Serial ATA(SATA) 數據線 (選配)

一塊 I/O 擋板



ASRock提醒您...

若要在Windows® 8 / 8 64位元 / 7 / 7 64位元 / Vista™ / Vista™ 64位元中發揮更好的效能，建議您將儲存裝置組態中的BIOS選項設為AHCI模式。有關BIOS設定的詳細資訊，請參閱支援光碟中的「使用者手冊」。

1.2 主機板規格

架構	- ATX 規格 - 全固態電容設計
處理器	- 支援第三代和二代 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 處理器 (LGA1155 腳位) - 支援 Intel® Turbo Boost 2.0 技術 - 支援 K 系列解除鎖定 CPU - 支援 Hyper-Threading 技術
晶片組	- Intel® H61 - 支援 Intel® 快速啟動技術和智能連接技術
系統記憶體	- 支援雙通道 DDR3 記憶體技術 - 2 個 DDR3 DIMM 插槽 - 支援 DDR3 1600/1333/1066 non-ECC、un-buffered 記憶體 (Intel® Ivy Bridge CPU 支援 DDR3 1600, Intel® Sandy Bridge CPU 支援 DDR3 1333) - 最高支援 16GB 系統容量 - 透過 Intel® Ivy Bridge CPU 支援 Intel® Extreme Memory Profile(XMP)1.3/1.2
擴充插槽	- 1 x PCI Express 3.0 x16 插槽 (PCIe2 @ x16 模式) * PCIe 3.0 僅適用 Intel® Ivy Bridge CPU。Intel® Sandy Bridge CPU 僅支援 PCIe 2.0。 - 5 x PCI Express x1 插槽
內建顯示	* 只有整合 GPU 的處理器才支援 Intel® HD Graphics 內建視覺技術 (Built-in Visuals) 與 VGA 輸出。 - 透過 Intel® Ivy Bridge CPU 支援 Intel® HD Graphics 內建視覺技術 (Built-in Visuals): Intel® Quick Sync Video 2.0、Intel® InTru™ 3D、Intel® Clear Video HD Technology、Intel® Insider™、Intel® HD Graphics 2500/4000 - 透過 Intel® Sandy Bridge CPU 支援 Intel® HD Graphics 內建視覺技術 (Built-in Visuals): Intel® Quick Sync Video、Intel® InTru™ 3D、Intel® Clear Video HD Technology、Intel® HD Graphics 2000/3000、Intel® Advanced Vector Extensions (AVX) - Intel® Ivy Bridge CPU 支援 Pixel Shader 5.0、DirectX 11 技術。Intel® Sandy Bridge CPU 支援 Pixel Shader 4.1、DirectX 10.1 技術。 - 透過 Intel® Ivy Bridge CPU 支援最大共享記憶體 1760MB。 - 透過 Intel® Sandy Bridge CPU 支援最大共享記憶體 1759MB。

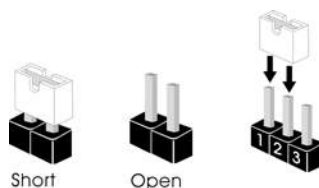
	- 雙 VGA 輸出：透過獨立顯示控制器提供 DVI-D 和 D-Sub 接口 - 支援 HDMI，最高解析度達 1920x1200 @ 60Hz - 支援 D-Sub，最高解析度達 2048x1536 @ 75Hz - 支援 HDMI，可支援 Auto Lip Sync、Deep Color (12bpc)、xvYCC 與 HBR(高位元率音效)(需具備相容 HDMI 的銀幕) - HDMI 接口支援 HDCP 功能 - HDMI 接口可播放 1080p 藍光光碟 (BD) / HD-DVD 光碟
音效	- 5.1 聲道高清晰音效 (VIA® VT1705 音效編解碼器)
網路功能	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - 支援網路喚醒 (Wake-On-LAN) - 支援網路線偵測功能 - 支援 Energy Efficient Ethernet 802.3az - 支援 PXE
Rear Panel I/O (後背板輸入 / 輸出接口)	- 1 個 PS/2 滑鼠接口 - 1 個 PS/2 鍵盤接口 - 1 個 D-Sub 接口 - 1 個 HDMI 接口 - 6 個可直接使用的 USB 2.0 接口 - 1 個 RJ-45 區域網接口與 LED 指示燈 (ACT/LINK LED 和 SPEED LED) - 高清晰音效插孔：音效輸入 / 前置喇叭 / 麥克風
儲存裝置介面	- 4 x SATA2 3.0Gb/s 接頭，支援 NCQ, AHCI 和熱插拔功能
接頭	- 1 x 紅外線模組接頭 - 1 x 序列埠 - 1 x CPU 風扇接頭 (4 針) - 1 x 機箱風扇接頭 (4 針) - 1 x 電源風扇接頭 (4 針) - 1 x 24 針 ATX 電源接頭 - 1 x 8 針 12V 電源接頭 - 2 x SLI/XFire 電源接頭 - 1 x 前置音效接頭 - 2 x USB 2.0 接頭 (可支援 4 個額外的 USB 2.0 接口)
BIOS	- 32Mb AMI BIOS - AMI UEFI Legal BIOS (支援 GUI) - 支援即插即用 (Plug and Play, PnP) - ACPI 1.1 電源管理 - 支援喚醒功能 - 支援 jumperfree 免跳線模式 - IGPU、DRAM、PCH、CPU PLL、VTT、VCCSA 電壓多功能調節
支援光碟	- 驅動程式，工具軟體，防毒軟體 (試用版本)，Google Chrome Browser 和 Toolbar

硬體監控	- CPU 溫度偵測 - 主機板溫度偵測 - CPU/ 機箱 / 電源風扇轉速計 - CPU/ 機箱靜音風扇 (可透過 CPU 溫度自動調節機箱的風扇速度) - CPU/ 機箱風扇多速控制 - 電壓範圍 : +12V, +5V, +3.3V, 核心電壓
操作系統	- Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/ Vista™ 64 位元 /XP/XP 64 位元
認證	- FCC, CE, WHQL - 支援 ErP/EuP (需要同時使用支援 ErP/EuP 的電源供應器)

* 請參閱華擎網站了解詳細的產品訊息 : <http://www.asrock.com>

1.3 跳線設置

插圖所示的就是設置跳線的方法。當跳線帽放置在針腳上時，這個跳線就是“短接”。如果針腳上沒有放置跳線帽，這個跳線就是“開路”。插圖顯示了一個 3 針腳的跳線，當跳線帽放置在針腳 1 和針腳 2 之間時就是“短接”。



接腳

設定

清除 CMOS

(CLRCMOS1, 3 針腳跳線)

(見第 2 頁第 9 項)



註： CLRCMOS1 可供您清除 CMOS 中的資料。若要清除及重設系統參數並恢復為預設設定，請先關閉電腦電源，並從電源插座中拔下電源線，等待 15 秒鐘之後，使用跳線帽使 CLRCMOS1 的 pin2 及 pin3 短路 5 秒的時間。但請勿於更新 BIOS 後立即清除 CMOS。如需於更新 BIOS 後立即清除 CMOS，您必須先開機再關機，然後再執行 CMOS 清除操作。請注意，只有在移除 CMOS 電池的情況下，密碼、日期、時間、使用者預設設定檔、1394 GUID 及 MAC 位址才會清除。

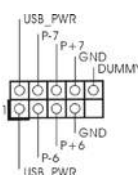
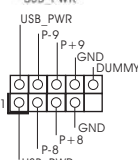
1.4 接頭

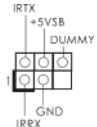


此類接頭是不用跳線帽連接的，請不要用跳線帽短接這些接頭。
跳線帽不正確的放置將會導致主機板的永久性損壞！

接頭	圖示	說明
Serial ATAII 接口 (SATA2_0: 見第 2 頁第 12 項) (SATA2_1: 見第 2 頁第 15 項) (SATA2_2: 見第 2 頁第 11 項) (SATA2_3: 見第 2 頁第 14 項)		這裡有四組 Serial ATAII (SATAII) 接口支援 SATA 數據線作為內部儲存設置。 目前 SATAII 界面理論上可提供高達 3.0Gb/s 的數據傳輸速率。

Serial ATA (SATA) 數據線 (選配)		SATA 數據線的任意一端均可連接 SATA/SATAII 硬碟或者主機板上的 SATAII 接口。
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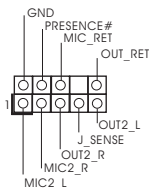
USB 2.0 擴充接頭 (9 針 USB6_7) (見第 2 頁第 18 項)		除了位於 I/O 面板的六個 USB 2.0 接口之外，這款主機板有兩組 USB 2.0 接針。每組 USB 2.0 接針可以支援兩個 USB 2.0 接口。
(9 針 USB8_9) (見第 2 頁第 17 項)		

紅外線模組接頭 (5 針 IR1) (見第 2 頁第 13 項)		這個接頭支援一個選配的模組，可用來無線傳輸和接收紅外線。
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前置音效接頭

(9 針 HD_AUDI01)

(見第 2 頁第 20 項)



可以方便連接音效設備。

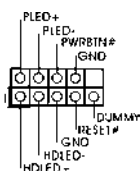


1. 高清晰音效 (High Definition Audio, HDA) 支援智能音效接口檢測功能 (Jack Sensing), 但是機箱面板的連線必須支持 HDA 才能正常使用。請按我們提供的手冊和機箱手冊上的使用說明安裝您的系統。
2. 如果您使用 AC' 97 音效面板, 請按照下面的步驟將它安裝到前面板音效接針:
 - A. 將 Mic_IN(MIC) 連接到 MIC2_L。
 - B. 將 Audio_R(RIN) 連接到 OUT2_R, 將 Audio_L(LIN) 連接到 OUT2_L。
 - C. 將 Ground(GND) 連接到 Ground(GND)。
 - D. MIC_RET 和 OUT_RET 僅用於 HD 音效面板。您不必將它們連接到 AC' 97 音效面板。

系統面板接頭

(9 針 PANEL1)

(見第 2 頁第 16 項)



可接各種不同燈, 電源開關及重啟鍵等各種連線。



請根據下面的腳位說明連接機箱上的電源開關、重開按鈕與系統狀態指示燈到這個接頭。請先注意針腳的正負極。

PWRBTN(電源開關):

連接機箱前面板的電源開關。您可以設定用電源鍵關閉系統的方式。

RESET(重開開關):

連接機箱前面板的重開開關。當電腦當機且無法正常重新啟動時, 可按下重開開關重新啟動電腦。

PLED(系統電源指示燈):

連接機箱前面板的電源狀態指示燈。當系統運行時, 此指示燈亮起。當系統處於 S1 待命模式時, 此指示燈保持閃爍。當系統處於 S3/S4 待命模式或關機 (S5) 模式時, 此指示燈熄滅。

HD LED(硬碟活動指示燈):

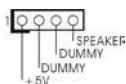
連接機箱前面板的硬碟動作指示燈。當硬碟正在讀取或寫入數據時, 此指示燈亮起。

前面板設計因機箱不同而有差異。前面板模組一般由電源開關、重開開關、電源指示燈、硬碟活動指示燈、喇叭等構成。將您的機箱前面板連接到此接頭時, 請確認連線與針腳上的說明相對應。

機箱喇叭接頭

(4 針 SPEAKER1)

(見第 2 頁第 10 項)



請將機箱喇叭連接到這個接頭。

機箱，電源風扇接頭

(4 針 CHA_FAN1)

(見第 2 頁第 6 項)



請將風扇連接線接到這個接頭，並讓黑線與接地的針腳相接。

(4 針 PWR_FAN1)

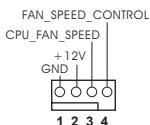
(見第 2 頁第 28 項)



CPU 風扇接頭

(4 針 CPU_FAN1)

(見第 2 頁第 2 項)



請將 CPU 風扇連接線接到這個接頭，並讓黑線與接地的針腳相接。



雖然此主板支持 4-Pin CPU 風扇 (Quiet Fan, 靜音風扇)，但是沒有調速功能的 3-Pin CPU 風扇仍然可以在此主板上正常運行。如果您打算將 3-Pin CPU 風扇連接到此主板的 CPU 風扇接口，請將它連接到 Pin 1-3。

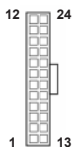
Pin 1-3 連接
3-Pin 風扇的安裝



ATX 電源接頭

(24 針 ATXPWR1)

(見第 2 頁第 5 項)

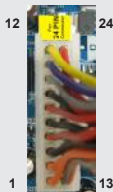


請將 ATX 電源供應器連接到這個接頭。



雖然此主機板提供 24-pin ATX 電源接口，但是您仍然可以使用傳統的 20-pin ATX 電源。為了使用 20-pin ATX 電源，請順著 Pin 1 和 Pin 13 插上電源接頭。

20-Pin ATX 電源安裝說明



ATX 12V 電源接口

(8 針 ATX12V1)

(見第 2 頁第 3 項)



請注意，必需將帶有 ATX 12V 插頭的電源供應器連接到這個插座，這樣就可以提供充足的電力。如果不這樣做，就會導致供電故障。



雖然此主機板提供 8-pin ATX 12V 電源接口，但是您仍然可以使用傳統的 4-pin ATX 12V 電源。為了使用 4-pin ATX 12V 電源，請順著 Pin 1 和 Pin 5 插上電源接頭。

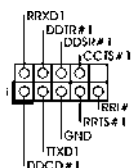
4-Pin ATX 12V 電源安裝說明



序列埠

(9 針 COM1)

(見第 2 頁第 19 項)



這個序列埠 COM1 支援一個序列埠的裝置。

SLI/XFire 電源接頭

(4 針 SLI/XFIRE_PWR1)

(見第 2 頁第 29 項)



在本主機板上安裝三張顯示卡時，請將此接頭接至電源。

(4 針 SLI/XFIRE_PWR2)

(見第 2 頁第 27 項)



2. BIOS 訊息

主板上的 Flash Memory 晶片存儲了 BIOS 設置程序。啟動系統，在系統開機自檢 (POST) 的過程中按下 <F2> 或 鍵，就可進入 BIOS 設置程序，否則將繼續進行開機自檢之常規檢驗。如果需要在開機自檢後進入 BIOS 設置程序，請按下 <Ctl> + <Alt> + <Delete> 鍵重新啟動電腦，或者按下系統面板上的重開按鈕。功能設置程序儲存有主板自身的和連接在其上的設備的缺省和設定的參數。這些訊息用於在啟動系統和系統運行需要時，測試和初始化元件。有關 BIOS 設置的詳細訊息，請查閱隨機支援光碟裡的使用手冊 (PDF 文件)。

3. 支援光碟訊息

本主板支援各種微軟 Windows® 操作系統：Microsoft® Windows® 8/8 64 位元 /7/7 64 位元 /Vista™/Vista™ 64 位元 /XP/XP 64 位元。主板附帶的支援光碟包含各種有助於提高主板效能的必要驅動和實用程式。請將隨機支援光碟放入光碟機裡，如果系統的“自動運行”功能已啟用，銀幕將會自動顯示主菜單。如果主菜單不能自動顯示，請查閱支援光碟內 BIN 文件夾下的 ASSETUP.EXE 文件並雙點它，即可調出主菜單。

1. Penjelasan

Terimakasih untuk membeli papan induk penghasil kontrol kualitas keras terus-menerus ASRock's yang dapat dipercaya. Dia dapat menyajikan pertunjukan baik dengan bentuknya sesuai dengan janji kualitas dan ketahanan ASRock's. Buku Pedoman Instalasi Cepat ini mengandung pengenalan papan induk dan instalasi langkah-demi-langkah. Informasi lebih terperinci tentang papan induk ini dapat dilihat dalam buku tangan pemakai dalam Support CD.



Karena spesifikasi papan induk dan software BIOS barangkali dapat diperbarui, isi dalam buku pedoman ini akan mengikuti perubahan tanpa peringatan. Dalam kondisi terjadinya modifikasi buku pedoman ini, versi baru akan diperlihatkan dalam website ASRock tanpa peringatan lebih. Anda dapat mendapatkan kartu-kartu yang paling baru dan daftar bantuan CPU pada website ASRock. Website ASRock <http://www.asrock.com>

1.1 Isi Paket

Papan Induk **H61 Pro BTC** ASRock (Faktor Form ATX)

Pemimpin Instalasi Cepat **H61 Pro BTC** ASRock

Support CD **H61 Pro BTC** ASRock

2 x Kabel satu serial Data ATA (SATA) (bebas-pilih)

1 x Satu Pelindung I/O

1.2 Spesifikasi

Podium	- Faktor Form ATX - Desain All Solid Capacitor
CPU	- Mendukung Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® Generasi ke-2 dalam paket LGA1155 - Menggunakan Teknologi Intel® Turbo Boost 2.0 - Mendukung CPU K-Series jenis “unlocked”
Grup Chip	- Intel® H61 - Mendukung Intel® Rapid Start Technology dan Smart Connect Technology
Ingatan	- Teknologi ingatan DDR3 dwisaluran - 2 x Alur DDR3 DIMM - Mendukung memori DDR3 1600/1333/1066 non-ECC yang tidak di-buffer (DDR3 1600 dengan Intel® Ivy Bridge CPU, DDR3 1333 dengan Intel® Sandy Bridge CPU) - Kapasitas paling banyak: 16GB - Mendukung Intel® Extreme Memory Profile (XMP) dengan Intel® Ivy Bridge CPU
Alur Ekspansi	- 1 x slot PCI Express 3.0 x16 (PCIe2 @ x16 mode) * PCIe 3.0 hanya didukung dengan Intel® Ivy Bridge CPU. Dengan Intel® Sandy Bridge CPU, hanya PCIe 2.0 yang didukung. - 5 x PCI Express 2.0 x1 slot
Diagram	* Intel® HD Graphics Built-in Visual dan output VGA hanya dapat didukung dengan prosesor yang mengintegrasikan GPU. - Mendukung Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video 2.0, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 2500/4000 dengan Intel® Ivy Bridge CPU - Mendukung Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® HD Graphics 2000/3000, Intel® Advanced Vector Extensions (AVX) dengan Intel® Sandy Bridge CPU - Pixel Shader 5.0, DirectX 11 dengan Intel® Ivy Bridge CPU, Pixel Shader 4.1, DirectX 10.1 dengan Intel® Sandy Bridge CPU - Ingatan sama Max. 1760MB dengan Intel® Ivy Bridge CPU. Ingatan sama Max. 1759MB dengan Intel® Sandy Bridge CPU.

	- Output VGA Ganda: mendukung port HDMI dan D-Sub melalui pengontrol tampilan independen - Mendukung HDMI Technology dengan resolusi maksimal hingga 1920x1200 @ 60Hz - Mendukung D-Sub dengan resolusi maksimal hingga 2048x1536 @ 75Hz - Mendukung Auto Lip Sync, Deep Color (12bpc), xvYCC dan HBR (High Bit Rate Audio) dengan HDMI (memerlukan monitor HDMI yang kompatibel) - Mendukung fungsi HDCP dengan port HDMI - Mendukung pemutaran 1080p Blu-ray (BD) / HD-DVD dengan port HDMI
Audio	- 5.1 CH HD Audio (VIA® VT1705 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111E - Menggunakan Wake-On-LAN - Mendukung Deteksi Kabel LAN - Mendukung Energy Efficient Ethernet 802.3az - Mendukung PXE
Papan Belakang I/O	- 1 x Port Mouse PS/2 - 1 x Port Keyboard PS/2 - 1 x Port D-Sub - 1 x Port HDMI - 6 x Port USB 2.0 siap-dipakai - 1 x RJ-45 LAN Port LED (ACT/LINK LED dan SPEED LED) - HD Audio Jack: Line in/Penyuaran Depan/mikropon
Antarmuka Penyimpanan	- 4 x penghubung SATA2 3.0Gb/s, dapat menggunakan NCQ, AHCI dan fungsi "Hot Plug"
Penghubung	- 1 x IR header - 1 x port header COM - 1 x Penghubung KIPAS CPU (4 pin) - 1 x Penghubung KIPAS casing (4 pin) - 1 x Penghubung KIPAS Power (4 pin) - 1 x Penghubung power 24 pin ATX - 1 x Penghubung power 8 pin 12V - 2 x Penghubung power SLI/XFire - 1 x Penghubung audio panel depan - 2 x USB 2.0 header (menggunakan 4 port USB 2.0)
Ciri-ciri BIOS	- 32Mb AMI Legal BIOS - AMI UEFI Legal BIOS dengan dukungan GUI - Menggunakan "Plug and Play"

	- ACPI 1.1 Compliance Wake Up Events - Menggunakan jumperfree - Penyokong AMBIOS 2.3.1 - Penyesuaian berbagai tegangan IGPU, DRAM, PCH, CPU PLL, VTT, VCCSA
Sokongan CD	- Driver, Utilitas, Perangkat Lunak Antivirus (Versi Percobaan), Google Chrome Browser dan Toolbar
Penjaga Hardware	- Perasa Suhu CPU - Perasa Suhu Casis - Pengukur Kipas CPU/casis/power - Kipas CPU/Sasis Senyap (Kecepatan Kipas Sasis Otomatis Disesuaikan Berdasarkan Temperatur CPU) - Kontrol Multi-Kecepatan Kipas CPU/casis - Penjagaan voltasi: +12V, +5V, +3.3V, Vcore
OS	- dapat digunakan Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit / Vista™ / Vista™ 64-bit / XP / XP 64-bit
Sertifikasi	- FCC, CE, WHQL - ErP/EuP Ready (memerlukan catu daya ErP/EuP ready)

* Untuk informasi rinci, silakan kunjungi website kami: <http://www.asrock.com>

Installing OS on a HDD Larger Than 2TB

This motherboard is adopting UEFI BIOS that allows Windows® OS to be installed on a large size HDD (>2TB). Please follow below procedure to install the operating system.

1. Please make sure to use **Windows® Vista™ 64-bit (with SP1 or above)**, **Windows® 7 64-bit** or **Windows® 8 64-bit**.
2. Press <F2> or <Delete> at system POST. Set **AHCI Mode** in UEFI Setup Utility > Advanced > Storage Configuration > SATA Mode.
3. Choose the item “**UEFI:xxx**” to boot in UEFI Setup Utility > Boot > Boot Option #1. (“xxx” is the device which contains your Windows® installation files. Normally it is an optical drive.) You can also press <F11> to launch boot menu at system POST and choose the item “**UEFI:xxx**” to boot.
4. Start Windows® installation.
5. If you install **Windows® 7 64-bit** OS, OS will be formatted by GPT (GUID Partition Table). Please install the hotfix file from Microsoft®:
<http://support.microsoft.com/kb/979903>

Contact Information

If you need to contact ASRock or want to know more about ASRock, you're welcome to visit ASRock's website at <http://www.asrock.com>; or you may contact your dealer for further information. For technical questions, please submit a support request form at <http://www.asrock.com/support/tsd.asp>

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