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CE

**Dichiarazione di conformità sintetica**

Ai sensi dell'art. 2 comma 3 del D.M. 275 del 30/10/2002

Si dichiara che questo prodotto è conforme alle normative vigenti e soddisfa i requisiti essenziali richiesti dalle direttive

2004/108/CE, 2006/95/CE e 1999/05/CE

quando ad esso applicabili

**Short Declaration of conformity**

We declare this product is complying with the laws in force and meeting all the essential requirements as specified by the directives

2004/108/CE, 2006/95/CE and 1999/05/CE

whenever these laws may be applied

## Table of Contents

# CHAPTER 1: INTRODUCTION

## 1.1 Before You Start

Thank you for choosing our product. Before you start installing the motherboard, please make sure you follow the instructions below:

- Prepare a dry and stable working environment with sufficient lighting.
- Always disconnect the computer from power outlet before operation.
- Before you take the motherboard out from anti-static bag, ground yourself properly by touching any safely grounded appliance, or use grounded wrist strap to remove the static charge.
- Avoid touching the components on motherboard or the rear side of the board unless necessary. Hold the board on the edge, do not try to bend or flex the board.
- Do not leave any unfastened small parts inside the case after installation. Loose parts will cause short circuits which may damage the equipment.
- Keep the computer from dangerous area, such as heat source, humid air and water.
- The operating temperatures of the computer should be 0 to 45 degrees Celsius.
- To avoid injury, be careful of:
  Sharp pins on headers and connectors
  Rough edges and sharp corners on the chassis
  Damage to wires that could cause a short circuit

## 1.2 Package Checklist

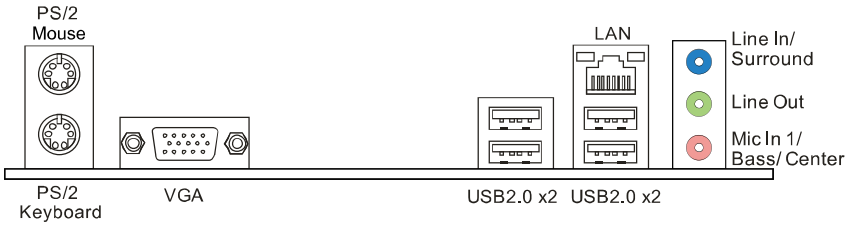
- ☑ Serial ATA Cable x2
- ☑ Rear I/O Panel for ATX Case x1
- ☑ Installation Guide x1
- ☑ Fully Setup Driver DVD x1

**Note:** The package contents may be different due to the sales region or models in which it was sold. For more information about the standard package in your region, please contact your dealer or sales representative.

## 1.3 MOTHERBOARD FEATURES

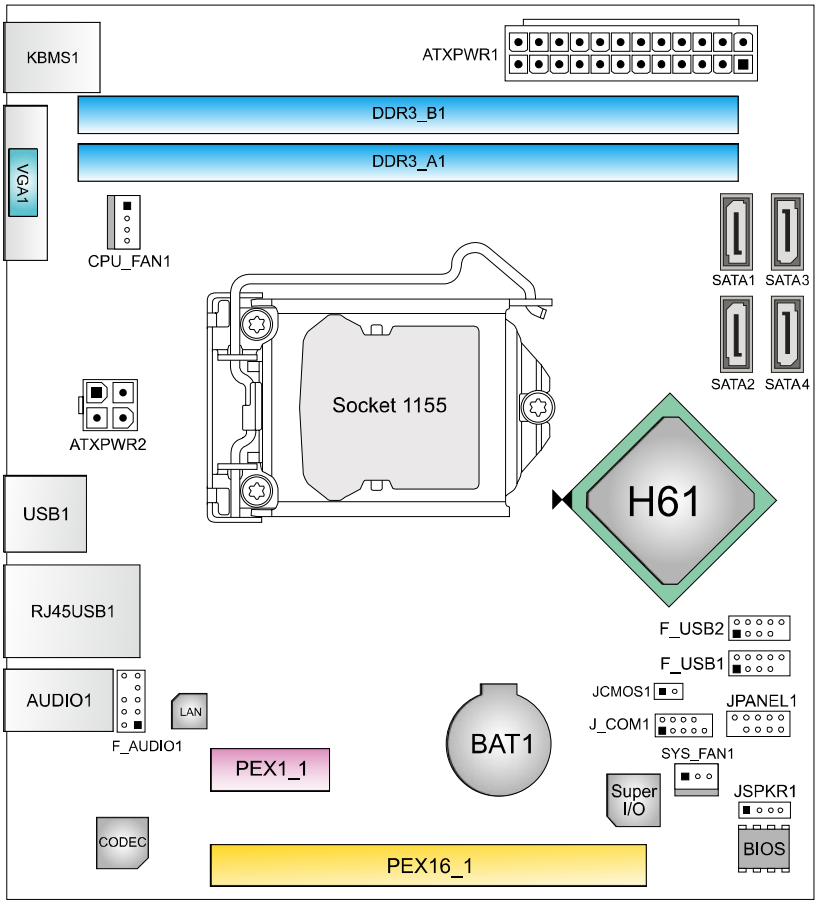
| SPEC | | | |
|---|---|---|---|
| CPU | Socket 1155<br>Intel Core i7 / i5 / i3 / Pentium / Celeron processor | | Supports Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology / Hyper Threading |
| Chipset | Intel H61 | | |
| Super I/O | IT8772E<br>Provides the most commonly used legacy Super I/O functionality<br>Low Pin Count Interface | | Environment Control initiatives<br>Hardware Monitor Controller<br>Fan Speed Controller<br>ITE's "Smart Guardian" function |
| Main Memory | DDR3 DIMM Slots x 2<br>Max Memory Capacity 16GB<br>Each DIMM supports 512MB/ 1GB/2GB/4GB/8GB DDR3 | | Dual Channel Mode DDR3 memory module<br>Supports DDR3 1066 / 1333<br>Supports DDR3 1600 (depending on CPU)<br>Registered DIMM and ECC DIMM is not supported |
| SATA 2 | Integrated Serial ATA Controller | | Data transfer rates up to 3.0 Gb/s<br>SATA Version 2.0 specification compliant |
| LAN | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | 10 / 100 / 1000Mb/s auto negotiation<br>10 / 100 Mb/s auto negotiation |
| Sound Codec | VT1705CF / ALC662 | | 5.1 channels audio out , High Definition Audio |
| Slots | PCI-E Gen3x16 slot (depending on CPU)<br>PCI-E Gen2 x1 slot | x1<br>x1 | Supports PCI-E Gen2/3 x16 expansion card<br>Supports PCI-E Gen2 x1 expansion card |
| On Board Connectors | SATA2 Connector<br>Front Panel Connector<br>Chassis Speaker Connector<br>Front Audio Connector<br>CPU Fan Header<br>System Fan Header<br>Clear CMOS Header<br>USB2.0 Connector<br>Serial Port Connector<br>Power Connector (24pin)<br>Power Connector (4pin) | x4<br>x1<br>x1<br>x1<br>x1<br>x1<br>x1<br>x2<br>x1<br>x1<br>x1 | Each connector supports 1 SATA2 device<br>Supports front panel facilities<br>Supports chassis speaker<br>Supports front panel audio function<br>CPU Fan power supply (with Smart Fan function)<br>System Fan Power supply<br>Restore CMOS data to factory default<br>Each connector supports 2 front panel USB2.0 ports<br>Connects to RS-232 Port<br>Connects to Power supply<br>Connects to Power supply |
| Rear Panel I/O | PS/2 Keyboard<br>PS/2 Mouse<br>VGA Port<br>LAN port<br>USB2.0 Port<br>Audio Jack | x1<br>x1<br>x1<br>x1<br>x4<br>x3 | Connects to PS/2 Keyboard<br>Connects to PS/2 Mouse<br>Connect to D-SUB monitor<br>Connect to RJ-45 Ethernet cable<br>Connect to USB2.0 devices<br>Provide Audio-In/Out and Mic. Connection |
| Board Size | 170 (W) x 191 (L) mm | | |
| OS Support | Windows XP / Vista / 7 / 8 | | Biostar reserves the right to add or remove support for any OS with or without notice |

## 1.4 Rear Panel Connectors




**Note1:** VGA Output requires an Intel Core family processor with Intel Graphics Technology.
**Note2:** VGA Maximum resolution: 2048 x 1536 @75Hz

## 1.5 Motherboard Layout

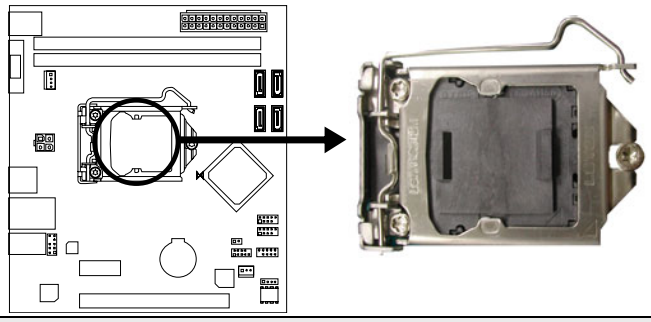



**Note1:** ■ represents the 1st pin.

# CHAPTER 2: HARDWARE INSTALLATION

## 2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)

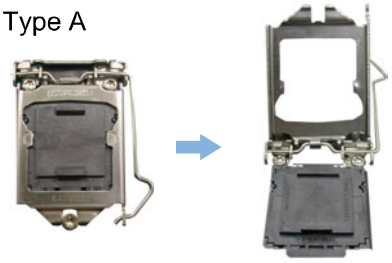
**Step 1:** Locate the CPU socket on the motherboard



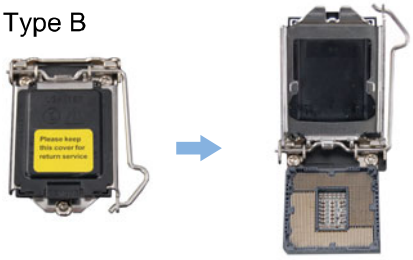
**Note1:** Remove Pin Cap before installation, and make good preservation for future use. When the CPU is removed, cover the Pin Cap on the empty socket to ensure pin legs won't be damaged.
**Note2:** The motherboard might equip with two different types of pin cap. Please refer below instruction to remove the pin cap.

**Step 2:** Pull the socket locking lever out from the socket and then raise the lever up.

Type A

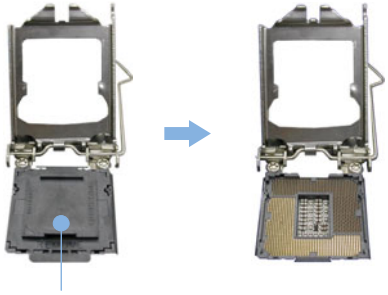


Type B

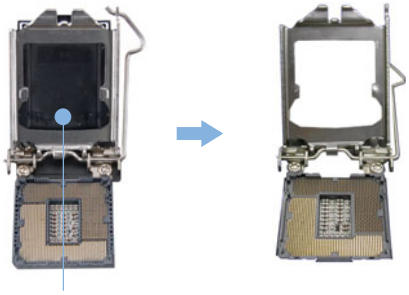


**Step 3:** Remove the Pin Cap.

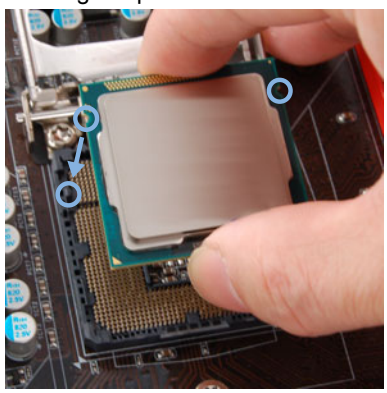
Type A




Type B



**Step 4:** Hold processor with your thumb and index fingers, oriented as shown. Align the notches with the socket. Lower the processor straight down without tilting or sliding the processor in the socket.



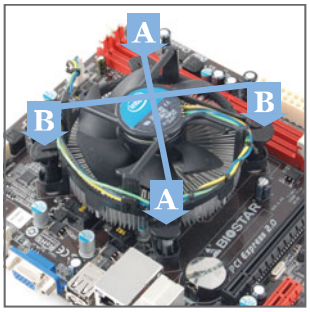
**Note:** The CPU fits only in one correct orientation. Do not force the CPU into the socket to prevent damaging the CPU.

**Step 5:** Hold the CPU down firmly, and then lower the lever to locked position to complete the installation.

## 2.2 Install a Heatsink

**Step 1:** Place the CPU fan assembly on top of the installed CPU and make sure that the four fasteners match the motherboard holes. Orient the assembly and make the fan cable is closest to the CPU fan connector.

**Step 2:** Press down two fasteners at one time in a diagonal sequence to secure the CPU fan assembly in place. Ensure that all four fasteners are secured.

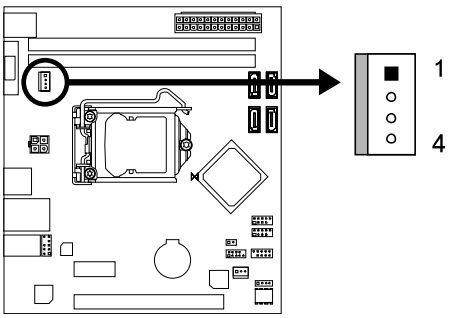



**Note1:** Do not forget to connect the CPU fan connector.
**Note2:** For proper installation, please kindly refer to the installation manual of your CPU heatsink.

## 2.3 FAN HEADERS

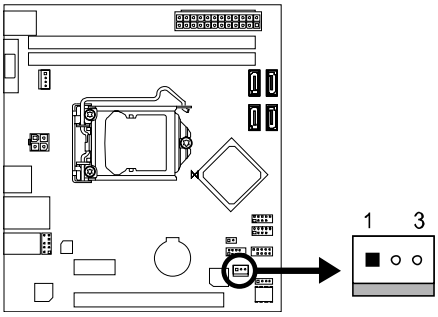
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

### CPU_FAN1: CPU Fan Header




| Pin | Assignment |
|---|---|
| 1 | Ground |
| 2 | +12V |
| 3 | FAN RPM rate sense |
| 4 | Smart Fan Control (By Fan) |

### SYS_FAN1: System Fan Header

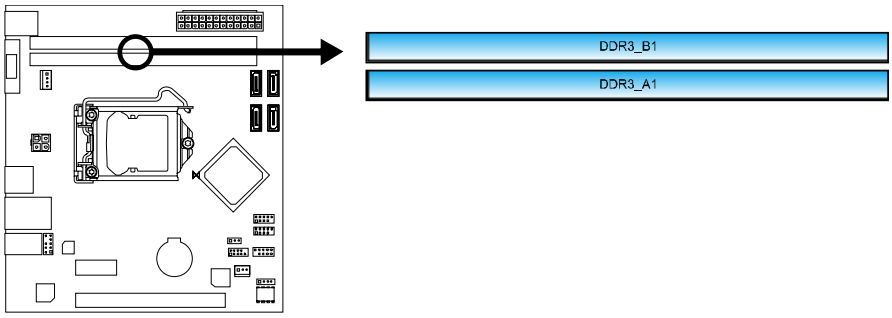



| Pin | Assignment |
|---|---|
| 1 | Ground |
| 2 | +12V |
| 3 | FAN RPM rate sense |

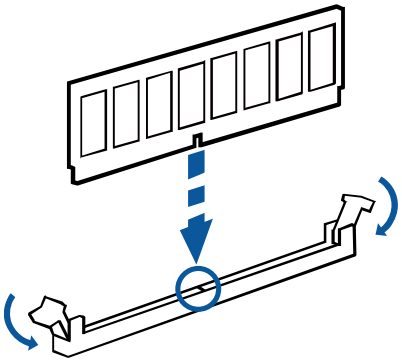
**Note:** CPU_FAN1, SYS_FAN1 support 4-pin and 3-pin head connectors. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

## 2.4 Installing System Memory

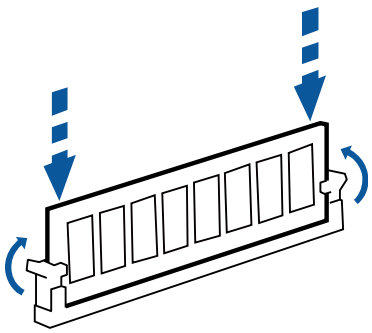
### A. Memory Modules




**Step 1:** Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.



**Step 2:** Insert the DIMM vertically and firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.



**Note:** If the DIMM does not go in smoothly, do not force it. Pull it all the way out and try again.

### B. Memory Capacity

| DIMM Socket Location | DDR3 Module | Total Memory Size |
|---|---|---|
| DDR3_A1 | 512MB/1GB/2GB/4GB/8GB | Max is 16GB. |
| DDR3_B1 | 512MB/1GB/2GB/4GB/8GB | |

### C. Dual Channel Memory Installation

Please refer to the following requirements to activate Dual Channel function:
Install memory module of the same density in pairs, shown in the table.

| Dual Channel Status | DDR3_A1 | DDR3_B1 |
|---|---|---|
| Disabled | O | X |
| Disabled | X | O |
| Enabled | O | O |

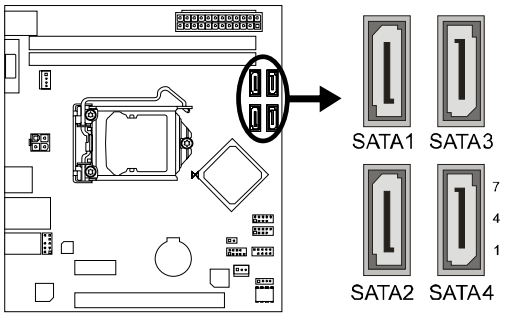
(O means memory installed; X, not installed.)

**Note:** The DRAM bus width of the memory module must be the same (x8 or x16)

## 2.5 Connectors and Slots

### SATA1~SATA4: Serial ATA Connectors

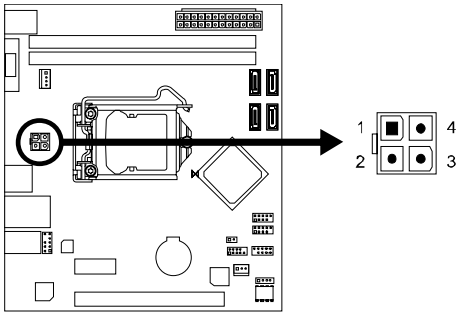
These connectors connect to SATA hard disk drives via SATA cables.
Those satisfy the SATA 2.0 spec and with transfer rate of 3.0Gb/s.




| Pin | Assignment |
|---|---|
| 1 | Ground |
| 2 | TX+ |
| 3 | TX- |
| 4 | Ground |
| 5 | RX- |
| 6 | RX+ |
| 7 | Ground |

## ATXPWR2: ATX Power Source Connector

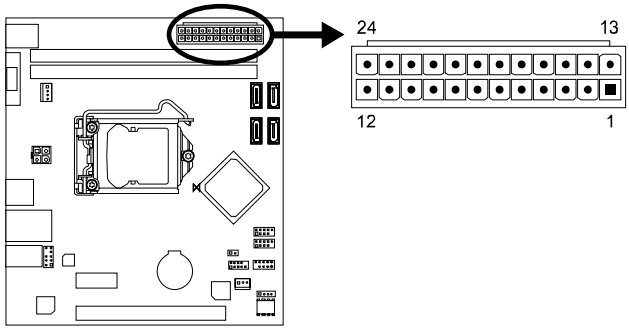
This connector provides +12V to CPU power circuit.




| Pin | Assignment |
|---|---|
| 1 | +12V |
| 2 | +12V |
| 3 | Ground |
| 4 | Ground |

## ATXPWR1: ATX Power Source Connector

This connector allows user to connect 24-pin power connector on the ATX power supply.




| Pin | Assignment | Pin | Assignment |
|---|---|---|---|
| 13 | +3.3V | 1 | +3.3V |
| 14 | -12V | 2 | +3.3V |
| 15 | Ground | 3 | Ground |
| 16 | PS_ON | 4 | +5V |
| 17 | Ground | 5 | Ground |
| 18 | Ground | 6 | +5V |
| 19 | Ground | 7 | Ground |
| 20 | NC | 8 | PW_OK |
| 21 | +5V | 9 | Standby Voltage+5V |
| 22 | +5V | 10 | +12V |
| 23 | +5V | 11 | +12V |
| 24 | Ground | 12 | +3.3V |

**Note1:** Before you power on the system, please make sure that both ATXPWR1 and ATXPWR2 connectors have been plugged-in.

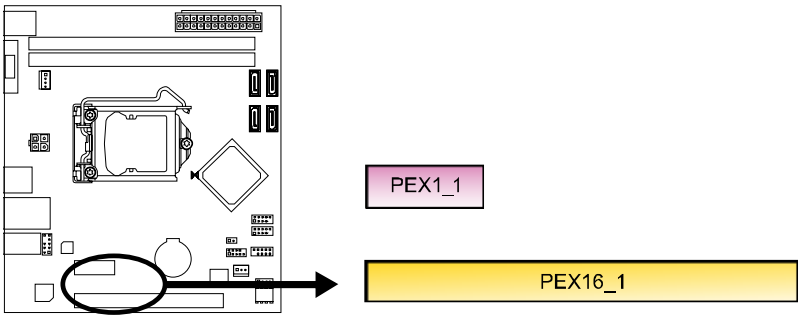
**Note2:** Insufficient power supplied to the system may result in instability or the peripherals not functioning properly. Use of a PSU with a higher power output is recommended when configuring a system with more power-consuming devices.

## PEX16_1: PCI-Express Gen3 x16 Slot

- PCI-Express 3.0 compliant.
- Maximum theoretical realized bandwidth of 16GB/s simultaneously per direction, for an aggregate of 32GB/s totally.
- PCI-E 3.0 is supported by Core i7-3xxx / i5-3xxx CPU.

## PEX1_1: PCI-Express Gen2 x1 Slot

- PCI-Express 2.0 compliant.
- Data transfer bandwidth up to 500MB/s per direction; 1GB/s in total.




## Install an Expansion Card

You can install your expansion card by following steps:

1. Read the related expansion card's instruction document before install the expansion card into the computer.
2. Remove your computer's chassis cover, screws and slot bracket from the computer.
3. Place a card in the expansion slot and press down on the card until it is completely seated in the slot.
4. Secure the card’s metal bracket to the chassis back panel with a screw.
5. Replace your computer's chassis cover.
6. Power on the computer, if necessary, change BIOS settings for the expansion card.
7. Install related driver for the expansion card.

# CHAPTER 3: HEADERS & JUMPERS SETUP

## 3.1 How to Setup Jumpers

The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.

Pin opened

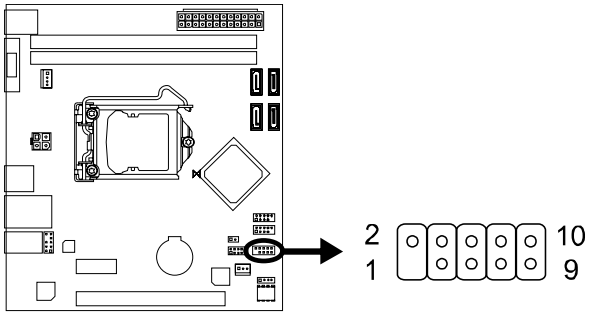
Pin closed


Pin1-2 closed

## 3.2 Detail Settings

### JPANEL1: Front Panel Header

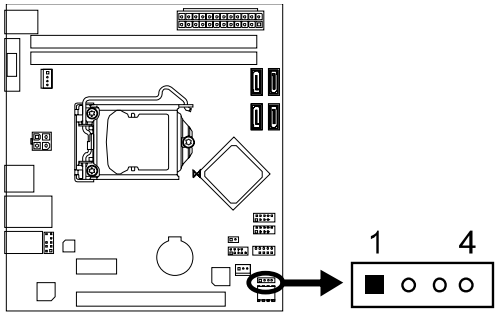
This connector includes Power-on, Reset, HDD LED and Power LED connections. It allows user to connect the PC case’s front panel switch functions.




| Pin | Assignment | Function | Pin | Assignment | Function |
|---|---|---|---|---|---|
| 1 | N/A | N/A | 2 | Power LED (+) | Power LED |
| 3 | HDD LED(+) | HDD LED | 4 | Power LED (+) | |
| 5 | HDD LED(-) | | 6 | Power LED (-) | |
| 7 | Ground | Reset Button | 8 | Power Button | Power-On Button |
| 9 | Reset Control | | 10 | Ground | |

## JSPKR1: Chassis Speaker Header

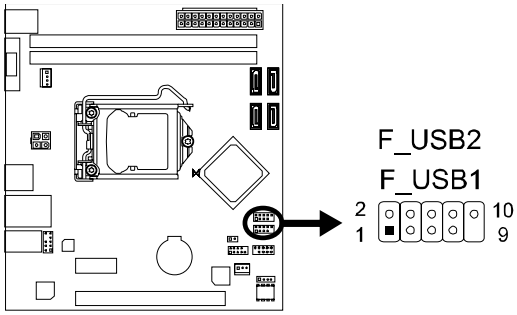
Please connect the chassis speaker to this header.




| Pin | Assignment |
|---|---|
| 1 | +5V |
| 2 | N/A |
| 3 | N/A |
| 4 | Speaker |

## F_USB1/F_USB2: Headers for USB 2.0 Ports at Front Panel

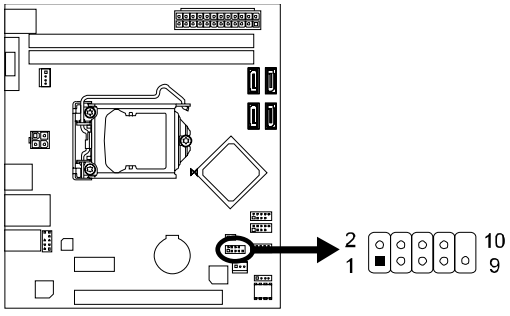
These headers allow users to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.




| Pin | Assignment |
|---|---|
| 1 | +5V (fused) |
| 2 | +5V (fused) |
| 3 | USB- |
| 4 | USB- |
| 5 | USB+ |
| 6 | USB+ |
| 7 | Ground |
| 8 | Ground |
| 9 | Key |
| 10 | NC |

## J_COM1: Serial Port Connector

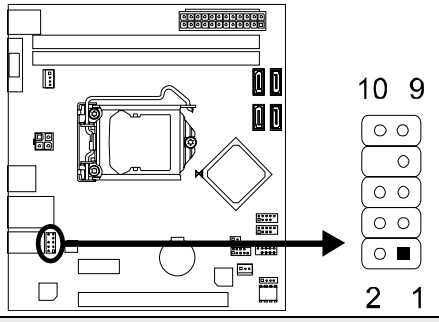
The motherboard has a Serial Port Connector for connecting RS-232 Port.




| Pin | Assignment |
|---|---|
| 1 | Carrier detect |
| 2 | Received data |
| 3 | Transmitted data |
| 4 | Data terminal ready |
| 5 | Signal ground |
| 6 | Data set ready |
| 7 | Request to send |
| 8 | Clear to send |
| 9 | Ring indicator |
| 10 | Key |

## F_AUDIO1: Front Panel Audio Header

This header allows users to connect the front audio output cable with the PC front panel.

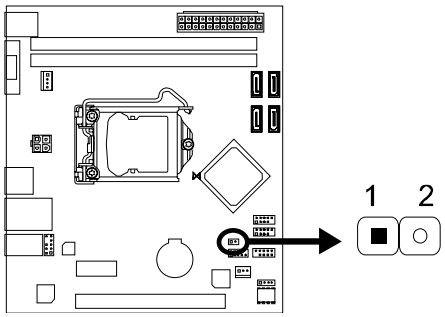



| HD Audio | | AC'97 | |
|---|---|---|---|
| Pin | Assignment | Pin | Assignment |
| 1 | Mic Left in | 1 | Mic In |
| 2 | Ground | 2 | Ground |
| 3 | Mic Right in | 3 | Mic Power |
| 4 | GPIO | 4 | Audio Power |
| 5 | Right line in | 5 | RT Line Out |
| 6 | Jack Sense | 6 | RT Line Out |
| 7 | Front Sense | 7 | Reserved |
| 8 | Key | 8 | Key |
| 9 | Left line in | 9 | LFT Line Out |
| 10 | Jack Sense | 10 | LFT Line Out |

**Note1:** It is recommended that you connect a high-definition front panel audio module to this connector to avail of the motherboard's high definition audio capability.
**Note2:** Please try to disable the "Front Panel Jack Detection" if you want to use an AC'97 front audio output cable. The function can be found via O.S. Audio Utility.

## JCMOS1: Clear CMOS Jumper

The jumper allows users to restore the BIOS safe setting and the CMOS data. Please carefully follow the procedures to avoid damaging the motherboard.





**Pin 1-2 Open:**
Normal Operation (default).


**Pin 1-2 Close:**
Clear CMOS data.

### ※ Clear CMOS Procedures:

1. Remove AC power line.
2. Set the jumper to “Pin 1-2 close”, you can use a metal object like a screwdriver to touch the two pins.
3. Wait for five seconds.
4. After clearing the CMOS values, be sure the jumper is “Pin 1-2 open”.
5. Power on the AC.
6. Load Optimal Defaults and save settings in CMOS.

# CHAPTER 4: USEFUL HELP

## 4.1 DRIVER INSTALLATION NOTE

After you installed your operating system, please insert the Fully Setup Driver DVD into your optical drive and install the driver for better system performance. You will see the following window after you insert the DVD


The setup guide will auto detect your motherboard and operating system.

**Note:** If this window didn't show up after you insert the Driver DVD, please use file browser to locate and execute the file SETUP.EXE under your optical drive.

### A. Driver Installation

To install the driver, please click on the Driver icon. The setup guide will list the compatible driver for your motherboard and operating system. Click on each device driver to launch the installation program.

### B. Software Installation

To install the software, please click on the Software icon. The setup guide will list the software available for your system, click on each software title to launch the installation program.

### C. Manual

Aside from the paperback manual, we also provide manual in the Driver DVD. Click on the Manual icon to browse for available manual.

**Note:** You will need Acrobat Reader to open the manual file. Please download the latest version of Acrobat Reader software from http://get.adobe.com/reader/

## 4.2 Software

### Installing Software

1. Insert the Setup DVD to the optical drive. The drivers installation program would appear if the Autorun function has been enabled.
2. Select **Software Installation**, and then click on the respective software title.
3. Follow the on-screen instructions to complete the installation.

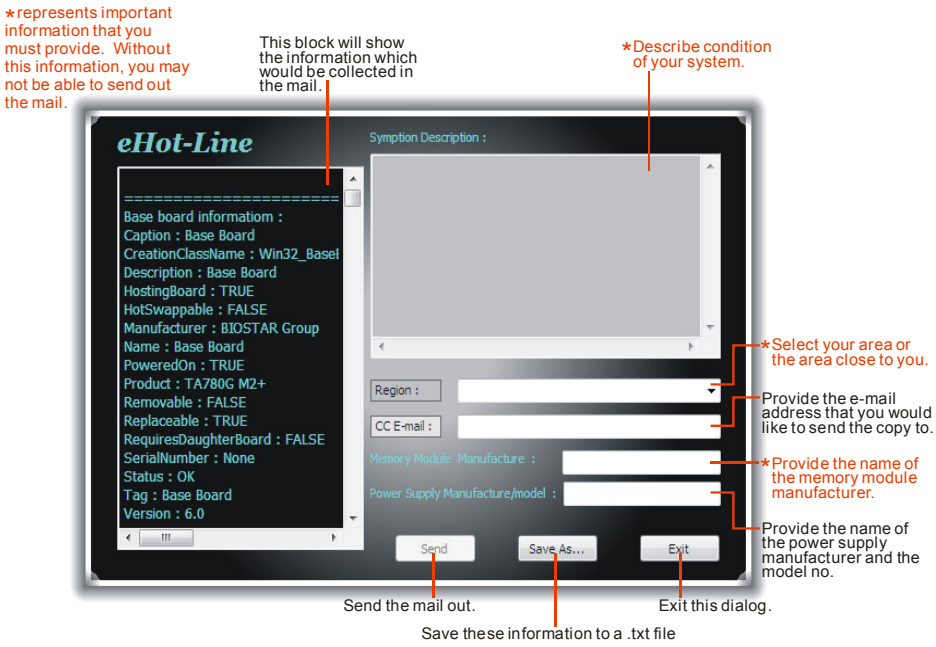
### Launching Software

After the installation process, you will see the software icon “eHOT Line” / “BIOS Update” appears on the desktop. Double-click the icon to launch the utility.

### eHot-Line

eHot-Line is a convenient utility that helps you to contact with our Tech-Support system. This utility will collect the system information which is useful for analyzing the problem you may have encountered, and then send these information to our tech-support department to help you fix the problem.

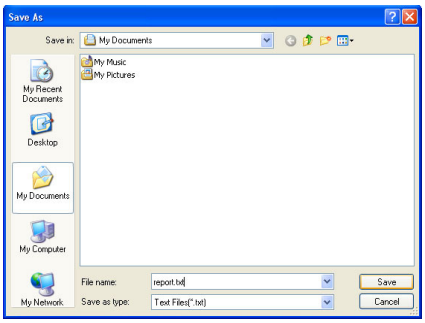
Before you use this utility, please set Outlook Express as your default e-mail client application program.

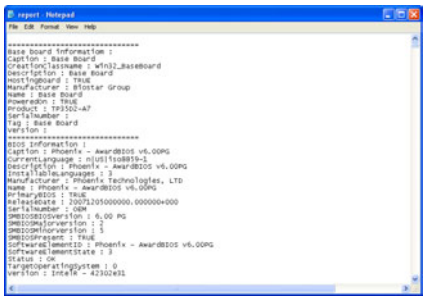


After filling up this information, click "**Send**" to send the mail out. A warning dialog would appear asking for your confirmation; click "**Send**" to confirm or "**Do Not Send**" to cancel.


If you want to save this information to a .txt file, click "**Save As…**" and then you will see a saving dialog appears asking you to enter file name.

Enter the file name and then click "**Save**". Your system information will be saved to a .txt file.



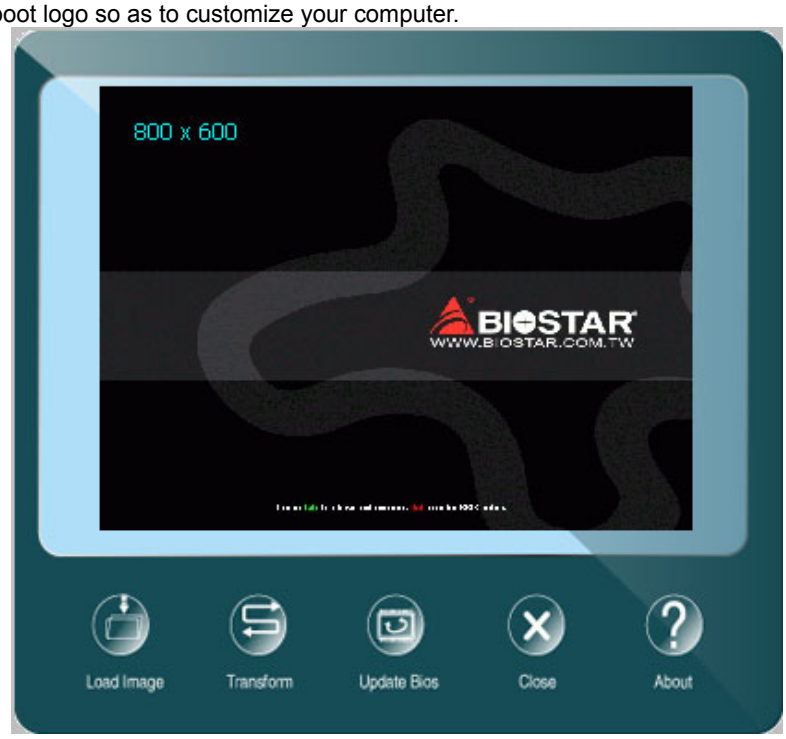
Open the saved .txt file, you will see your system information including motherboard/BIOS/CPU/video/ device/OS information. This information is also concluded in the sent mail.

**Note1:** We will not share customer's data with any other third parties, so please feel free to provide your system information while using eHot-Line service.

**Note2:** If you are not using Outlook Express as your default e-mail client application, you may need to save the system information to a .txt file and send the file to our tech support with other e-mail application. Go to the following web http://www.biostar.com.tw/app/en/about/contact.php for getting our contact information.

## BIOScreen Utility

This utility allows you to personalize your boot logo easily. You can choose BMP as your boot logo so as to customize your computer.




Please follow the following instructions to update boot logo:

- Load Image：Choose the picture as the boot logo.
- Transform：Transform the picture for BIOS and preview the result.
- Update Bios：Write the picture to BIOS Memory to complete the update.

## 4.3 BIOS UPDATE

There are three ways to update the BIOS: BIOS Update Utility, BIOS Online Update Utility and BIOSTAR BIOS Flasher.

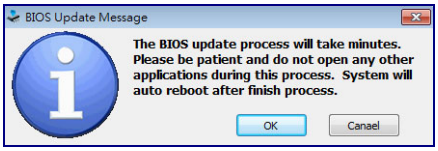
**Note:** The programming procedure may take minutes, please do not make any operation during the programming process.

### 1. BIOS Update Utility

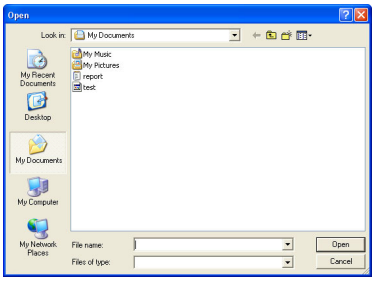
1. Installing BIOS Update Utility from the DVD Driver.
2. Download the proper BIOS from www.biostar.com.tw .

3. Open BIOS Update Utility and click the **Update BIOS** button on the main screen.

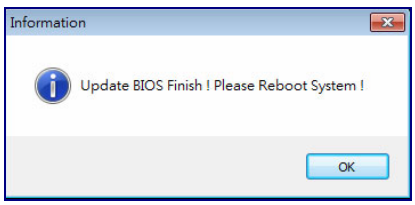

4. A warning message will show up to request your agreement to start the BIOS update. Click **OK** to start the update procedure.




5. Choose the location for your BIOS file in the system. Please select the proper BIOS file, and then click on **Open**. It will take several minutes, please be patient.




6. After the BIOS Update process is finished, click on **OK** to reboot the system.



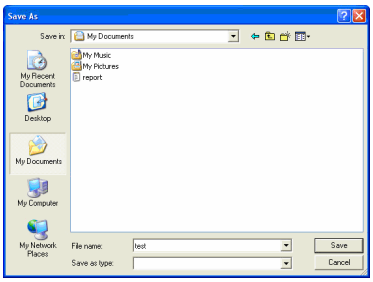
7. While the system boots up and the full screen logo shows up, please press the 

<Delete> key to enter BIOS setup.

After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

### Backup BIOS

Click the Backup BIOS button on the main screen for the backup of BIOS, and select a proper location for your backup BIOS file in the system, and click **Save**.

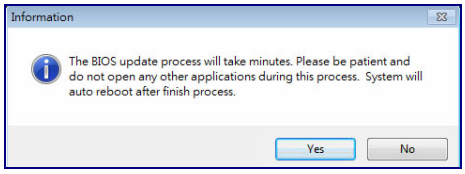



## 2. Online Update Utility

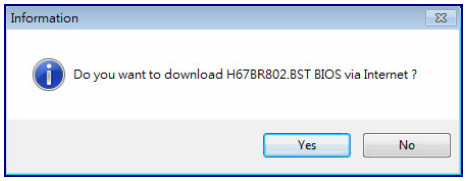
1. Installing BIOS Update Utility from the DVD Driver.
2. Please make sure the system is connected to the internet before using this function.

3. Open BIOS Update Utility and click the **Online Update** button on the main screen.

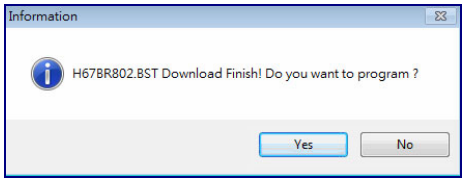

4. An open dialog will show up to request your agreement to start the BIOS update. Click **Yes** to start the online update procedure.



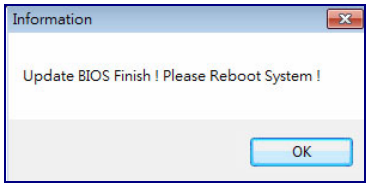

5. If there is a new BIOS version, the utility will ask you to download it. Click **Yes** to proceed.



6. After the download is completed, you will be asked to program (update) the BIOS or not. Click **Yes** to proceed.




7. After the updating process is finished, you will be asked you to reboot the system. Click **OK** to reboot.




8. While the system boots up and the full screen logo shows up, press 

<Delete> key to enter BIOS setup.

After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

## 3. BIOSTAR BIOS Flasher

BIOSTAR BIOS Flasher is a BIOS flashing utility providing you an easy and simple way to update your BIOS via USB pen drive.

The BIOSTAR BIOS Flasher is built in the BIOS ROM. To enter the utility, **press <F12> during the Power-On Self Tests (POST)** procedure while booting up.

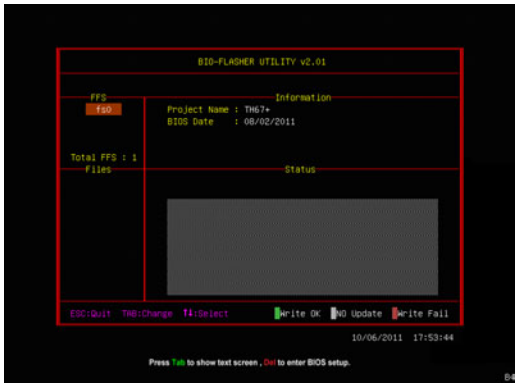
**Note1:** This utility only allows storage device with FAT32/16 format and single partition.

**Note2:** Shutting down or resetting the system while updating the BIOS will lead to system boot failure.

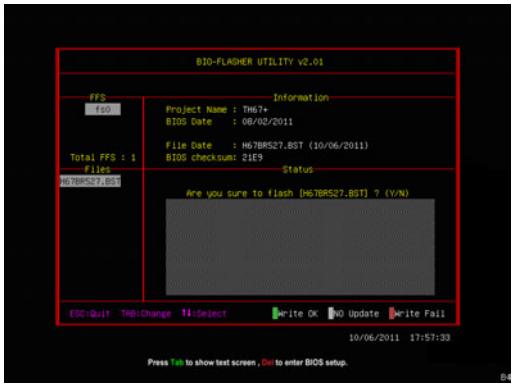
**Updating BIOS with BIOSTAR BIOS Flasher**

1. Go to the website to download the latest BIOS file for the motherboard.
2. Then, copy and save the BIOS file into a USB flash (pen) drive.
3. Insert the USB pen drive that contains the BIOS file to the USB port.
4. Power on or reset the computer and then press **<F12>** during the **POST** process.

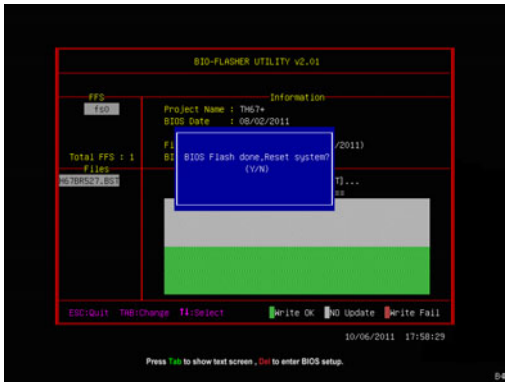
5. After entering the POST screen, the BIOS-FLASHER utility pops out. Choose [fs0] to search for the BIOS file.




6. Select the proper BIOS file, and a message asking if you are sure to flash the BIOS file. Click Yes to start updating BIOS.




7. A dialog pops out after BIOS flash is completed, asking you to restart the system. Press the [Y] key to restart system.




8. While the system boots up and the full screen logo shows up, press Del <Delete> key to enter BIOS setup.

After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

## 4.4 AMI BIOS BEEP CODE

### Boot Block Beep Codes

| Number of Beeps | Description |
|---|---|
| Continuing | Memory sizing error or Memory module not found |

### POST BIOS Beep Codes

| Number of Beeps | Description |
|---|---|
| 1 | Success booting. |
| 8 | Display memory error (system video adapter) |

## 4.5 TROUBLESHOOTING

| Probable | Solution |
|---|---|
| 1. There is no power in the system. Power LED does not shine; the fan of the power supply does not work<br>2. Indicator light on keyboard does not shine. | 1. Make sure power cable is securely plugged in.<br>2. Replace cable.<br>3. Contact technical support. |
| System is inoperative. Keyboard lights are on, power indicator lights are lit, and hard drives are running. | Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place. |
| System does not boot from a hard disk drive, but can be booted from optical drive. | 1. Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup.<br>2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time. |
| System only boots from an optical drive. Hard disks can be read, applications can be used, but system fails to boot from a hard disk. | 1. Back up data and applications files.<br>2. Reformat the hard drive. Re-install applications and data using backup disks. |
| Screen message shows “Invalid Configuration” or “CMOS Failure.” | Review system’s equipment. Make sure correct information is in setup. |
| System cannot boot after the user installs a second hard drive. | 1. Set master/slave jumpers correctly.<br>2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives. |

## CPU Overheated

If the system shutdown automatically after power on system for seconds, that means the CPU protection function has been activated.

When the CPU is over heated, the motherboard will shutdown automatically to avoid a damage of the CPU, and the system may not power on again.

In this case, please double check:

1. The CPU cooler surface is placed evenly with the CPU surface.
2. CPU fan is rotated normally.
3. CPU fan speed is fulfilling with the CPU speed.

After confirmed, please follow steps below to relief the CPU protection function.

1. Remove the power cord from power supply for seconds.
2. Wait for seconds.
3. Plug in the power cord and boot up the system.

Or you can:

1. Clear the CMOS data.
   (See “Close CMOS Header: JCMOS1” section)
2. Wait for seconds.
3. Power on the system again.

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# APPENDIX: SPEC IN OTHER LANGUAGES

## GERMAN

| *Spezifikationen* | | | |
|---|---|---|---|
| CPU | Socket 1155<br>Intel Core i7 / i5 / i3 / Pentium / Celeron Prozessoren | | Unterstützt Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology / Hyper Threading |
| Chipsatz | Intel H61 | | |
| Super E/A | IT8772E<br>Bietet die häufig verwendeten alten Super E/A-Funktionen.<br>Low Pin Count-Schnittstelle | | Umgebungskontrolle,<br>Hardware-Überwachung<br>Lüfterdrehzahl-Controller/-Überwachung<br>"Smart Guardian"-Funktion von ITE |
| Arbeitsspeicher | DDR3 DIMM-Steckplätze x 2<br>Max. 16GB Arbeitsspeicher<br>Jeder DIMM unterstützt 512MB/ 1GB/2GB/4GB/8GB DDR3. | | Dual-Kanal DDR3 Speichermodul<br>Unterstützt DDR3 1066 / 1333 / 1600 registrierte DIMMs. ECC DIMMs werden nicht unterstützt. |
| SATA 2 | Integrierter Serial ATA-Controller | | Datentransferrate bis zu 3.0Gb/s<br>Konform mit der SATA-Spezifikation Version 2.0 |
| LAN | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | 10 / 100 / 1000Mb/s Auto-Negotiation<br>10 / 100 Mb/s Auto-Negotiation |
| HD Audio-Unterstützung | VT1705CF / ALC662 | | Unterstützt High-Definition Audio<br>5.1-Kanal-Audioausgabe |
| Steckplätze | PCI-E Gen3 x 16 Steckplatz<br>PCI-E Gen2 x1-Steckplatz | x1<br>x1 | (je nach CPU) |
| Onboard-Anschluss | SATA2-Anschluss<br>Fronttafelanschluss<br>Front-Audioanschluss<br>CPU-Lüfter-Sockel | x4<br>x1<br>x1<br>x1 | Jeder Anschluss unterstützt 1 SATA2-Laufwerk<br>Unterstützt die Fronttafelfunktionen<br>Unterstützt die Fronttafel-Audioanschlussfunktion<br>CPU-Lüfterstromversorgungsanschluss (mit Smart Fan-Funktion) |

| *Spezifikationen* | | | |
|---|---|---|---|
| | System-Lüfter-Sockel | x1 | System-Lüfter-Stromversorgungsanschluss |
| | Chassis Lautsprecher-Anschluss | x1 | |
| | "CMOS löschen"-Sockel | x1 | |
| | USB2.0-Anschluss | x2 | Jeder Anschluss unterstützt 2 Fronttafel-USB2.0-Anschlüsse |
| | Serieller Anschluss | x1 | |
| | Stromanschluss (24-polig) | x1 | |
| | Stromanschluss (4-polig) | x1 | |
| Rückseiten-E/A | PS/2-Tastatur | x1 | |
| | PS/2-Maus | x1 | |
| | VGA-Anschluss | x1 | |
| | LAN-Anschluss | x1 | |
| | USB2.0-Anschluss | x4 | |
| | Audioanschluss | x3 | |
| Platinengröße | 170 mm (B) X 191 mm (L) | | |
| OS-Unterstützung | Windows XP / Vista / 7 / 8 | | Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen. |

## FRENCH

| SPEC | | |
|---|---|---|
| UC | Socket 1155<br>Processeurs Intel Core i7 / i5 / i3 / Pentium / Celeron | Prend en charge les technologies d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ d'architecture Intel 64 / de mémoire étendue 64 / de virtualisation / Hyper Threading |
| Chipset | Intel H61 | |
| Super E/S | IT8772E<br>Fournit la fonctionnalité de Super E/S patrimoniales la plus utilisée.<br>Interface à faible compte de broches | Initiatives de contrôle environnementales,<br>Moniteur de matériel<br>Contrôleur /moniteur de vitesse de ventilateur<br>Fonction "Gardien intelligent" de l'ITE |
| Mémoire principale | Fentes DDR3 DIMM x 2<br>Capacité mémoire maximale de 16 Go<br>Chaque DIMM prend en charge des DDR3 de 512Mo/1Go/2Go/4Go/8Go | Module de mémoire DDR3 à mode à double voie<br>Prend en charge la DDR3 1066 / 1333 / 1600<br>Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge |
| SATA 2 | Contrôleur Serial ATA intégré | Taux de transfert jusqu'à 3.0Go/s.<br>Conforme à la spécification SATA Version 2.0 |
| LAN | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | 10 / 100 / 1000 Mb/s négociation automatique<br>10 / 100 Mb/s négociation automatique |
| Prise en charge audio HD | VT1705CF / ALC662 | Prise en charge de l'audio haute définition<br>Sortie audio à 5.1 voies |
| Fentes | Fente PCI-E Gen3 x 16 x1<br>Fente PCI-E Gen2 x1 x1 | (en fonction du CPU) |
| Connecteur embarqué | Connecteur SATA2 x4 | Chaque connecteur prend en charge 1 périphérique SATA2 |
| | Connecteur du panneau avant x1 | Prend en charge les équipements du panneau avant |
| | Connecteur Audio du panneau avant x1 | Prend en charge la fonction audio du panneau avant |
| | Embase de ventilateur UC x1 | Alimentation électrique du ventilateur UC (avec fonction de ventilateur intelligent) |

| SPEC | | | |
|---|---|---|---|
| | Embase de ventilateur système | x1 | Alimentation électrique du ventilateur système |
| | Châssis Connecteur Haut-parleur | x1 | |
| | Embase d'effacement CMOS | x1 | |
| | Connecteur USB2.0 | x2 | Chaque connecteur prend en charge 2 ports USB2.0 de panneau avant |
| | Port série | x1 | |
| | Connecteur d'alimentation (24 broches) | x1 | |
| | Connecteur d'alimentation (4 broches) | x1 | |
| E/S du panneau arrière | Clavier PS/2 | x1 | |
| | Souris PS/2 | x1 | |
| | Port VGA | x1 | |
| | Port LAN | x1 | |
| | Port USB2.0 | x4 | |
| | Fiche audio | x3 | |
| Dimensions de la carte | 170 mm (l) X 191 mm (H) | | |
| Support SE | Windows XP / Vista / 7 / 8 | | Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis |

# ITALIAN

| *SPECIFICA* | | | |
|---|---|---|---|
| CPU | Socket 1155<br>Processore Intel Core i7 / i5 / i3 / Pentium / Celeron | | Supporto di Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization / Hyper Threading |
| Chipset | Intel H61 | | |
| Super I/O | IT8772E<br>Fornisce le funzionalità legacy Super I/O usate più comunemente.<br>Interfaccia LPC (Low Pin Count) | | Funzioni di controllo dell'ambiente:<br>Monitoraggio hardware<br>Controller / Monitoraggio velocità ventolina<br>Funzione "Smart Guardian" di ITE |
| Memoria principale | Alloggi DIMM DDR3 x 2<br>Capacità massima della memoria 16GB<br>Ciascun DIMM supporta DDR3 512MB/1GB/2GB/4GB/8GB | | Modulo di memoria DDR3 a canale doppio<br>Supporto di DDR3 1066 / 1333 / 1600<br>DIMM registrati e DIMM ECC non sono supportati |
| SATA 2 | Controller Serial ATA integrato | | Velocità di trasferimento dei dati fino a 3.0Gb/s.<br>Compatibile specifiche SATA Versione 2.0 |
| LAN | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | Negoziazione automatica 10 / 100 / 1000 Mb/s<br>Negoziazione automatica 10 / 100 Mb/s |
| Supporto audio HD | VT1705CF / ALC662 | | Supporto audio High-Definition (HD)<br>Uscita audio 5.1 canali |
| Alloggi | Alloggio PCI-E Gen3 x16<br>Alloggio PCI Express Gen2 x1 | x1<br>x1 | (a seconda del CPU) |
| Connettori su scheda | Connettore SATA2<br>Connettore pannello frontale<br>Connettore audio frontale<br>Collettore ventolina CPU<br>Collettore ventolina sistema | x4<br>x1<br>x1<br>x1<br>x1 | Ciascun connettore supporta 1 unità SATA2<br>Supporta i servizi del pannello frontale<br>Supporta la funzione audio pannello frontale<br>Alimentazione ventolina CPU (con funzione Smart Fan)<br>Alimentazione ventolina di sistema |

| SPECIFICA | | |
|---|---|---|
| | Chassis Connettore altoparlante x1<br>Collettore cancellazione CMOS x1<br>Connettore USB2.0 x2<br>Porta seriale x1<br>Connettore alimentazione (24 pin) x1<br>Connettore alimentazione (4 pin) x1 | Ciascun connettore supporta 2 porte USB2.0 pannello frontale |
| I/O pannello posteriore | Tastiera PS/2 x1<br>Mouse PS/2 x1<br>Porta VGA x1<br>Porta LAN x1<br>Porta USB2.0 x4<br>Connettore audio x3 | |
| Dimensioni scheda | 170 mm (larghezza) x 191 mm (altezza) | |
| Sistemi operativi supportati | Windows XP / Vista / 7 / 8 | Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso. |

## Spanish

| *Especificación* | | | |
|---|---|---|---|
| CPU | Socket 1155<br>Procesador Intel Core i7 / i5 / i3 / Pentium / Celeron | | Admite Bit de deshabilitación de ejecución / Intel SpeedStep® Mejorado / Intel Architecture-64 / Tecnología Extended Memory 64 / Tecnología de virtualización / Hyper Threading |
| Conjunto de chips | Intel H61 | | |
| Súper E/S | IT8772E<br>Le ofrece las funcionalidades heredadas de uso más común Súper E/S.<br>Interfaz de cuenta Low Pin | | Iniciativas de control de entorno,<br>Monitor hardware<br>Controlador/monitor de velocidad de ventilador<br>Función "Guardia inteligente" de ITE |
| Memoria principal | Ranuras DIMM DDR3 x 2<br>Capacidad máxima de memoria de 16GB<br>Cada DIMM admite DDR de 512MB/1GB/2GB/4GB/8GB | | Módulo de memoria DDR3 de canal Doble<br>Admite DDR3 de 1066 / 1333 / 1600<br>No admite DIMM registrados o DIMM compatibles con ECC |
| SATA 2 | Controlador ATA Serie Integrado | | Tasas de transferencia de hasta 3.0 Gb/s.<br>Compatible con la versión SATA 2.0 |
| Red Local | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | Negociación de 10 / 100 / 1000 Mb/s<br>Negociación de 10 / 100 Mb/s |
| Soporte de sonido HD | VT1705CF / ALC662 | | Soporte de sonido de Alta Definición<br>Salida de sonido de 5.1 canales |
| Ranuras | Ranura PCI-E Gen3 x16<br>Ranura PCI-E Gen2 x 1 | X1<br>X1 | (dependiendo de la CPU) |
| Conectores en placa | Conector SATA2<br>Conector de panel frontal<br>Conector de sonido frontal<br>Cabecera de ventilador de CPU<br><br>Cabecera de ventilador de sistema | X4<br>X1<br>X1<br>X1<br><br>X1 | Cada conector soporta 1 dispositivos SATA2<br>Soporta instalaciones en el panel frontal<br>Soporta funciones de sonido en el panel frontal<br>Fuente de alimentación de ventilador de CPU (con función Smart Fan)<br>Fuente de alimentación de ventilador de sistema |

| *Especificación* | | | |
|---|---|---|---|
| | Cabecera de borrado de CMOS | X1 | |
| | Chasis Conector de altavoz | X1 | |
| | Conector USB2.0 | X2 | Cada conector soporta 2 puertos USB2.0 frontales |
| | Puerto serie | X1 | |
| | Conector de alimentación (24 patillas) | X1 | |
| | Conector de alimentación (4 patillas) | X1 | |
| Panel trasero de E/S | Teclado PS/2 | X1 | |
| | Ratón PS/2 | X1 | |
| | Puerto VGA | X1 | |
| | Puerto de red local | X1 | |
| | Puerto USB2.0 | X4 | |
| | Conector de sonido | X3 | |
| Tamaño de la placa | 170 mm. (A) X 191 Mm. (H) | | |
| Soporte de sistema operativo | Windows XP / Vista / 7 / 8 | | Biostar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo. |

# PORTUGUESE

| ESPECIFICAÇÕES | | | |
|---|---|---|---|
| CPU | Socket 1155<br>Processador Intel Core i7 / i5 / i3 / Pentium / Celeron | | Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Arquitecture -64 / Extended Memory 64 / Virtualization / Hyper Threading |
| Chipset | Intel H61 | | |
| Especificação Super I/O | IT8772E<br>Proporciona as funcionalidades mais utilizadas em termos da especificação Super I/O.<br>Interface LPC (Low Pin Count). | | Iniciativas para controlo do ambiente<br>Monitorização do hardware<br>Controlador/Monitor da velocidade da ventoinha<br>Função "Smart Guardian" da ITE |
| Memória principal | Ranhuras DIMM DDR3 x 2<br>Capacidade máxima de memória: 16 GB<br>Cada módulo DIMM suporta uma memória DDR3 de 512MB/ 1GB/2GB/4GB/8GB | | Módulo de memória DDR3 de canal duplo<br>Suporta módulos DDR3 1066 / 1333 / 1600<br>Os módulos DIMM registados e os DIMM ECC não são suportados |
| SATA 2 | Controlador Serial ATA integrado | | Velocidades de transmissão de dados até 3.0 Gb/s.<br>Compatibilidade com a especificação SATA versão 2.0 |
| LAN | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | Auto negociação de 10 / 100 / 1000 Mb/s<br>Auto negociação de 10 / 100 Mb/s |
| Suporte para áudio de alta definição | VT1705CF / ALC662 | | Suporta a especificação High-Definition Audio<br>Saída de áudio de 5.1 canais |
| Ranhuras | Ranhura PCI-E Gen3 x16<br>Ranhura PCI-E Gen2 x 1 | x1<br>x1 | (dependendo da CPU) |
| Conectores na placa | Conector SATA2<br>Conector do painel frontal<br>Conector de áudio frontal<br>Conector da ventoinha da CPU | x4<br>x1<br>x1<br>x1 | Cada conector suporta 1 dispositivo SATA2<br>Para suporte de várias funções no painel frontal<br>Suporta a função de áudio no painel frontal<br>Alimentação da ventoinha da CPU (com a função Smart Fan) |

| ESPECIFICAÇÕES | | | |
|---|---|---|---|
| | Conector da ventoinha do sistema | x1 | Alimentação da ventoinha do sistema |
| | Chassis Conector Speaker | x1 | |
| | Conector para limpeza do CMOS | x1 | |
| | Conector USB2.0 | x2 | Cada conector suporta 2 portas USB2.0 no painel frontal |
| | Porta série | x1 | |
| | Conector de alimentação (24 pinos) | x1 | |
| | Conector de alimentação (4 pinos) | x1 | |
| Entradas/Saídas no painel traseiro | Teclado PS/2 | x1 | |
| | Rato PS/2 | x1 | |
| | Porta VGA | x1 | |
| | Porta LAN | x1 | |
| | Porta USB2.0 | x4 | |
| | Tomada de áudio | x3 | |
| Tamanho da placa | 170 mm (L) X 191 mm (A) | | |
| Sistemas operativos suportados | Windows XP / Vista / 7 / 8 | | A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio. |

# POLISH

| SPEC | | | |
|---|---|---|---|
| Procesor | Socket 1155<br>Procesor Intel Core i7 / i5 / i3 / Pentium / Celeron | | Obsługa Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology / Hyper Threading |
| Chipset | Intel H61 | | |
| Pamięć główna | Gniazda DDR3 DIMM x 2<br>Maks. wielkość pamięci 16GB<br>Każde gniazdo DIMM obsługuje moduły 512MB/1GB/2GB/4GB/8GB DDR3 | | Moduł pamięci DDR3 z trybem podwójnego kanału<br>Obsługa DDR3 1066 / 1333 / 1600<br>Brak obsługi Registered DIMM oraz ECC DIMM |
| Super I/O | IT8772E<br>Zapewnia najbardziej powszechne funkcje Super I/O.<br>Interfejs Low Pin Count | | Funkcje kontroli warunków pracy,<br>Monitor H/W<br>Kontroler/Monitor prędkości wentylatora<br>Funkcja ITE "Smart Guardian" |
| SATA 2 | Zintegrowany kontroler Serial ATA | | Transfer danych do 3.0 Gb/s.<br>Zgodność ze specyfikacją SATA w wersji 2.0 |
| LAN | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | 10 /100 /1000Mb/s z automatyczną negocjacją szybkości<br>10 /100 Mb/s z automatyczną negocjacją szybkości |
| Obsługa audio HD | VT1705CF / ALC662 | | Obsługa High-Definition Audio<br>5.1 kanałowe wyjście audio |
| Gniazda | Gniazdo PCI-E Gen3 x16<br>Gniazdo PCI-E Gen2 x 1 | x1<br>x1 | (w zależności od procesora) |
| Złącza wbudowane | Złącze SATA2<br>Złącze panela przedniego<br>Przednie złącze audio<br>Złącze główkowe wentylatora procesora | x4<br>x1<br>x1<br>x1 | Każde złącze obsługuje 1 urządzenie SATA2<br>Obsługa elementów panela przedniego<br>Obsługa funkcji audio na panelu przednim<br>Zasilanie wentylatora procesora (z funkcją Smart Fan) |

| SPEC | | | |
|---|---|---|---|
| | Złącze główkowe wentylatora systemowego | x1 | Zasilanie wentylatora systemowego |
| | Chassis Speaker Connector | x1 | |
| | Złącze główkowe kasowania CMOS | x1 | |
| | Złącze USB2.0 | x2 | Każde złącze obsługuje 2 porty USB2.0 na panelu przednim |
| | Port szeregowy | x1 | |
| | Złącze zasilania (24 pinowe) | x1 | |
| | Złącze zasilania (4 pinowe) | x1 | |
| Back Panel I/O | Klawiatura PS/2 | x1 | |
| | Mysz PS/2 | x1 | |
| | Port VGA | x1 | |
| | Port LAN | x1 | |
| | Port USB2.0 | x4 | |
| | Gniazdo audio | x3 | |
| Wymiary płyty | 170 mm (S) X 191 mm (W) | | |
| Obsluga systemu operacyjnego | Windows XP / Vista / 7 / 8 | | Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia. |

## RUSSIAN

| СПЕЦ | | | |
|---|---|---|---|
| CPU (центральный процессор) | Socket 1155<br>Процессор Intel Core i7 / i5 / i3 / Pentium / Celeron | | Поддержка технологий Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация / Hyper Threading |
| Набор микросхем | Intel H61 | | |
| Основная память | Слоты DDR3 DIMM x 2<br>Максимальная ёмкость памяти 16 ГБ<br>Каждый модуль DIMM поддерживает 512МБ/1ГБ/2ГБ/4ГБ/8ГБ DDR3 | | Модуль памяти с двухканальным режимом DDR3<br>Поддержка DDR3 1066 / 1333 / 1600<br>Не поддерживает зарегистрированные модули DIMM and ECC DIMM |
| Super I/O | IT8772E<br>Обеспечивает наиболее используемые действующие функциональные возможности Super I/O.<br>Интерфейс с низким количеством выводов | | Инициативы по охране окружающей среды, Аппаратный монитор<br>Регулятор скорости вентилятора/ монитор<br>Функция ITE "Smart Guardian" (Интеллектуальная защита) |
| SATA 2 | Встроенное последовательное устройство управления ATA | | скорость передачи данных до 3.0 гигабит/с.<br>Соответствие спецификации SATA версия 2.0 |
| Локальная сеть | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | Автоматическое согласование 10/ 100 /1000 Мб/с<br>Автоматическое согласование 10/ 100 Мб/с |
| Звуковая поддержка жесткого диска | VT1705CF / ALC662 | | Звуковая поддержка High-Definition<br>5.1канальный звуковой выход |
| Слоты | Слот PCI-E Gen3 x16 @ x16<br>Слот PCI-E Gen2 x 1 | x1<br>x1 | (в зависимости от процессора) |
| Встроенный разъём | Разъём SATA2<br>Разъём на лицевой панели<br>Входной звуковой разъём<br>Контактирующее приспособление вентилятора центрального процессора | x4<br>x1<br>x1<br>x1 | Каждый разъём поддерживает 1 устройство SATA2<br>Поддержка устройств на лицевой панели<br>Поддержка звуковых функций на лицевой панели<br>Источник питания для вентилятора центрального процессора (с функцией интеллектуального вентилятора) |

| *СПЕЦ* | | | |
|---|---|---|---|
| | Контактирующее приспособление вентилятора системы | x1 | Источник питания для вентилятора системы |
| | Шасси акустической системы | x1 | |
| | Открытое контактирующее приспособление CMOS | x1 | |
| | USB2.0-разъём | x2 | Каждый разъём поддерживает 2 USB2.0-порта на лицевой панели |
| | Последовательный порт | x1 | |
| | Разъем питания (24 вывод) | x1 | |
| | Разъем питания (4 вывод) | x1 | |
| Задняя панель средств ввода-вывода | Клавиатура PS/2 | x1 | |
| | Мышь PS/2 | x1 | |
| | Порт VGA | x1 | |
| | Порт LAN | x1 | |
| | USB2.0-порт | x4 | |
| | Гнездо для подключения наушников | x3 | |
| Размер панели | 170 мм (Ш) X 191 мм (В) | | |
| Поддержка OS | Windows XP / Vista / 7 / 8 | | Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления. |

## ARABIC

| المواصفات | | | |
|---|---|---|---|
| وحدة المعالجة المركزية | Socket 1155<br>معالجات Intel Core i7 / i5 / i3 / Pentium / بتردد يصل إلى Celeron | | تدعم تقنيات Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology / Hyper Threading |
| مجموعة الشرائح | Intel H61 | | |
| الذاكرة الرئيسية | مزدوجة القناة DDR3 وحدة ذاكرة<br>1600 / 1366 / 1066 سعات DDR3 تدعم الذاكرة من نوع<br>بايت ميجا<br>ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة | فتحة DDR3 DIMM<br>سعة ذاكرة قصوى 16 جيجا بايت<br>ميجا بايت و 1/ 512/ سعة DDR3 تدعم ذاكرة من نوع DIMM تدعم كل فتحة<br>و 2/ و 4/ و 8 جيجا بايت | عدد 2 |
| Super I/O | IT8772E<br>الأكثر استخداما. Super I/O توفر وظيفة<br>Low Pin Count Interface تدعم تقنية | وسائل التحكم في البيئة:<br>مراقب لمعرفة حالة الأجهزة<br>مراقب في سرعة المروحة<br>ITE من "Smart Guardian" وظيفة | |
| SATA 2 | متكامل Serial ATA متحكم | جيجابت/ثانية. 3.0 نقل البيانات بسرعات تصل إلى<br>2.0 الإصدار SATA مطابقة لمواصفات | |
| شبكة داخلية | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | تفاوض تلقائي 10/100/1000 ميجا بايت / ثانية<br>تفاوض تلقائي 10/100 ميجا بايت / ثانية | |
| دعم الصوت علي التعريف | VT1705CF / ALC662 | تدعم تقنية الصوت علي التعريف من<br>5.1 قنوات لخرج الصوت | |
| الفتحات | فتحة PCI-E Gen3 x16<br>فتحة PCI-E Gen2 x 1 | عدد 1<br>عدد 1 | (اعتمادا على وحدة المعالجة المركزية) |
| المنافذ على سطح اللوحة | منفذ SATA2<br>منفذ اللوحة الأمامية<br>منفذ الصوت الأمامي<br>وصلة مروحة وحدة المعالجة المركزية | عدد 4<br>عدد 1<br>عدد 1<br>عدد 1 | يدعم كل منفذ واحد من أجهزة SATA2<br>يدعم تجهيزات اللوحة الأمامية<br>يدعم وظيفة الصوت باللوحة الأمامية<br>لتوصيل الطاقة لمروحة وحدة المعالجة مع وظيفة Smart Fan |

| المواصفات | | | |
|---|---|---|---|
| | وصلة مروحة النظام | عدد 1 | لتوصيل الطاقة لمروحة النظام |
| | قابل رئيس رابط | عدد 1 | |
| | وصلة مسح CMOS | عدد 1 | |
| | منفذ USB2.0 | عدد 2 | يدعم كل منفذ فتحتي USB2.0 باللوحة الأمامية |
| | منفذ تسلسلي | عدد1 | |
| | منفذ توصيل الطاقة (24دبوس) | عدد 1 | |
| | منفذ توصيل الطاقة (4دبابيس) | عدد 1 | |
| منافذ دخل/خرج اللوحة الخلفية | لوحة مفاتيح PS/2 | عدد 1 | |
| | ماوس PS/2 | عدد 1 | |
| | منافذ VGA | عدد 1 | |
| | منفذ شبكة اتصال محلية | عدد 1 | |
| | منافذ USB2.0 | عدد 4 | |
| | مقبس صوت | عدد 3 | |
| حجم اللوحة | 170 مم (عرض) X 191 مم (ارتفاع) | | |
| دعم أنظمة التشغيل | Windows XP / Vista / 7 / 8 | | بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو بدون Biostarتحتفظ إخطار. |

# JAPANESE

| *仕様* | | | |
|---|---|---|---|
| CPU | Socket 1155<br>Intel Core i7 / i5 / i3 / Pentium / Celeron プロセッサ | | Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology / Hyper Threadingをサポートします |
| チップセット | Intel H61 | | |
| メインメモリ | DDR3 DIMMスロット x 2<br>最大メモリ容量16GB<br>各DIMMは 512MB/1GB/2GB/4GB/8GB DDR3をサポート | | デュアル チャンネルモードDDR3メモリモジュール<br>DDR3 1066 / 1333 / 1600をサポート<br>登録済みDIMMとECC DIMMはサポートされません |
| Super I/O | IT8772E<br>もっとも一般に使用されるレガシーSuper I/O機能を採用しています。<br>低ピンカウントインターフェイス | | 環境コントロールイニシアチブ、<br>H/Wモニター<br>ファン速度コントローラ/ モニター<br>ITEの「スマートガーディアン」機能 |
| SATA 2 | 統合シリアルATAコントローラ | | 最高3.0 Gb/秒のデータ転送速度<br>SATAバージョン2.0仕様に準拠 |
| LAN | RTL8111G (H61MGV3)<br>RTL8106E (H61MLV3) | | 10 / 100 / 1000 Mb/秒のオートネゴシエーション<br>10 / 100 Mb/秒のオートネゴシエーション |
| HDオーディオのサポート | VT1705CF / ALC662 | | ハイデフィニションオーディオのサポート<br>5.1 チャンネルオーディオアウト |
| スロット | PCI-E Gen3 x16スロット<br>PCI Express Gen2 x 1スロット | x1<br>x1 | (CPUに依存) |
| オンボードコネクタ | SATA2コネクタ<br>フロントパネルコネクタ<br>フロントオーディオコネクタ<br>CPUファンヘッダ<br>システムファンヘッダ<br>シャーシスピーカーコネクタ<br>CMOSクリアヘッダ | x4<br>x1<br>x1<br>x1<br>x1<br>x1<br>x1 | 各コネクタは1つのSATA2デバイスをサポートします<br>フロントパネル機能をサポートします<br>フロントパネルオーディオ機能をサポートします<br>CPUファン電源装置(スマートファン機能を搭載)<br>システムファン電源装置 |

| *仕様* | | | |
|---|---|---|---|
| | USB2.0コネクタ | x2 | 各コネクタは2つのフロントパネルUSB2.0ポートをサポートします |
| | シリアルポート | x1 | |
| | 電源コネクタ(24ピン) | x1 | |
| | 電源コネクタ(4ピン) | x1 | |
| 背面パネルI/O | PS/2キーボード | x1 | |
| | PS/2マウス | x1 | |
| | VGAポート | x1 | |
| | LANポート | x1 | |
| | USB2.0ポート | x4 | |
| | オーディオジャック | x3 | |
| ボードサイズ | 170 mm (幅) X 191 mm (高さ) | | |
| OSサポート | Windows XP / Vista / 7 / 8 | | Biostarは事前のサポートなしにOSサポートを追加または削除する権利を留保します。 |

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