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Al 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

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## **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
- User's Manual x1
- Fully Setup Driver DVD x1

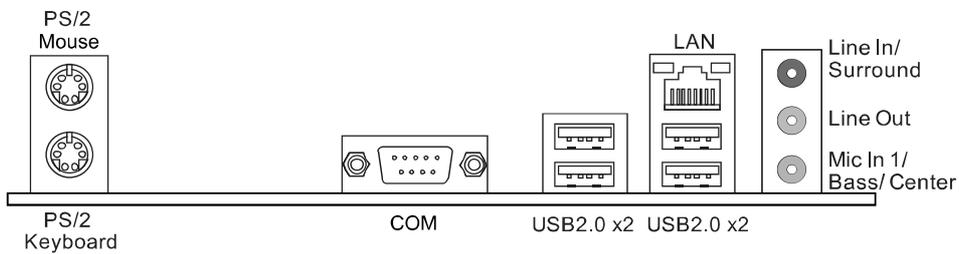
**Note:** The package contents may be different due to the sales region or models in which it was sold. For more information about the standard package in your region, please contact your dealer or sales representative.

### 1.3 MOTHERBOARD FEATURES

SPEC		
CPU	Socket 1155 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	IT8728F-BX Provides the most commonly used legacy Super I/O functionality Low Pin Count Interface	Environment Control initiatives Hardware Monitor Controller Fan Speed Controller ITE's "Smart Guardian" function
Main Memory	DDR3 DIMM Slots x 2 Max Memory Capacity 16GB Each DIMM supports 512MB/ 1GB/2GB/4GB/8GB DDR3	Dual Channel Mode DDR3 memory module Supports DDR3 1066 / 1333 /1600 (depending on CPU) Registered DIMM and ECC DIMM is not supported
SATA 2	Integrated Serial ATA Controller	Data transfer rates up to 3.0 Gb/s SATA Version 2.0 specification compliant
LAN	Realtek RTL8111F	10 / 100 Mb/s / 1Gb/s auto negotiation Half / Full duplex capability
Sound Codec	ALC662	5.1 channels audio out High Definition Audio, Biostar Hi-Fi
Slots	PCI-E Gen3 x16 slot	x1 Supports PCI-E Gen2/3 x16 expansion card (depending on CPU)
	PCI-E Gen2 x1 slot	x5 Supports PCI-E Gen2 x1 expansion card
On Board Connectors	SATA2 Connector	x4 Each connector supports 1 SATA2 device
	Front Panel Connector	x1 Supports front panel facilities
	Front Audio Connector	x1 Supports front panel audio function
	CPU Fan Header	x1 CPU Fan power supply (with Smart Fan function)
	System Fan Header	x1 System Fan Power supply
	Clear CMOS Header	x1 Restore CMOS data to factory default

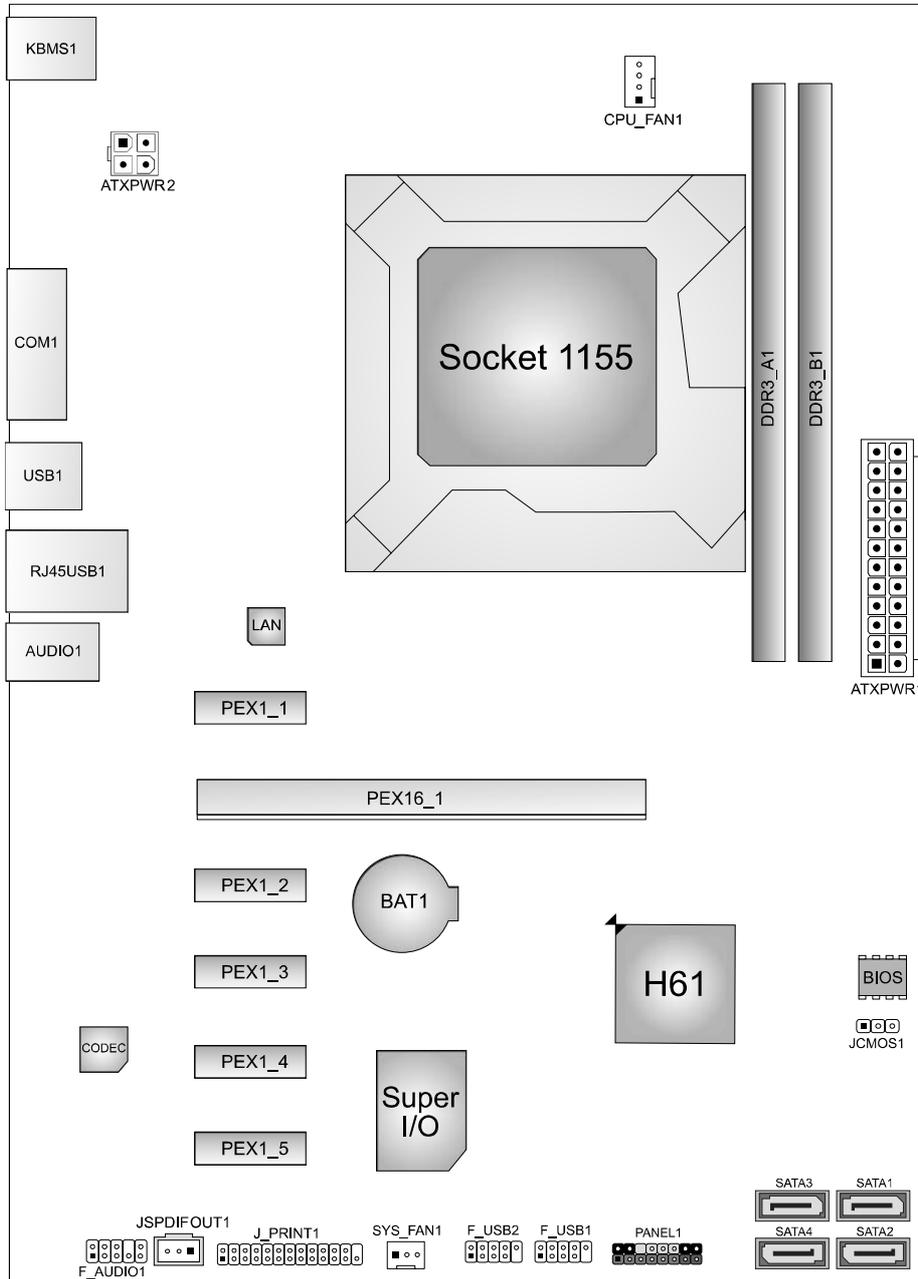
SPEC			
	USB2.0 Connector	x2	Each connector supports 2 front panel USB2.0 ports
	S/PDIF out Connector	x1	Supports digital audio out function
	Printer Port Connector	x1	Each connector supports 1 Printer port
	Power Connector (24pin)	x1	Connects to Power supply
	Power Connector (4pin)	x1	Connects to Power supply
Rear Panel I/O	PS/2 Keyboard / Mouse	x1	Connects to PS/2 Keyboard / Mouse
	Serial Port	x1	Provide RS-232 Serial connection
	LAN port	x1	Connect to RJ-45 Ethernet cable
	USB2.0 Port	x4	Connect to USB2.0 devices
	Audio Jack	x3	Provide Audio-In/Out and Mic. connection
Board Size	210 (W) x 295 (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



**Note:** Since the audio chip supports High Definition Audio Specification, the function of each audio jack can be defined by software. The input / output function of each audio jack listed above represents the default setting. However, when connecting external microphone to the audio port, please use the Line In (Blue) and Mic In (Pink) audio jack.

## 1.5 MOTHERBOARD LAYOUT

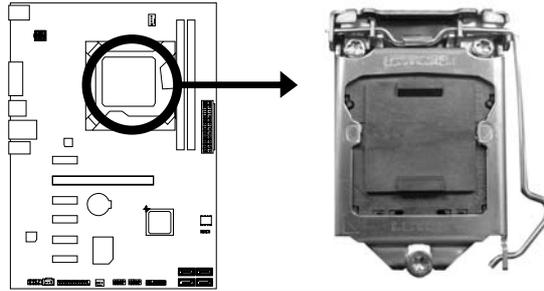


**Note:** ■ represents the 1st pin.

## CHAPTER 2: HARDWARE INSTALLATION

### 2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)

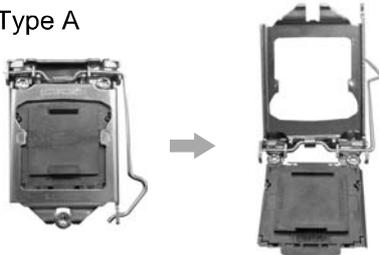
Step 1: Locate the CPU socket on the motherboard



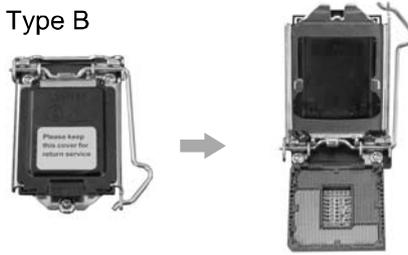
**Note1:** Remove Pin Cap before installation, and make good preservation for future use. When the CPU is removed, cover the Pin Cap on the empty socket to ensure pin legs won't be damaged.  
**Note2:** The motherboard might equip with two different types of pin cap. Please refer below instruction to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

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

Type A

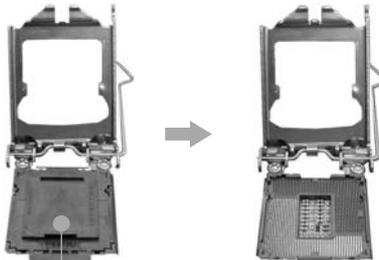


Type B



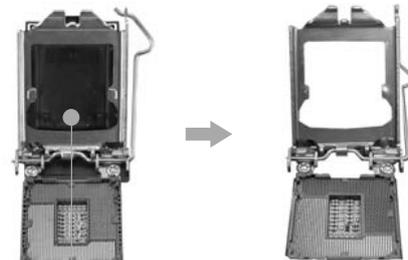
Step 3: Remove the Pin Cap.

Type A



Pin Cap

Type B



Pin Cap

## Motherboard Manual

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**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.



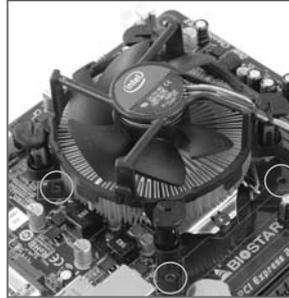
**Note:** The CPU fits only in one correct orientation. Do not force the CPU into the socket to prevent damaging the CPU.

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

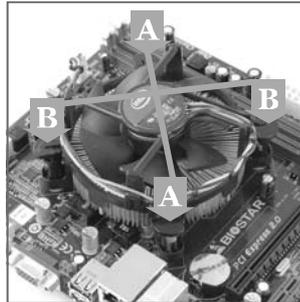


## 2.2 INSTALL A HEATSINK

**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.



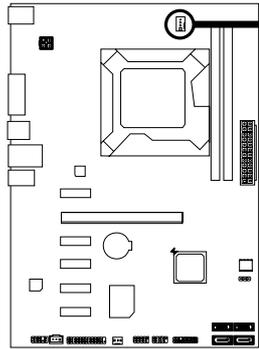
**Note1:** Do not forget to connect the CPU fan connector.

**Note2:** For proper installation, please kindly refer to the installation manual of your CPU heatsink.

## 2.3 FAN HEADERS

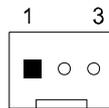
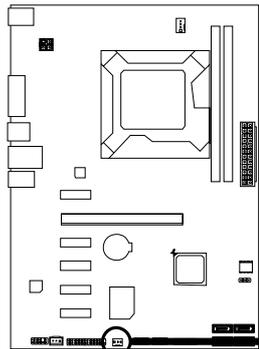
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

### CPU\_FAN1: CPU Fan Header



Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense
4	Smart Fan Control

### SYS\_FAN1: System Fan Header

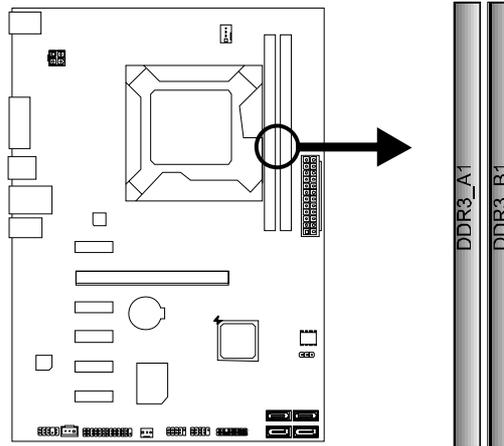


Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense

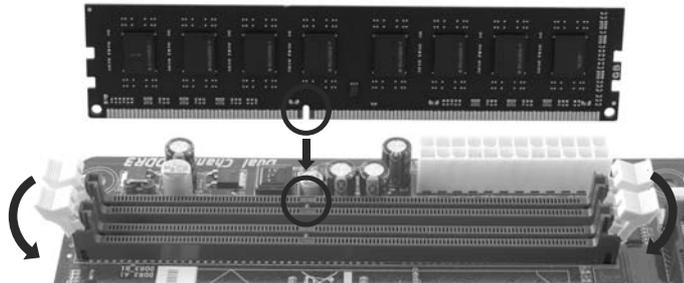
**Note:** CPU\_FAN1, SYS\_FAN1 support 4-pin and 3-pin head connectors. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

## 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

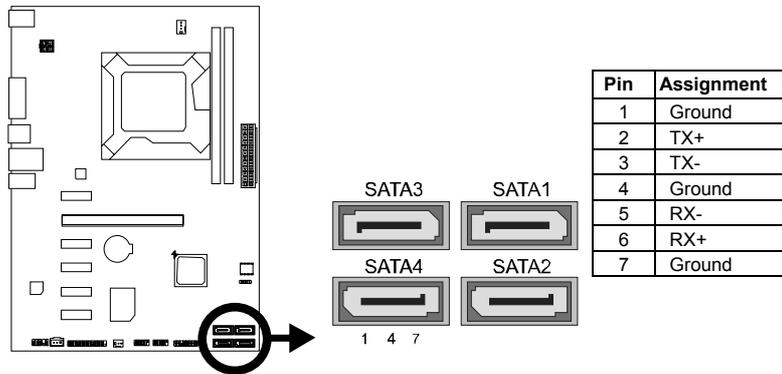
(O means memory installed; X, not installed.)

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

## 2.5 CONNECTORS AND SLOTS

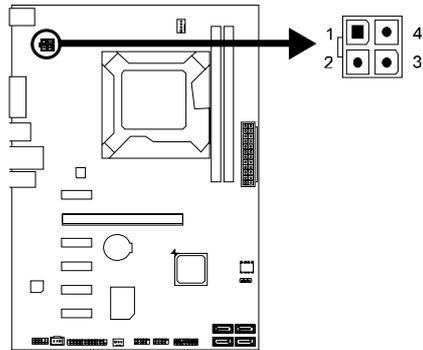
### SATA1~SATA4: Serial ATA2 Connectors

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.



**ATXPWR2: ATX Power Source Connector**

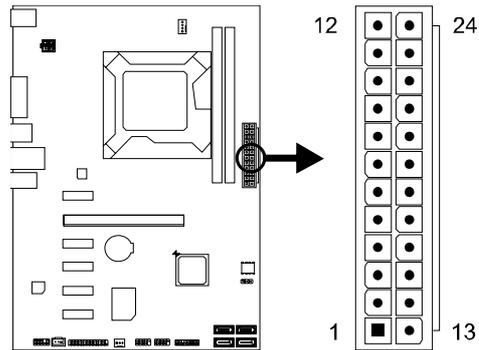
This connector provides +12V to CPU power circuit.



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

**ATXPWR1: ATX Power Source Connector**

This connector allows users 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.

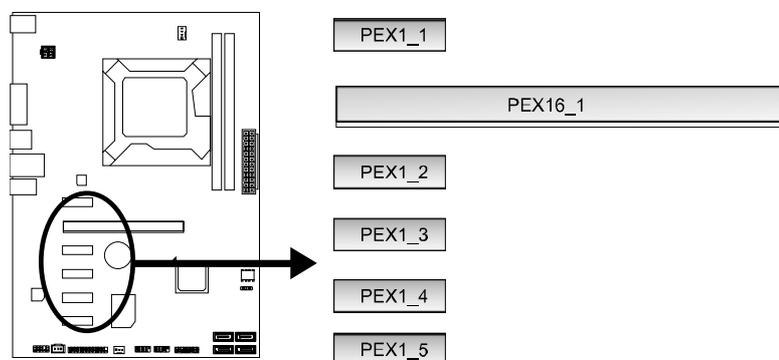
**Note2:** Insufficient power supplied to the system may result in instability or the peripherals not functioning properly. Use of a PSU with a higher power output is recommended when configuring a system with more power-consuming devices.

### 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 ~ PEX1\_5: PCI-Express Gen2 x1 Slots

- PCI-Express 2.0 compliant.
- Data transfer bandwidth up to 500MB/s per direction; 1GB/s in total.
- PCI-Express supports a raw bit-rate of 2.5Gb/s on the data pins.



### 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

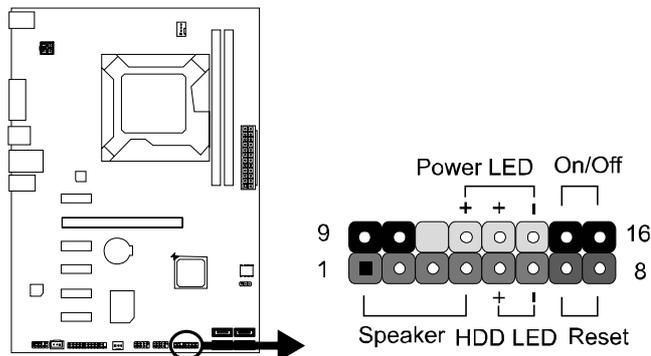
The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.



### 3.2 DETAIL SETTINGS

#### PANEL1: Front Panel Header

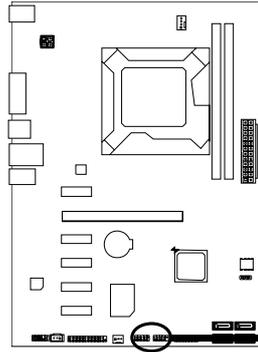
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, and speaker connection. It allows users to connect the PC case’s front panel switch functions.



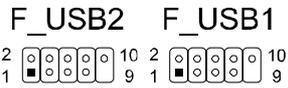
Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	9	N/A	N/A
2	N/A		10	N/A	N/A
3	N/A		11	N/A	N/A
4	Speaker	Hard drive LED	12	Power LED (+)	Power LED
5	HDD LED (+)		13	Power LED (+)	
6	HDD LED (-)		14	Power LED (-)	
7	Ground	Reset button	15	Power button	Power-on button
8	Reset control		16	Ground	

**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.

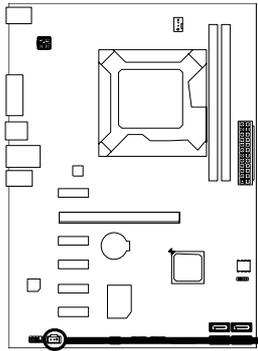


Pin	Assignment
1	+5V (fused)
2	+5V (fused)
3	USB-
4	USB-
5	USB+
6	USB+
7	Ground
8	Ground
9	Key
10	NC

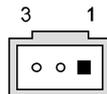


**JSPDIFOUT1: Digital Audio-out Connector**

This connector allows users to connect the PCI bracket SPDIF output header.

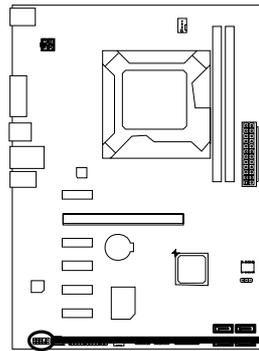


Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

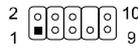


### F\_AUDIO1: Front Panel Audio Header

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



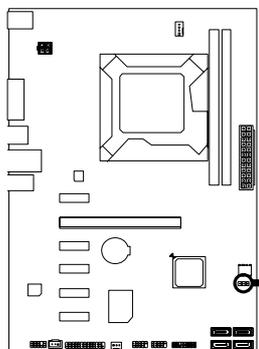
HD Audio		AC'97	
Pin	Assignment	Pin	Assignment
1	Mic Left in	1	Mic In
2	Ground	2	Ground
3	Mic Right in	3	Mic Power
4	GPIO	4	Audio Power
5	Right line in	5	RT Line Out
6	Jack Sense	6	RT Line Out
7	Front Sense	7	Reserved
8	Key	8	Key
9	Left line in	9	LFT Line Out
10	Jack Sense	10	LFT Line Out



**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 Header

Placing the jumper on pin2-3 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 Close:**  
Normal Operation (default).



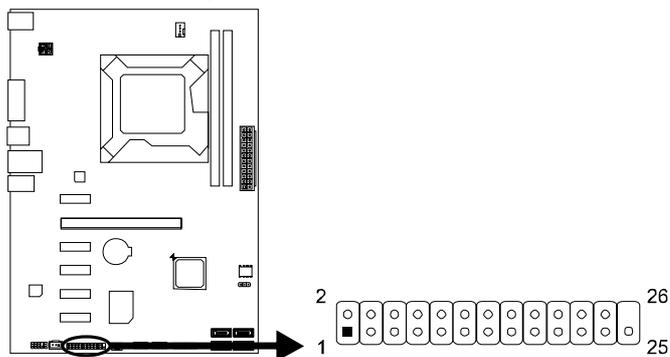
**Pin 2-3 Close:**  
Clear CMOS data.

#### ※ Clear CMOS Procedures:

1. Remove AC power line.
2. Set the jumper to "Pin 2-3 close".
3. Wait for five seconds.
4. Set the jumper to "Pin 1-2 close".
5. Power on the AC.
6. Load Optimal Defaults and save settings in CMOS.

### J\_PRINT1: Printer Port Connector

This header allows you to connector printer on the PC.



Pin	Assignment	Pin	Assignment
1	-Strobe	14	Ground
2	-ALF	15	Data 6
3	Data 0	16	Ground
4	-Error	17	Data 7
5	Data 1	18	Ground
6	-Init	19	-ACK
7	Data 2	20	Ground
8	-Sctin	21	Busy
9	Data 3	22	Ground
10	Ground	23	PE
11	Data 4	24	Ground
12	Ground	25	SCLT
13	Data 5	26	Key

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## CHAPTER 4: USEFUL HELP

### 4.1 DRIVER INSTALLATION

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 driver 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.

**Note1:** All the information and content about following software are subject to be changed without notice. For better performance, the software is being continuously updated.

**Note2:** The information and pictures described below are for your reference only. The actual information and settings on board may be slightly different from this manual.

### 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 (Optional)

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.

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

\*represents important information that you must provide. Without this information, you may not be able to send out the mail.

This block will show the information which would be collected in the mail.

\*Describe condition of your system.

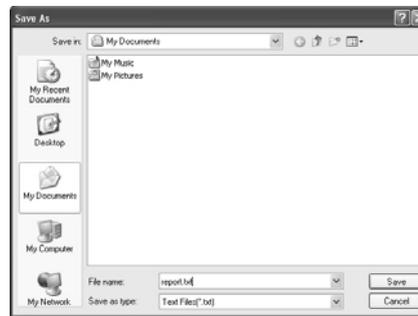
The screenshot shows the eHot-Line utility window. On the left, a text area displays system information: Base board information: Caption: Base Board, CreationClassName: Win32\_Base, Description: Base Board, HostingBoard: TRUE, HotSwappable: FALSE, Manufacturer: BIOSTAR Group, Name: Base Board, PoweredOn: TRUE, Product: TA780G M2+, Removable: FALSE, Replaceable: TRUE, RequiresDaughterBoard: FALSE, SerialNumber: None, Status: OK, Tag: Base Board, Version: 6.0. The main area has a 'Symptom Description' text box. Below it are fields for 'Region', 'CC E-mail', 'Memory Module Manufacture', and 'Power Supply Manufacture/model'. At the bottom are 'Send', 'Save As...', and 'Exit' buttons. Annotations with arrows point to these elements: 'This block will show the information which would be collected in the mail.' points to the system information text area; '\*Describe condition of your system.' points to the Symptom Description text box; '\*Select your area or the area close to you.' points to the Region dropdown; 'Provide the e-mail address that you would like to send the copy to.' points to the CC E-mail field; '\*Provide the name of the memory module manufacturer.' points to the Memory Module Manufacture field; 'Provide the name of the power supply manufacturer and the model no.' points to the Power Supply Manufacture/model field; 'Send the mail out.' points to the Send button; 'Exit this dialog.' points to the Exit button; 'Save these information to a .txt file' points to the Save As... button.

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.



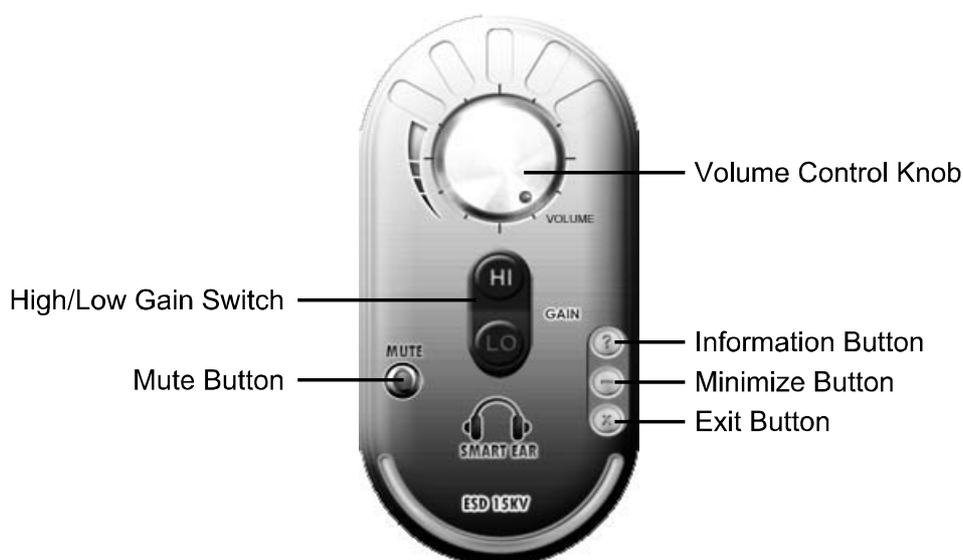
Open the saved .txt file, you will see your system information including motherboard/BIOS/CPU/video/ device/OS information. This information is also included in the sent mail.

**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.

### Smart EAR

Smart EAR is a windows-based audio utility which allows you to easily adjust system volume. With its user-friendly GUI, you can also adjust impedance setting (Low/High Gain) to optimize your headphone performance.



- **High/Low Gain Switch:** Keep the gain switch to low for low impedance headphone and set to high for high impedance headphone.
- **Mute Button:** To disable system sound
- **Volume Control Knob:** The volume can be finely adjusted by turning the knob either clockwise or anti-clockwise to increase or decrease system volume accordingly.
- **Information Button:** Get information of the application
- **Minimize Button:** Minimize the application window to the taskbar
- **Exit Button:** Exit the application

**Note:**

1. Smart EAR is only supported by Windows 7/8 and BIOSTAR Hi-Fi series motherboards.
2. High/Low Gain Switch is only for "Front Panel Audio Header", please make sure you are connecting your headphone to the front panel I/O.

### 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.

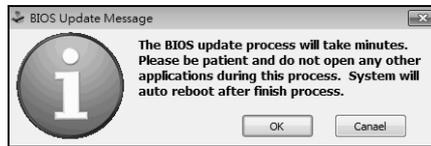
#### 1. BIOS Update Utility

1. Installing BIOS Update Utility from the DVD Driver.
2. Download the proper BIOS from [www.biostar.com.tw](http://www.biostar.com.tw).

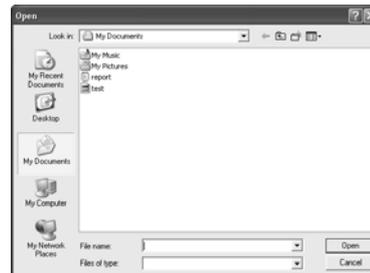
3. Open BIOS Update Utility and click the **Update BIOS** button on the main screen.



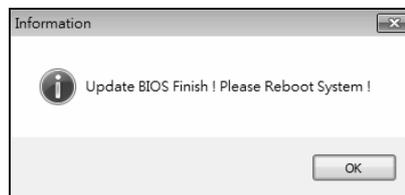
4. A warning message will show up to request your agreement to start the BIOS update. Click **OK** to start the update procedure.



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.

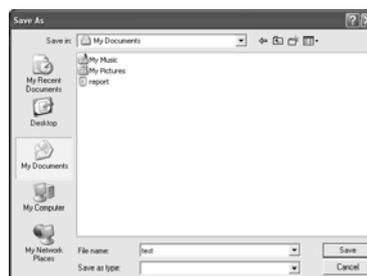


7. While the system boots up and the full screen logo shows up, please press the **Del** <Delete> key to enter BIOS setup.

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.

### 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**.



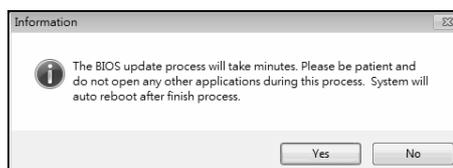
## 2. Online Update Utility

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

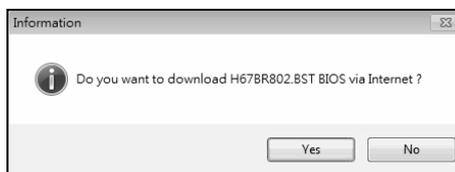
3. Open BIOS Update Utility and click the **Online Update** button on the main screen.



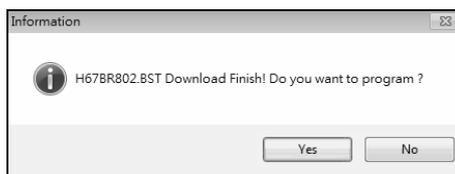
4. An open dialog will show up to request your agreement to start the BIOS update. Click **Yes** to start the online update procedure.



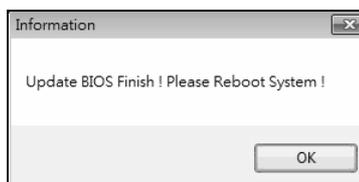
5. If there is a new BIOS version, the utility will ask you to download it. Click **Yes** to proceed.



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.

**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.

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.

#### 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  <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
<ol style="list-style-type: none"> <li>1. There is no power in the system. Power LED does not shine; the fan of the power supply does not work</li> <li>2. Indicator light on keyboard does not shine.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure power cable is securely plugged in.</li> <li>2. Replace cable.</li> <li>3. Contact technical support.</li> </ol>
<p>System is inoperative. Keyboard lights are on, power indicator lights are lit, and hard drives are running.</p>	<p>Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.</p>
<p>System does not boot from a hard disk drive, but can be booted from optical drive.</p>	<ol style="list-style-type: none"> <li>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.</li> <li>2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.</li> </ol>
<p>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.</p>	<ol style="list-style-type: none"> <li>1. Back up data and applications files.</li> <li>2. Reformat the hard drive. Re-install applications and data using backup disks.</li> </ol>
<p>Screen message shows "Invalid Configuration" or "CMOS Failure."</p>	<p>Review system's equipment. Make sure correct information is in setup.</p>
<p>System cannot boot after the user installs a second hard drive.</p>	<ol style="list-style-type: none"> <li>1. Set master/slave jumpers correctly.</li> <li>2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives.</li> </ol>

### **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.

## APPENDIX: SPEC IN OTHER LANGUAGES

### GERMAN

Spezifikationen		
CPU	Socket 1155 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	IT8728F-BX Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle	Umgebungskontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller/-Überwachung "Smart Guardian"-Funktion von ITE
Arbeitsspeicher	DDR3 DIMM-Steckplätze x 2 Max. 16GB Arbeitsspeicher Jeder DIMM unterstützt 512MB/1GB/2GB/4GB/8GB DDR3.	Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 1066 / 1333 /1600 (depending on CPU) registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
SATA 2	Integrierter Serial ATA-Controller	Datentransferrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0
LAN	Realtek RTL8111F	10 / 100 / 1000 Mb/s Auto-Negotiation Halb-/ Vollduplex-Funktion
HD Audio-Unterstützung	ALC662	Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe, Biostar Hi-Fi
Steckplätze	PCI-E Gen3 x 16 @ x16 Steckplatz x1 PCI-E Gen2 x1-Steckplatz x5	(je nach CPU)
Onboard-Anschluss	SATA2-Anschluss x4 Fronttafelanschluss x1 Front-Audioanschluss x1	Jeder Anschluss unterstützt 1 SATA2-Laufwerk Unterstützt die Fronttafel-funktionen Unterstützt die Fronttafel-Audioanschlussfunktion

Spezifikationen			
	CPU-Lüfter-Sockel	x1	CPU-Lüfterstromversorgungsanschluss (mit Smart Fan-Funktion)
	System-Lüfter-Sockel	x1	System-Lüfter-Stromversorgungsanschluss
	"CMOS löschen"-Sockel	x1	
	USB2.0-Anschluss	x2	Jeder Anschluss unterstützt 2 Fronttafel-USB2.0-Anschlüsse
	Verbraucher-IR Anschluss	x1	
	S/PDIF Ausgangsanschluss	x1	Unterstützt die digitale Audioausgabefunktion
	Druckeranschluss Anschluss	x1	Jeder Anschluss unterstützt 1 Druckeranschluss
	Stromanschluss (24-polig)	x1	
	Stromanschluss (4-polig)	x1	
Rückseiten-E /A	PS/2-Tastatur / Maus	x1	
	Serieller Anschluss	x1	
	LAN-Anschluss	x1	
	USB2.0-Anschluss	x4	
	Audioanschluss	x3	
Platinengröße	210 mm (B) X 295 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**

<i>SPEC</i>		
UC	Socket 1155 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	IT8728F-BX Fournit la fonctionnalité de Super E/S patrimoniales la plus utilisée. Interface à faible compte de broches	Initiatives de contrôle environnementales, Moniteur de matériel Contrôleur /moniteur de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE
Mémoire principale	Fentes DDR3 DIMM x 2 Capacité mémoire maximale de 16 Go Chaque DIMM prend en charge des DDR3 de 512Mo/1Go/2Go/4Go/8Go	Module de mémoire DDR3 à mode à double voie Prend en charge la DDR3 1066 / 1333 /1600 (depending on CPU) 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. Conforme à la spécification SATA Version 2.0
LAN	Realtek RTL8111F	10 / 100 / 1000 Mb/s négociation automatique Half / Full duplex capability
Prise en charge audio HD	ALC662	Prise en charge de l'audio haute définition Sortie audio à 5.1 voies, Biostar Hi-Fi
Fentes	Fente PCI-E Gen3 x 16 @ x16      x1 Fente PCI-E Gen2 x1              x5	(en fonction du CPU)
Connecteur embarqué	Connecteur SATA2                      x4 Connecteur du panneau avant      x1 Connecteur Audio du panneau avant x1	Chaque connecteur prend en charge 1 périphérique SATA2 Prend en charge les équipements du panneau avant Prend en charge la fonction audio du panneau avant

<b>SPEC</b>			
	Embase de ventilateur UC	x1	Alimentation électrique du ventilateur UC (avec fonction de ventilateur intelligent)
	Embase de ventilateur système	x1	Alimentation électrique du ventilateur système
	Embase d'effacement CMOS	x1	
	Connecteur USB2.0	x2	Chaque connecteur prend en charge 2 ports USB2.0 de panneau avant
	Connecteur de IR du consommateur	x1	
	Connecteur de sortie S/PDIF	x1	Prend en charge la fonction de sortie audio numérique
	Connecteur de Port d'imprimante	x1	Chaque connecteur prend en charge 1 Port d'imprimante
	Connecteur d'alimentation (24 broches)	x1	
	Connecteur d'alimentation (4 broches)	x1	
E/S du panneau arrière	Clavier / Souris PS/2	x1	
	Port série	x1	
	Port LAN	x1	
	Port USB2.0	x4	
	Fiche audio	x3	
Dimensions de la carte	210 mm (l) X 295 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**

<b>SPECIFICA</b>		
CPU	Socket 1155 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	IT8728F-BX Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count)	Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller / Monitoraggio velocità ventolina Funzione "Smart Guardian" di ITE
Memoria principale	Alloggi DIMM DDR3 x 2 Capacità massima della memoria 16GB Ciascun DIMM supporta DDR3 512MB/1GB/2GB/4GB/8GB	Modulo di memoria DDR3 a canale doppio Supporto di DDR3 1066 / 1333 /1600 (depending on CPU) DIMM registrati e DIMM ECC non sono supportati
SATA 2	Controller Serial ATA integrato	Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0
LAN	Realtek RTL8111F	Negoziazione automatica 10 / 100 / 1000 Mb/s Capacità Half / Full Duplex
Supporto audio HD	ALC662	Supporto audio High-Definition (HD) Uscita audio 5.1 canali, Biostar Hi-Fi
Alloggi	Alloggio PCI-E Gen3 x16 @ x16 x1 Alloggio PCI-E Gen2 x1 x5	(a seconda del CPU)
Connettori su scheda	Connettore SATA2 x4 Connettore pannello frontale x1 Connettore audio frontale x1 Collettore ventolina CPU x1	Ciascun connettore supporta 1 unità SATA2 Supporta i servizi del pannello frontale Supporta la funzione audio pannello frontale Alimentazione ventolina CPU (con funzione Smart Fan)

<b>SPECIFICA</b>			
	Collettore ventolina sistema	x1	Alimentazione ventolina di sistema
	Collettore cancellazione CMOS	x1	
	Connettore USB2.0	x2	Ciascun connettore supporta 2 porte USB2.0 pannello frontale
	Connettore IR del consumatore	x1	
	Connettore output S/PDIF	x1	Supporta la funzione d'output audio digitale
	Connettore Porta stampante	x1	Ciascun connettore supporta 1 Porta stampante
	Connettore alimentazione (24 pin)	x1	
	Connettore alimentazione (4 pin)	x1	
I/O pannello posteriore	Tastiera / Mouse PS/2	x1	
	Porta Seriale	x1	
	Porta LAN	x1	
	Porta USB2.0	x4	
	Connettore audio	x3	
Dimensioni scheda	210 mm (larghezza) x 295 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**

<i>Especificación</i>		
CPU	Socket 1155 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	IT8728F-BX Le ofrece las funcionalidades heredadas de uso más común Súper E/S. Interfaz de cuenta Low Pin	Iniciativas de control de entorno, Monitor hardware Controlador/monitor de velocidad de ventilador Función "Guardia inteligente" de ITE
Memoria principal	Ranuras DIMM DDR3 x 2 Capacidad máxima de memoria de 16GB Cada DIMM admite DDR de 512MB/1GB/2GB/4GB/8GB	Módulo de memoria DDR3 de canal Doble Admite DDR3 de 1066 / 1333 /1600 (depending on CPU) No admite DIMM registrados o DIMM compatibles con ECC
SATA 2	Controlador ATA Serie Integrado	Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0
Red Local	Realtek RTL8111F	Negociación de 10 / 100 / 1000 Mb/s Funciones Half / Full dúplex
Soporte de sonido HD	ALC662	Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales, Biostar Hi-Fi
Ranuras	Ranura PCI-E Gen3 x16 @ x16 X1 Ranura PCI-E Gen2 x 1 X5	(dependiendo de la CPU)
Conectores en placa	Conector SATA2 X4 Conector de panel frontal X1 Conector de sonido frontal X1 Cabecera de ventilador de CPU X1	Cada conector soporta 1 dispositivos SATA2 Soporta instalaciones en el panel frontal Soporta funciones de sonido en el panel frontal Fuente de alimentación de ventilador de CPU (con función Smart Fan)

<b>Especificación</b>			
	Cabecera de ventilador de sistema	X1	Fuente de alimentación de ventilador de sistema
	Cabecera de borrado de CMOS	X1	
	Conector USB2.0	X2	Cada conector soporta 2 puertos USB2.0 frontales
	Conector de IR del consumidor	X1	
	Conector de salida S/PDIF	X1	Soporta función de salida de sonido digital
	Conector Puerto de impresora	X1	Cada conector soporta 1 Puerto de impresora
	Conector de alimentación (24 patillas)	X1	
	Conector de alimentación (4 patillas)	X1	
Panel trasero de E/S	Teclado / Ratón PS/2	X1	
	Puerto serie	X1	
	Puerto de red local	X1	
	Puerto USB2.0	X4	
	Conector de sonido	X3	
Tamaño de la placa	210 mm. (A) X 295 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**

<b>ESPECIFICAÇÕES</b>		
CPU	Socket 1155 Processador Intel Core i7 / i5 / i3 / Pentium / Celeron	Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture -64 / Extended Memory 64 / Virtualization / Hyper Threading
Chipset	Intel H61	
Especificação Super I/O	IT8728F-BX Proporciona as funcionalidades mais utilizadas em termos da especificação Super I/O. Interface LPC (Low Pin Count).	Iniciativas para controlo do ambiente Monitorização do hardware Controlador/Monitor da velocidade da ventoinha Função "Smart Guardian" da ITE
Memória principal	Ranhuradas DIMM DDR3 x 2 Capacidade máxima de memória: 16 GB Cada módulo DIMM suporta uma memória DDR3 de 512MB/ 1GB/2GB/4GB/8GB	Módulo de memória DDR3 de canal duplo Suporta módulos DDR3 1066 / 1333 / 1600 (depending on CPU) 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. Compatibilidade com a especificação SATA versão 2.0
LAN	Realtek RTL8111F	Auto negociação de 10 / 100 / 1000 Mb/s Capacidade semi/full-duplex
Suporte para áudio de alta definição	ALC662	Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais, Biostar Hi-Fi
Ranhuradas	Ranhura PCI-E Gen3 x16 @ x16      x1 Ranhura PCI-E Gen2 x 1              x5	(dependendo da CPU)
Conectores	Conector SATA2                      x4 Conector do painel frontal          x1	Cada conector suporta 1 dispositivo SATA2 Para suporte de várias funções no painel frontal

<b>ESPECIFICAÇÕES</b>			
na placa	Conector de áudio frontal	x1	Suporta a função de áudio no painel frontal
	Conector da ventoinha da CPU	x1	Alimentação da ventoinha da CPU (com a função Smart Fan)
	Conector da ventoinha do sistema	x1	Alimentação da ventoinha do sistema
	Conector para limpeza do CMOS	x1	
	Conector USB2.0	x2	Cada conector suporta 2 portas USB2.0 no painel frontal
	Conector de IR do consumidor	x1	
	Conector de saída S/PDIF	x1	Suporta a saída de áudio digital
	Conector da para impressora	x1	Cada conector suporta 1 Porta para impressora
	Conector de alimentação (24 pinos)	x1	
	Conector de alimentação (4 pinos)	x1	
Entradas/Saídas no painel traseiro	Teclado / Rato PS/2	x1	
	Porta Série	x1	
	Porta LAN	x1	
	Porta USB2.0	x4	
	Tomada de áudio	x3	
Tamanho da placa	210 mm (L) X 295 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 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 Maks. wielkość pamięci 16GB Każde gniazdo DIMM obsługuje moduły 512MB/1GB/2GB/4GB/8GB DDR3	Moduł pamięci DDR3 z trybem podwójnego kanału Obsługa DDR3 1066 / 1333 /1600 (depending on CPU) Brak obsługi Registered DIMM oraz ECC DIMM
Super I/O	IT8728F-BX Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count	Funkcje kontroli warunków pracy, Monitor H/W Kontroler/Monitor prędkości wentylatora Funkcja ITE "Smart Guardian"
SATA 2	Zintegrowany kontroler Serial ATA	Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0
LAN	Realtek RTL8111F	10 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości Działanie w trybie połowicznego / pełnego duplexu
Obsługa audio HD	ALC662	Obsługa High-Definition Audio 5.1 kanałowe wyjście audio, Biostar Hi-Fi
Gniazda	Gniazdo PCI-E Gen3 x16 @ x16 x1 Gniazdo PCI-E Gen2 x 1 x5	(w zależności od procesora)
Złącza wbudowane	Złącze SATA2 x4 Złącze panela przedniego x1 Przednie złącze audio x1 Złącze główkowe wentylatora procesora x1	Każde złącze obsługuje 1 urządzenie SATA2 Obsługa elementów panela przedniego Obsługa funkcji audio na panelu przednim Zasilanie wentylatora procesora (z funkcją Smart Fan)

SPEC			
	Złącze główkowe wentylatora systemowego	x1	Zasilanie wentylatora systemowego
	Złącze główkowe kasowania CMOS	x1	
	Złącze USB2.0	x2	Każde złącze obsługuje 2 porty USB2.0 na panelu przednim
	Złącze Konsument IR	x1	
	Złącze wyjścia S/PDIF	x1	Obsługa funkcji cyfrowego wyjścia audio
	Złącze Port drukarki	x1	Każde złącze obsługuje 1 Port drukarki
	Złącze zasilania (24 pinowe)	x1	
	Złącze zasilania (4 pinowe)	x1	
Back Panel I/O	Klawiatura / Mysz PS/2	x1	
	Port Szeregowy	x1	
	Port LAN	x1	
	Port USB2.0	x4	
	Gniazdo audio	x3	
Wymiary płyty	210 mm (S) X 295 mm (W)		
Obsługa systemu operacyjnego	Windows XP / Vista / 7 / 8		Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.

**RUSSIAN**

<i><b>СПЕЦ</b></i>		
CPU (центральный процессор)	Socket 1155 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 Максимальная ёмкость памяти 16 ГБ Каждый модуль DIMM поддерживает 512МБ/1ГБ/2ГБ/4ГБ/8ГБ DDR3	Модуль памяти с двухканальным режимом DDR3 Поддержка DDR3 1066 / 1333 /1600 (depending on CPU) Не поддерживает зарегистрированные модули DIMM and ECC DIMM
Super I/O	IT8728F-BX Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов	Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости вентилятора/ монитор Функция ITE "Smart Guardian" (Интеллектуальная защита)
SATA 2	Встроенное последовательное устройство управления ATA	скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0
Локальная сеть	Realtek RTL8111F	Автоматическое согласование 10 / 100 / 1000 Мб/с Частичная / полная дуплексная способность
Звуковая поддержка жесткого диска	ALC662	Звуковая поддержка High-Definition 5.1канальный звуковой выход, Biostar Hi-Fi
Слоты	Слот PCI-E Gen3 x16 @ x16 x1 Слот PCI-E Gen2 x 1 x5	(в зависимости от процессора)
Встроенный разъём	Разъём SATA2 x4 Разъём на лицевой панели x1 Входной звуковой разъём x1 Контактирующее приспособление вентилятора центрального процессора x1 Контактирующее приспособление вентилятора системы x1	Каждый разъём поддерживает 1 устройство SATA2 Поддержка устройств на лицевой панели Поддержка звуковых функций на лицевой панели Источник питания для вентилятора центрального процессора (с функцией интеллектуального вентилятора) Источник питания для вентилятора системы

СПЕЦ				
	Открытое контактирующее приспособление CMOS	x1	Каждый разъем поддерживает 2 USB2.0-порта на лицевой панели	
	USB2.0-разъем	x2		
	Разъем едока ИКЫЙ	x1		
	Разъем вывода для S/PDIF	x1		Поддержка вывода цифровой звуковой функции
	Разъем Порт подключения принтера	x1		Каждый разъем поддерживает 1 Порт подключения принтера
	Разъем питания (24 вывод)	x1		
	Разъем питания (4 вывод)	x1		
Задняя панель средств ввода-вывода	Клавиатура / Мышь PS/2	x1		
	Последовательный порт	x1		
	Порт LAN	x1		
	USB2.0-порт	x4		
	Гнездо для подключения наушников	x3		
Размер панели	210 мм (Ш) X 295 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		
تدعم تقنيات Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology / Hyper Threading	Socket 1155 معالجات Intel Core i7 / i5 / i3 / Pentium / Celeron يتبردد يصل إلى	وحدة المعالجة المركزية
	Intel H61	مجموعة الشرائح
عدد2 قحقة DDR3 DIMM سعة ذاكرة قصوى 16 جيجا بايت تدعم كل قحقة DIMM تدعم ذاكرة من نوع DDR3 سعة 512/ ميجا بايت و1/ و2/ و4/ و8 جيجا بايت	وحدة ذاكرة DDR3 مزدوجة القناة تدعم الذاكرة من نوع DDR3 سعت 1600/ 1333 / 1066 (depending on CPU) ميجا بايت لا تدعم رفائق الذاكرة DIMM وتلك التي لا تتوافق مع ECC	الذاكرة الرئيسية
وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة وظيفة "Smart Guardian" من ITE	IT8728F-BX توفر وظيفة Super I/O الأكثر استخداماً. تدعم تقنية Low Pin Count Interface	Super I/O
نقل البيانات بسرعت تصل إلى 3.0 جيجابت/ثانية. مطابقة مواصفات SATA الإصدار 2.0	متحكم Serial ATA متكامل	SATA 2
تقوض تلقائي 100/10 ميجا بايت / ثنية و1 جيجا بت/ثانية إمكانية النقل المزدوج الكامل/النصفي	Realtek RTL8111F	شبكة داخلية
تدعم تقنية الصوت علي التعريف من 5.1 قنوات لخرج الصوت Biostar Hi-Fi ,	ALC662	دعم الصوت علي التعريف
(اعتمادا على وحدة المعالجة المركزية)	قحقة PCI-E Gen3 x16 @ x16 قحقة PCI-E Gen2 x 1	القححات
يدعم كل منفذ واحد من أجهزة SATA2 يدعم تجهيزات اللوحة الأمامية يدعم وظيفة الصوت باللوحة الأمامية للتوصيل الطاقة لمروحة وحدة المعالجة مع وظيفة Smart Fan للتوصيل الطاقة لمروحة النظام	4 عدد 1 عدد 1 عدد 1 عدد 1 عدد	المنفذ على سطح اللوحة منفذ SATA2 منفذ اللوحة الأمامية منفذ الصوت الأمامي وصلة مروحة وحدة المعالجة المركزية وصلة مروحة النظام

## Hi-Fi P61S2

المواصفات		
وصلة مسح CMOS	عدد 1	
منفذ USB2.0	عدد 2	يدعم كل منفذ قحطي USB2.0 باللوحة الأمامية
منفذ مستهلكة تحت الأحمر	عدد 1	
منفذ خرج S/PDIF	عدد 1	يدعم وظيفة خرج الصوت الرقمي
منفذ طباعة	عدد 1	
منفذ توصيل الطاقة (24دبوس)	عدد 1	
منفذ توصيل الطاقة (4دبليس)	عدد 1	
لوحة مفاتيح / ماوس PS/2	عدد 1	
منفذ تسلسلي	عدد 1	منفذ دخل/خرج
منفذ شبكة اتصال محلية	عدد 1	اللوحة الخلفية
منفذ USB2.0	عدد 4	
مقيس صوت	عدد 3	
حجم اللوحة	210 مم (عرض) X 295 مم (ارتفاع)	
دعم أنظمة التشغيل	Windows XP / Vista / 7 / 8	تحتفظ Biostar بحقها في إضاعة أو إزالة الدعم لأي نظام تشغيل باخطار أو بدون اخطار.

**JAPANESE**

仕様		
CPU	Socket 1155 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 最大メモリ容量16GB 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 DDR3 1066 / 1333 / 1600 (depending on CPU) をサポート 登録済みDIMMとECC DIMMはサポートされません
Super I/O	IT8728F-BX もつ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。 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、 H/Wモニター ファン速度コントローラ/ モニター 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 SATAバージョン2.0仕様に準拠
LAN	Realtek RTL8111F	10 / 100 / 1000 Mb/秒のオートネゴシエーション 半/全二重機能
HDオーディオのサポート	ALC662	ハイデフィニションオーディオのサポート 5.1 チャンネルオーディオアウト, Biostar Hi-Fi
スロット	PCI-E Gen3 x16 @ x16スロット x1 PCI-E Gen2 x 1スロット x2	(CPUに依存)
オンボードコネクタ	SATA2コネクタ x4 フロントパネルコネクタ x1 フロントオーディオコネクタ x1 CPUファンヘッダ x1 システムファンヘッダ x1 CMOSクリアヘッダ x1	各コネクタは1つのSATA2デバイスをサポートします フロントパネル機能をサポートします フロントパネルオーディオ機能をサポートします CPUファン電源装置(スマートファン機能を搭載) システムファン電源装置

## Hi-Fi P61S2

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	
	消費者IRコネクタ	x1		
	S/PDIFアウトコネクタ	x1		デジタルオーディオアウト機能をサポートします
	プリンタポートコネクタ	x1		各コネクタは1つのプリンタポートをサポートします
	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 / マウス	x1		
	シリアルポート	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	210 mm (幅) X 295 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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