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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.

1.2 PACKAGE CHECKLIST

- ✚ Serial ATA Cable X 2
- ✚ Rear I/O Panel for ATX Case X 1
- ✚ User's Manual X 1
- ✚ Fully Setup Driver CD X 1
- ✚ FDD Cable X 1 (optional)
- ✚ USB 2.0 Cable X1 (optional)
- ✚ Serial ATA Power Cable X 1 (optional)

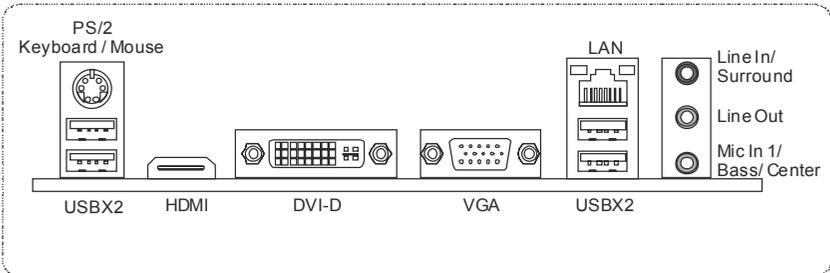
Note: The package contents may be different due to area or your motherboard version.

1.3 MOTHERBOARD FEATURES

SPEC			
CPU	Socket 1156 Intel Core i7 / i5 / i3/ Pentium processor		Supports Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
Chipset	Intel H55		
Super I/O	ITE 8721 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	DIMM Slots x 2 Each DIMM supports 512MB / 1GB / 2GB / 4GB DDR3 Max Memory Capacity 8GB		Dual Channel Mode DDR3 memory module Supports DDR3 1600(OC)/1333/1066/800 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 RTL8111DL		10 / 100 Mb/s / 1Gb/s auto negotiation Half / Full duplex capability
Sound Codec	ALC662		5.1 channels audio out High Definition Audio
Slots	PCI Express Gen2 x16 Slot	x1	Supports PCI-E Gen2 x16 expansion cards
	PCI Express Gen2 x1 Slot	x1	Supports PCI-E Gen2 x1 expansion cards
	PCI Slot	x2	Supports PCI expansion cards
On Board Connectors	Printer Port Connector	x1	Each connector supports 1 Printer port
	Serial Port Connector	x1	Connects to RS-232 Port
	IDE Connector	x1	Each connector supports 2 IDE devices
	SATA Connector	x4	Each connector supports 1 SATA devices
	Front Panel Connector	x1	Supports front panel facilities
	Front Audio Connector	x1	Supports front panel audio function
	S/PDIF out Connector	x1	Supports digital audio out 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
	USB Connector	x2	Each connector supports 2 front panel USB ports
	Consumer IR Connector	x1	Supports infrared function

SPEC			
	Power Connector (24pin)	x1	Connects to Power supply
	Power Connector (4pin)	x1	Connects to Power supply
Back Panel I/O	PS/2 Keyboard / Mouse	x1	Connects to PS/2 Keyboard / Mouse
	HDMI Port	x1	Connects to HDMI cable
	VGA Port	x1	Connect to D-SUB monitor
	DVI-D Port	x1	Connect to DVI monitor
	LAN Port	x1	Connect to RJ-45 ethernet cable
	USB Port	x4	Connect to USB devices
	Audio Jack	x3	Provide Audio-In/Out and microphone connection
Board Size	200(W) x 244 (L) mm		
OS Support	Windows XP / Vista / 7		Biostar reserves the right to add or remove support for any OS with or without notice

1.4 REAR PANEL CONNECTORS



NOTE: HDMI / DVI-D / VGA Output require an Intel Core family processor with Intel Graphics Technology.

NOTE: Maximum resolution:
 HDMI: 1920 x 1200 @60Hz
 DVI: 1920 x 1200 @60Hz
 VGA: 2048 x 1536 @75Hz

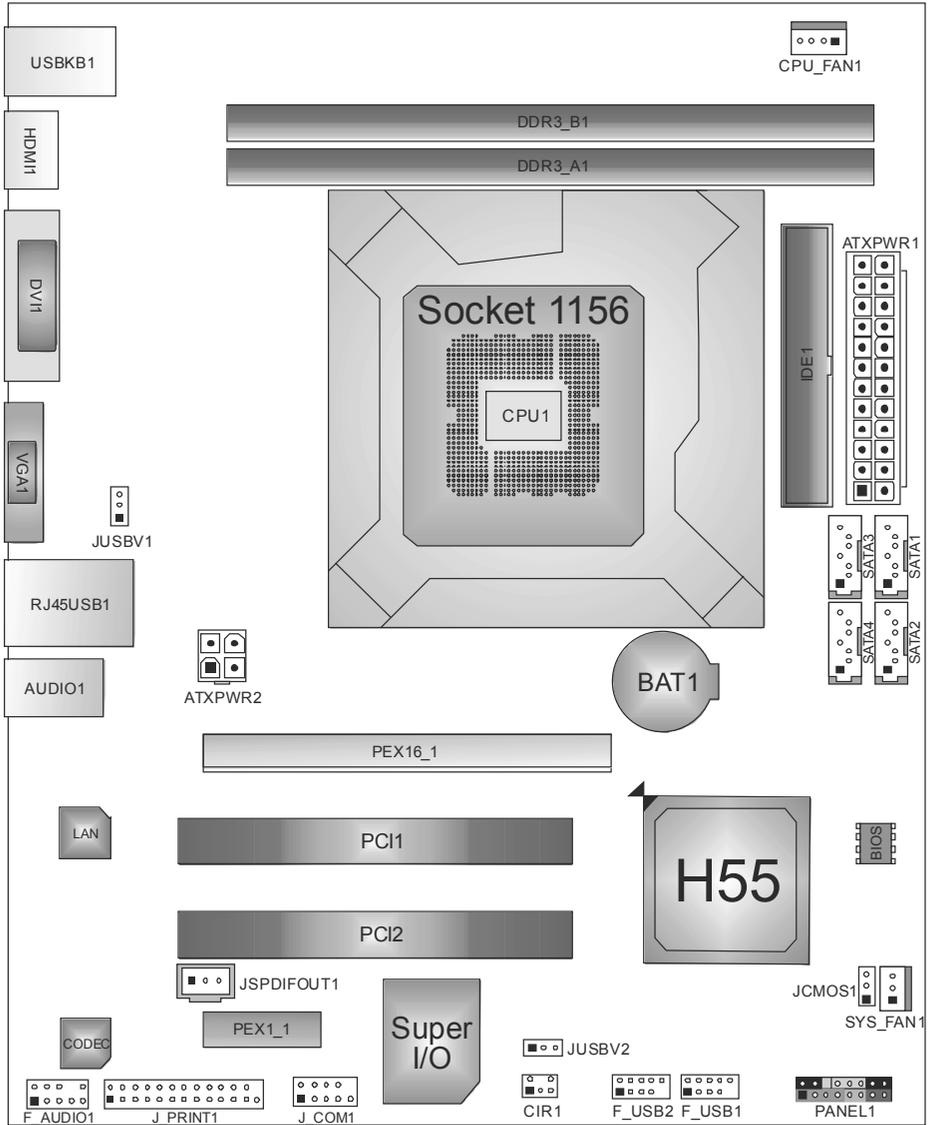
NOTE: This motherboard supports Multiple VGA output, and the configuration is as below: (HDMI is not supported under DOS and BIOS setup.)

Display Devices	VGA + HDMI	VGA + DVI-D	HDMI + DVI-D
Enabled	O	O	X



Caution: HDMI/DVI-D can not be plugged at the same time, or there will be no video output.

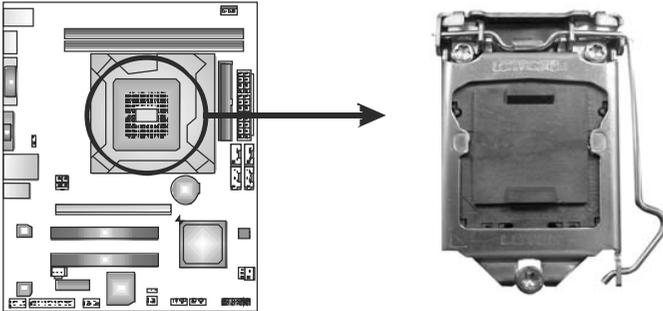
1.5 MOTHERBOARD LAYOUT



Note: ■ represents the 1st pin.

CHAPTER 2: HARDWARE INSTALLATION

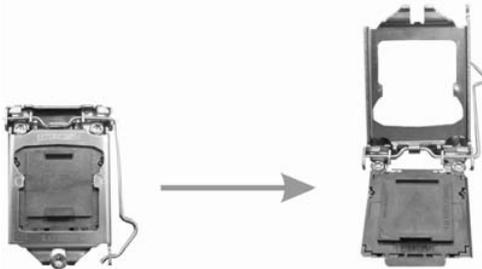
2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)



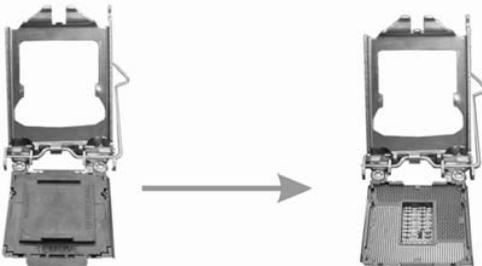
Special Notice:

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.

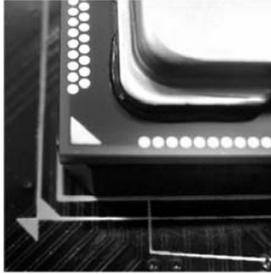
Step 1: Pull the socket locking lever out from the socket and then raise the lever up.



Step 2: Remove the Pin Cap.



Step 3: Look for the triangular cut edge on socket, and the golden dot on CPU should point forwards this triangular cut edge. The CPU will fit only in the correct orientation.



Step 4: Hold the CPU down firmly, and then lower the lever to locked position to complete the installation.

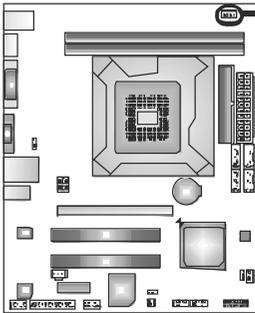


Step 5: Put the CPU Fan and heatsink assembly on the CPU and buckle it on the retention frame. Connect the CPU FAN power cable into the CPU_FAN1 to complete the installation.

2.2 FAN HEADERS

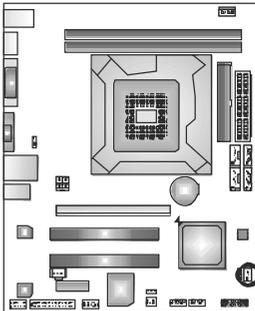
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different due to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

CPU_FAN1: CPU Fan Header



Pin	Assignment
1	Ground
2	Power
3	FAN RPM rate sense
4	Smart Fan Control

SYS_FAN1: System Fan Header



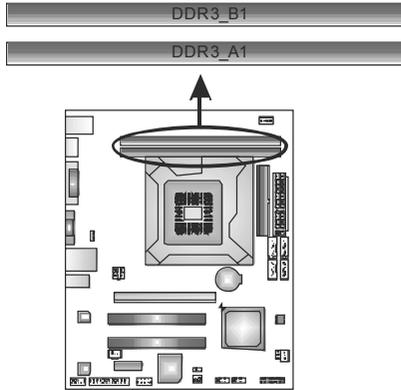
Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense

Note:

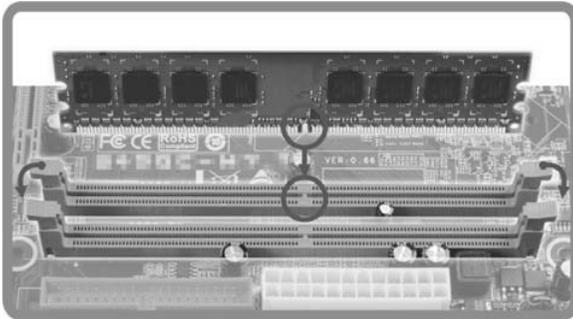
CPU_FAN1 supports 4-pin head connector; SYS_FAN1, 3-pin head one. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.3 INSTALLING SYSTEM MEMORY

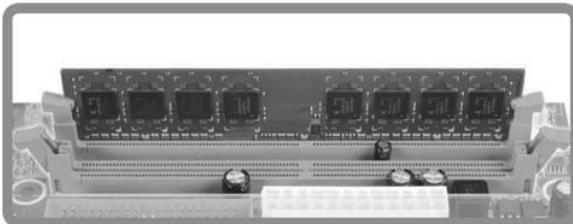
A. DDR3 module



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.



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



B. Memory Capacity

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

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.)

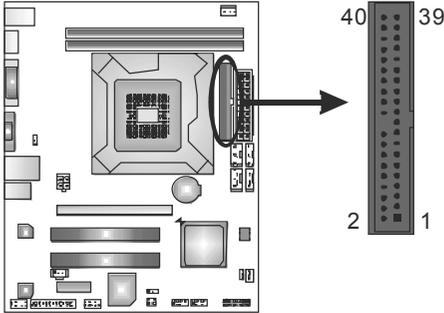
The DRAM bus width of the memory module must be the same(x8 or x16)

2.4 CONNECTORS AND SLOTS

IDE1: Hard Disk Connector

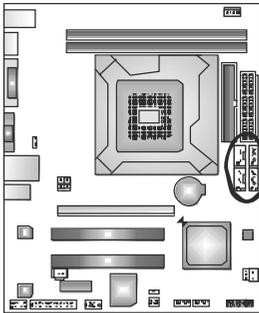
The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0~4, Bus Master, and Ultra DMA 33/66/100/133 functionality.

The IDE connector can connect a master and a slave drive, so you can connect up to two hard disk drives.



SATA1~SATA4: Serial ATA Connectors

The motherboard has a PCI to SATA Controller with 4 channels SATA interface, it satisfies the SATA 2.0 spec and with transfer rate of 3Gb/s.

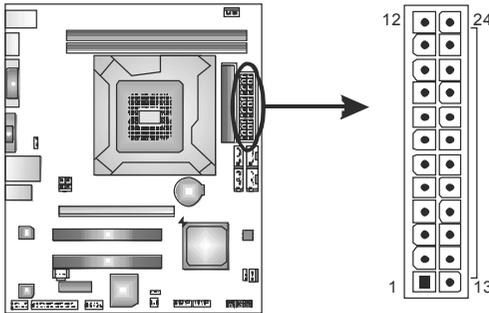


SATA3 SATA1
SATA4 SATA2

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

ATXPWR1: ATX Power Source Connector

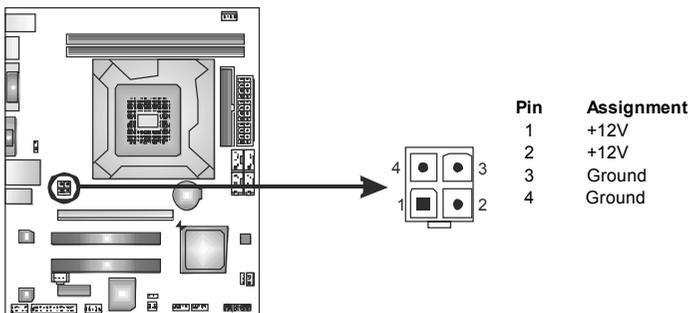
This connector is for 24-pin power connector on the ATX power supply.



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

ATXPWR2: ATX Power Source Connector

Connecting this connector provides +12V to CPU power circuit.

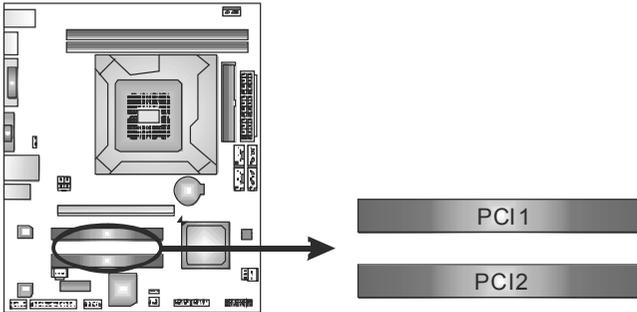


Note:

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

PCI1/PCI2: Peripheral Component Interconnect Slots

This motherboard is equipped with 2 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.

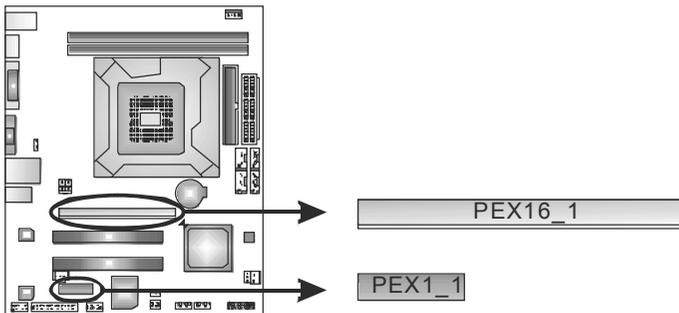


PEX16_1: PCI-Express Gen2 x16 Slot

- PCI-Express 2.0 compliant.
- Maximum theoretical realized bandwidth of 8GB/s simultaneously per direction, for an aggregate of 16GB/s totally.
- PCI-Express Gen2 supports a raw bit-rate of 5.0Gb/s on the data pins.
- 2X bandwidth over the PCI-Express 1.1 architecture.

PEX1_1: PCI-Express Gen2 x1 Slot

- PCI-Express 1.1 compliant.
- Data transfer bandwidth up to 250MB/s per direction; 500MB/s in total.
- PCI-Express supports a raw bit-rate of 2.5Gb/s on the data pins.



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

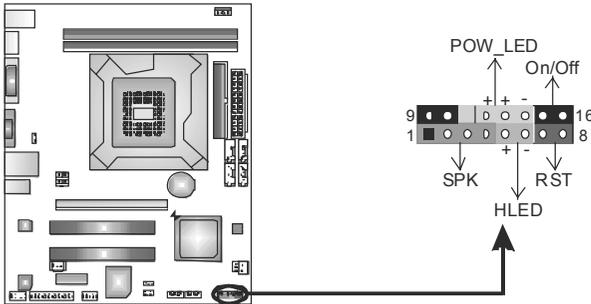


Pin1-2 closed

3.2 DETAIL SETTINGS

PANEL1: Front Panel Header

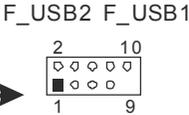
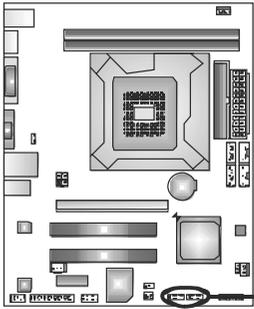
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, and speaker connection. It allows user to connect the PC case's front panel switch functions.



Pin	Assignment	Function	Pin	Assignment	Function
1	+5V		9	N/A	N/A
2	N/A	Speaker Connector	10	N/A	N/A
3	N/A		11	N/A	N/A
4	Speaker		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

This motherboard provides 2 USB 2.0 headers, which allows user 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

JUSBV1/JUSBV2: Power Source Headers for USB Ports

Pin 1-2 Close:

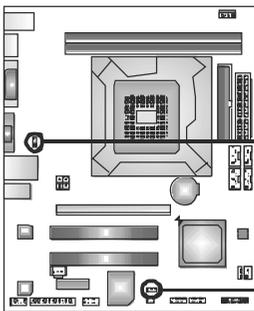
JUSBV1: +5V for USB ports at USBKB1/RJ45USB1.

JUSBV2: +5V for USB ports at F_USB1/F_USB2.

Pin 2-3 Close:

JUSBV1: +5V STB for USB ports at USBKB1/RJ45USB1.

JUSBV2: +5V STB for USB ports at F_USB1/F_USB2.



JUSBV1



Pin 1-2 close

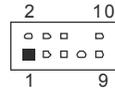
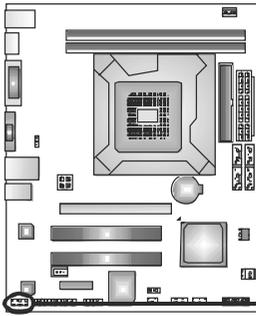
JUSBV2



Pin 2-3 close

F_AUDIO1: Front Panel Audio Header

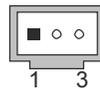
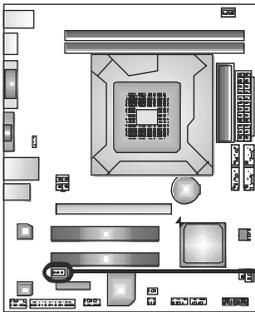
This header allows user to connect the front audio output cable with the PC front panel. This header allows only HD audio panel connector, not AC'97.



Pin	Assignment
1	Mic Left in
2	Ground
3	Mic Right in
4	GPIO
5	Right line in
6	Jack Sense
7	Front Sense
8	Key
9	Left line in
10	Jack Sense

JSPDIFOUT1: Digital Audio-out Connector

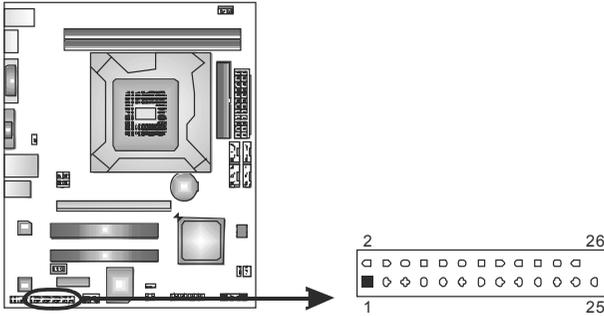
This connector allows user to connect the PCI bracket SPDIF output header.



Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

J_PRINT1: Printer Port Connector

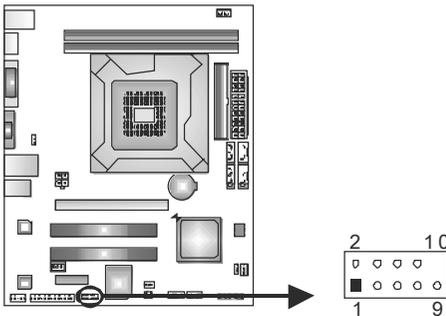
This header allows you to connector printer on the PC.



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	-ScstIn	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

J_COM1: Serial port Connector

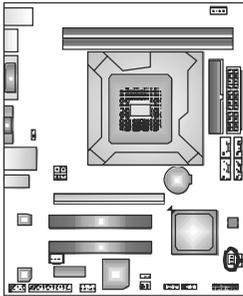
The motherboard has a Serial Port Connector for connecting RS-232 Port.



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	NC

JCMOS1: Clear CMOS Header

Placing the jumper on pin2-3 allows user 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).



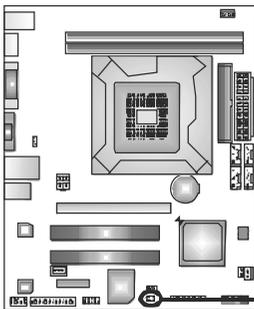
Pin 2-3 Close:
Clear CMOS data.

※ 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. Reset your desired password or clear the CMOS data.

CIR1: Consumer IR Connector

This header is for infrared remote control and communication.



Pin	Assignment
1	IrDA serial input
2	Ground
3	Ground
4	Key
5	IrDA serial output
6	IR Power

CHAPTER 4: USEFUL HELP

4.1 DRIVER INSTALLATION NOTE

After you installed your operating system, please insert the Fully Setup Driver CD into your optical drive and install the driver for better system performance.

You will see the following window after you insert the CD



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

Note:

If this window didn't show up after you insert the Driver CD, 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 CD. 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://www.adobe.com/products/acrobat/readstep2.html>

4.2 SOFTWARE

Installing Software

1. Insert the Setup CD 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 (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.



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.

eHot-Line

Base board information :
 Caption : Base Board
 CreationClassName : Win32_BaseBoard
 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

Symptom Description :

Region :

CC E-mail :

Memory Module Manufacture :

Power Supply Manufacture/model :

Buttons: Send, Save As..., Exit

Annotations:

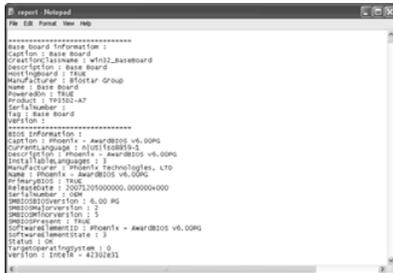
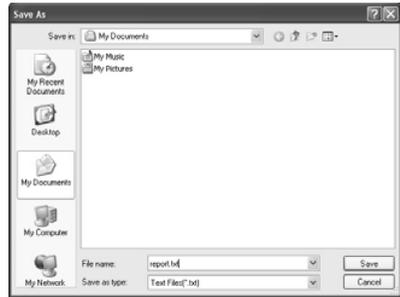
- Send the mail out.
- Save these information to a .txt file
- Exit this dialog.
- Select your area or the area close to you.
- Provide the e-mail address that you would like to send the copy to.
- *Provide the name of the memory module manufacturer.
- Provide the name of the power supply manufacturer and the model no.

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.



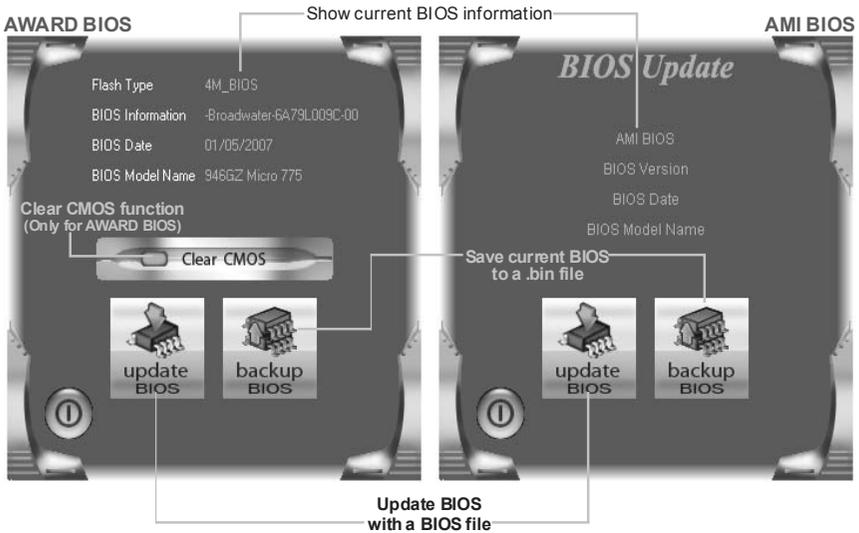
We will not share customer’s data with any other third parties, so please feel free to provide your system information while using eHot-Line service.



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-us/about/contact.php> for getting our contact information.

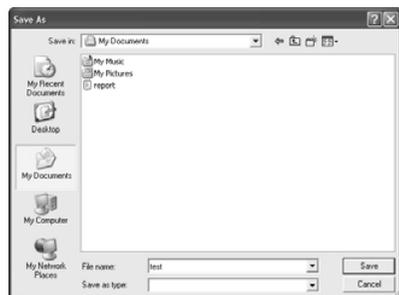
BIOS Update

BIOS Update is a convenient utility which allows you to update your motherboard BIOS under Windows system.



<Backup BIOS>

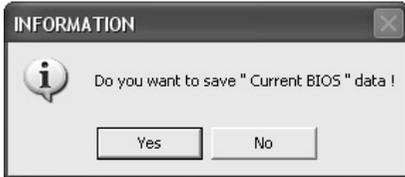
Once click on this button, the saving dialog will show. Choose the position to save file and enter file name. (We recommend that the file name should be English/number and no longer than 7 characters.) Then click **Save**.



<Update BIOS>

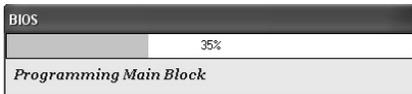
Before doing this, please download the proper BIOS file from the website.

For AWARD BIOS, update BIOS procedure should be run with Clear CMOS function, so please check on Clear CMOS first.



Then click Update BIOS button, a dialog will show for asking you backup current BIOS. Click **Yes** for BIOS backup and refer to the Backup BIOS procedure; or click **No** to skip this procedure.

After the BIOS Backup procedure, the open dialog will show for requesting the BIOS file which is going to be updated. Please choose the proper BIOS file for updating, then click on **Open**.



The utility will update BIOS with the proper BIOS file, and this process may take minutes. Please do not open any other applications during this process.

After the BIOS Update process, click on **OK** to restart the system.



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

In the BIOS setup, use the **Load Optimized Defaults** function and then **Save and Exit Setup** to exit BIOS setup. BIOS Update is completed.



All the information and content above about the software are subject to be changed without notice. For better performance, the software is being continuously updated. The information and pictures described above are for your reference only. The actual information and settings on board may be slightly different from this manual.

4.3 EXTRA INFORMATION

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.

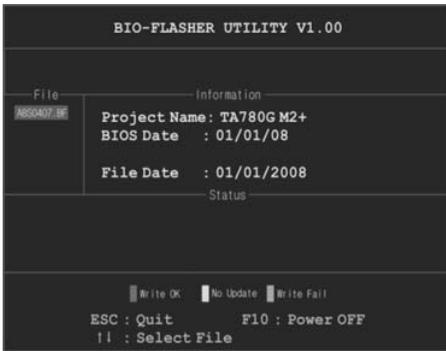
BIO-Flasher

BIO-Flasher is a BIOS flashing utility providing you an easy and simple way to update your BIOS via USB pen drive or floppy disk.

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

Updating BIOS with BIO-Flasher

1. Go to the website to download the latest BIOS file for the motherboard.
2. Then, save the BIOS file into a USB pen drive or a floppy disk.
3. Insert the USB pen drive or the floppy disk that contains the BIOS file to the USB port or the floppy disk drive.
4. Power on or reset the computer and then press **<F12>** during the **POST** process. A select dialog as the picture on the right appears. Select the device contains the BIOS file and press **<Enter>** to enter the utility.



5. The utility will show the BIOS files and their respective information. Select the proper BIOS file and press **<Enter>** then **<Y>** to perform the BIOS update process.

6. After the update process, the utility will ask you to reboot the system. Press **<Y>** to proceed. BIOS update completes.



- This utility only allows storage device with FAT32/16 format and single partition.
- Shutting down or resetting the system while updating the BIOS will lead to system boot failure.

4.4 AMI BIOS BEEP CODE

Boot Block Beep Codes

Number of Beeps	Description
1	No media present. (Insert diskette in floppy drive A:)
2	"AMIBOOT.ROM" file not found in root directory of diskette in A:
3	Insert next diskette if multiple diskettes are used for recovery
4	Flash Programming successful
5	File read error
7	No Flash EPROM detected
10	Flash Erase error
11	Flash Program error
12	"AMIBOOT.ROM" file size error
13	BIOS ROM image mismatch (file layout does not match image present in flash device)

POST BIOS Beep Codes

Number of Beeps	Description
1	Memory refresh timer error
3	Base memory read/write test error
6	Keyboard controller BAT command failed
7	General exception error (processor exception interrupt error)
8	Display memory error (system video adapter)

Troubleshooting POST BIOS Beep Codes

Number of Beeps	Troubleshooting Action
1, 3	Reseat the memory, or replace with known good modules.
6, 7	<p>Fatal error indicating a serious problem with the system. Consult your system manufacturer. Before declaring the motherboard beyond all hope, eliminate the possibility of interference by a malfunctioning add-in card. Remove all expansion cards except the video adapter.</p> <ul style="list-style-type: none"> ● If beep codes are generated when all other expansion cards are absent, consult your system manufacturer's technical support. ● If beep codes are not generated when all other expansion cards are absent, one of the add-in cards is causing the malfunction. Insert the cards back into the system one at a time until the problem happens again. This will reveal the malfunctioning card.
8	If the system video adapter is an add-in card, replace or reseat the video adapter. If the video adapter is an integrated part of the system board, the board may be faulty.

4.5 TROUBLESHOOTING

Probable	Solution
<ol style="list-style-type: none"> 1. There is no power in the system. Power LED does not shine; the fan of the power supply does not work 2. Indicator light on keyboard does not shine. 	<ol style="list-style-type: none"> 1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
<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"> 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. 2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.
<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"> 1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
<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 user installs a second hard drive.</p>	<ol style="list-style-type: none"> 1. Set master/slave jumpers correctly. 2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives.

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APPENDIX: SPEC IN OTHER LANGUAGES

GERMAN

<i>Spezifikationen</i>		
CPU	Socket 1156 Intel Core i7 / i5 / i3/ Pentium Prozessoren	Unterstützt Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
Chipsatz	Intel H55	
Super E/A	ITE 8721 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 Jeder DIMM unterstützt 512MB / 1GB / 2GB / 4GB DDR3. Max. 8GB Arbeitsspeicher	Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 1600(OC)/1333/1066/800 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
SATA	Integrierter Serial ATA-Controller	Datentransferate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0.
LAN	Realtek RTL8111DL	10 / 100 / 1000 Mb/s Auto-Negotiation Halb-/ Vollduplex-Funktion
HD Audio-Unterstützung	ALC662	Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe
Steckplätze	PCI Express Gen2 x16 Steckplatz x1 PCI Express Gen2 x1 Steckplatz x1 PCI Steckplatz x2	
Onboard-Anschluss	Druckeranschluss Anschluss x1 Serieller Anschluss x1 IDE-Anschluss x1	Jeder Anschluss unterstützt 1 Druckeranschluss Jeder Anschluss unterstützt 2 IDE-Laufwerke

Spezifikationen			
	SATA-Anschluss	x4	Jeder Anschluss unterstützt 1 SATA-Laufwerk
	Fronttafelanschluss	x1	Unterstützt die Fronttafel Funktionen
	Front-Audioanschluss	x1	Unterstützt die Fronttafel-Audioanschlussfunktion
	S/PDIF- Ausgangsanschluss	x1	Unterstützt die digitale Audioausgabefunktion
	CPU-Lüfter-Sockel	x1	CPU-Lüfterstromversorgungsanschluss (mit Smart Fan-Funktion)
	System-Lüfter-Sockel	x1	System-Lüfter-Stromversorgungsanschluss
	"CMOS löschen"-Sockel	x1	
	USB-Anschluss	x2	Jeder Anschluss unterstützt 2 Fronttafel-USB-Anschlüsse
	Verbraucher-IR Anschluss	x1	
	Stromanschluss (24-polig)	x1	
	Stromanschluss (4-polig)	x1	
Rückseiten-E /A	PS/2-Tastatur / Maus	x1	
	HDMI-Anschluss	x1	
	VGA-Anschluss	x1	
	DVI-D-Anschluss	x1	
	LAN-Anschluss	x1	
	USB-Anschluss	x4	
	Audioanschluss	x3	
Platinengröße	200mm (B) X 244 mm (L)		
OS-Unterstützung	Windows XP / Vista / 7		Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.

FRENCH

SPEC		
UC	Socket 1156 Processeurs Intel Core i7 / i5 / i3/ Pentium	Prend en charge les technologies d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ d'architecture Intel 64 / de mémoire étendue 64 / de virtualisation
Chipset	Intel H55	
Super E/S	ITE 8721 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 Chaque DIMM prend en charge des DDR3 de 512Mo / 1Go / 2Go / 4Go Capacité mémoire maximale de 8Go	Module de mémoire DDR3 à mode à double voie Prend en charge la DDR3 1600(OC)/1333/1066/800 Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge
SATA	Contrôleur Serial ATA intégré	Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0
LAN	Realtek RTL8111DL	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
Fentes	Fente PCI Express Gen2 x16 x1 Fente PCI Express Gen2 x1 x1 Fente PCI x2	
Connecteur embarqué	Connecteur de Port d'imprimante x1 Port série x1 Connecteur IDE x1 Connecteur SATA x4	Chaque connector prend en charge 1 Port d'imprimante Chaque connecteur prend en charge 2 périphériques IDE Chaque connecteur prend en charge 1 périphérique SATA

SPEC			
	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
	Connecteur de sortie S/PDIF	x1	Prend en charge la fonction de sortie audio numérique
	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 USB	x2	Chaque connecteur prend en charge 2 ports USB de panneau avant
	Connecteur de IR du consommateur	x1	
	Connecteur d'alimentation (24 broches)	x1	
	Connecteur d'alimentation (4 broches)	x1	
E/S du panneau arrière	Clavier / Souris PS/2	x1	
	Port HDMI	x1	
	Port VGA	x1	
	Port DVI-D	x1	
	Port LAN	x1	
	Port USB	x4	
	Fiche audio	x3	
Dimensions de la carte	200mm (l) X 244 mm (H)		
Support SE	Windows XP / Vista / 7		Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.

ITALIAN

SPECIFICA			
CPU	Socket 1156	Supporto di Execute Disable Bit / Enhanced Intel	
	Processore Intel Core i7 / i5 / i3/ Pentium	SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization	
Chipset	Intel H55		
Super I/O	ITE 8721	Funzioni di controllo dell'ambiente:	
	Fornisce le funzionalità legacy Super I/O usate più comunemente.	Monitoraggio hardware	
	Interfaccia LPC (Low Pin Count)	Controller / Monitoraggio velocità ventolina Funzione "Smart Guardian" di ITE	
Memoria principale	Alloggi DIMM DDR3 x 2	Modulo di memoria DDR3 a canale doppio	
	Ciascun DIMM supporta DDR3 512MB / 1GB / 2GB / 4GB	Supporto di DDR3 1600(OC)/1333/1066/800	
	Capacità massima della memoria 8GB	DIMM registrati e DIMM ECC non sono supportati	
SATA	Controller Serial ATA integrato	Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0.	
LAN	Realtek RTL8111DL	Negoziante automatica 10 / 100 / 1000 Mb/s Capacità Half / Full Duplex	
Supporto audio HD	ALC662	Supporto audio High-Definition (HD) Uscita audio 5.1 canali	
Alloggi	Alloggio PCI Express Gen2 x16	x1	
	Alloggio PCI Express Gen2 x1	x1	
	Alloggio PCI	x2	
Connettori su scheda	Connettore Porta stampante	x1	Ciascun connettore supporta 1 Porta stampante
	Porta seriale	x1	
	Connettore IDE	x1	Ciascun connettore supporta 2 unità IDE
	Connettore SATA	x4	Ciascun connettore supporta 1 unità SATA
	Connettore pannello frontale	x1	Supporta i servizi del pannello frontale
	Connettore audio frontale	x1	Supporta la funzione audio pannello frontale
	Connettore output SPDIF	x1	Supporta la funzione d'output audio digitale

SPECIFICA			
	Collettore ventolina CPU	x1	Alimentazione ventolina CPU (con funzione Smart Fan) Alimentazione ventolina di sistema Ciascun connettore supporta 2 porte USB pannello frontale
	Collettore ventolina sistema	x1	
	Collettore cancellazione CMOS	x1	
	Connettore USB	x2	
	Connettore IR del consumatore	x1	
	Connettore alimentazione (24 pin)	x1	
	Connettore alimentazione (4 pin)	x1	
I/O pannello posteriore	Tastiera / Mouse PS/2	x1	
	Porta HDMI	x1	
	Porta VGA	x1	
	Porta DVI-D	x1	
	Porta LAN	x1	
	Porta USB	x4	
	Connettore audio	x3	
Dimensioni i scheda	200mm (larghezza) x 244 mm (altezza)		
Sistemi operativi supportati	Windows XP / Vista / 7		Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.

SPANISH

Especificación			
CPU	Socket 1156 Procesador Intel Core i7 / i5 / i3/ Pentium		Admite Bit de deshabilitación de ejecución / Intel SpeedStep® Mejorado / Intel Architecture-64 / Tecnología Extended Memory 64 / Tecnología de virtualización
Conjunto de chips	Intel H55		
Súper E/S	ITE 8721 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 Cada DIMM admite DDR de 512MB / 1GB / 2GB / 4GB Capacidad máxima de memoria de 8GB		Módulo de memoria DDR3 de canal Doble Admite DDR3 de 1600(OC)/1333/1066/800 No admite DIMM registrados o DIMM compatibles con ECC
SATA	Controlador ATA Serie Integrado		Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0.
Red Local	Realtek RTL8111DL		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
Ranuras	Ranura PCI Express Gen2 x16 Ranura PCI express Gen2 x1 Ranura PCI	X1 X1 X2	
Conectores en placa	Conector Puerto de impresora Puerto serie Conector IDE Conector SATA Conector de panel frontal	X1 X1 X1 X4 X1	Cada conector soporta 1 Puerto de impresora Cada conector soporta 1 dispositivos SATA Soporta instalaciones en el panel frontal

Especificación			
	Conector de sonido frontal	X1	Soporta funciones de sonido en el panel frontal
	Conector de salida S/PDIF	X1	Soporta función de salida de sonido digital
	Cabecera de ventilador de CPU	X1	Fuente de alimentación de ventilador de CPU (con función Smart Fan)
	Cabecera de ventilador de sistema	X1	Fuente de alimentación de ventilador de sistema
	Cabecera de borrado de CMOS	X1	
	Conector USB	X2	Cada conector soporta 2 puertos USB frontales
	Conector de IR del consumidor	X1	
	Conector de alimentación (24 patillas)	X1	
	Conector de alimentación (4 patillas)	X1	
Panel trasero de E/S	Teclado / Ratón PS/2	X1	
	Ratón HDMI	X1	
	Puerto VGA	X1	
	Puerto DVI-D	X1	
	Puerto de red local	X1	
	Puerto USB	X4	
	Conector de sonido	X3	
Tamaño de la placa	200mm. (A) X 244 Mm. (H)		
Soporte de sistema operativo	Windows XP / Vista / 7		Biostar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.

PORTUGUESE

ESPECIFICAÇÕES		
CPU	Socket 1156 Processador Intel Core i7 / i5 / i3/ Pentium	Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture -64 / Extended Memory 64 / Virtualization
Chipset	Intel H55	
Especificação o Super I/O	ITE 8721 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	Ranuras DIMM DDR3 x 2 Cada módulo DIMM suporta uma memória DDR3 de 512 MB / 1GB / 2GB / 4GB Capacidade máxima de memória:8GB	Módulo de memória DDR3 de canal duplo Suporta módulos DDR3 1600(OC)/1333/1066/800 Os módulos DIMM registados e os DIMM ECC não são suportados
SATA	Controlador Serial ATA integrado	Velocidades de transmissão de dados até 3.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0.
LAN	Realtek RTL8111DL	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
Ranuras	Ranhura PCI Express Gen2 x16 x1 Ranhura PCI Express Gen2 x1 x1 Ranhura PCI x2	
Conectores na placa	Conector da para impressora x1 Porta série x1 Conector IDE x1	Cada conector suporta 1 Porta para impressora Cada conector suporta 2 dispositivos IDE

ESPECIFICAÇÕES

	Conector SATA	x4	Cada conector suporta 1 dispositivo SATA
	Conector do painel frontal	x1	Para suporte de várias funções no painel frontal
	Conector de áudio frontal	x1	Suporta a função de áudio no painel frontal
	Conector de saída S/PDIF	x1	Suporta a saída de áudio digital
	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 USB	x2	Cada conector suporta 2 portas USB no painel frontal
	Conector de IR do consumidor	x1	
	Conector de alimentação (24 pinos)	x1	
	Conector de alimentação (4 pinos)	x1	
Entradas/Saídas no painel traseiro	Teclado / Rato PS/2	x1	
	Porta HDMI	x1	
	Porta VGA	x1	
	Porta DVI-D	x1	
	Porta LAN	x1	
	Porta USB	x4	
	Tomada de áudio	x3	
Tamanho da placa	200mm (L) X 244 mm (A)		
Sistemas operativos suportados	Windows XP / Vista / 7		A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.

POLISH

<i>SPEC</i>		
Procesor	Socket 1156 Procesor Intel Core i7 / i5 / i3 / Pentium	Obsługa Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
Chipset	Intel H55	
Pamięć główna	Gniazda DDR3 DIMM x 2 Każde gniazdo DIMM obsługuje moduły 512MB / 1GB / 2GB / 4GB Maks. wielkość pamięci 8GB	Moduł pamięci DDR3 z trybem podwójnego kanału Obsługa DDR3 1600(OC)/1333/1066/800 Brak obsługi Registered DIMM oraz ECC DIMM
Super I/O	ITE 8721 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	Zintegrowany kontroler Serial ATA	Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.
LAN	Realtek RTL8111DL	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
Gniazda	Gniazdo PCI Express Gen2 x16 x1 Gniazdo PCI Express Gen2 x1 x1 Gniazdo PCI x2	
Złącza wbudowane	Złącze Port drukarki x1 Port szeregowy x1 Złącze IDE x1 Złącze SATA x4 Złącze panela przedniego x1 Przednie złącze audio x1	Każde złącze obsługuje 1 Port drukarki Każde złącze obsługuje 2 urządzenia IDE Każde złącze obsługuje 1 urządzenie SATA Obsługa elementów panela przedniego Obsługa funkcji audio na panelu przednim

SPEC			
	Złącze wyjścia S/PDIF	x1	Obsługa funkcji cyfrowego wyjścia audio
	Złącze główkowe wentylatora procesora	x1	Zasilanie wentylatora procesora (z funkcją Smart Fan)
	Złącze główkowe wentylatora systemowego	x1	Zasilanie wentylatora systemowego
	Złącze główkowe kasowania CMOS	x1	
	Złącze USB	x2	Każde złącze obsługuje 2 porty USB na panelu przednim
	Złącze Konsument IR	x1	
	Złącze zasilania (24 pinowe)	x1	
	Złącze zasilania (4 pinowe)	x1	
Back Panel I/O	Klawiatura / Mysz PS/2	x1	
	Port HDMI	x1	
	Port VGA	x1	
	Port DVI-D	x1	
	Port LAN	x1	
	Port USB	x4	
	Gniazdo audio	x3	
Wymiary płyty	200mm (S) X 244 mm (W)		
Obsługa systemu operacyjnego	Windows XP / Vista / 7		Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.

RUSSIAN

СПЕЦ		
ЦПУ (центральный процессор)	Socket 1156 Процессор Intel Core i7 / i5 / i3/ Pentium	Поддержка технологий Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация
Набор микросхем	Intel H55	
Основная память	Слоты DDR3 DIMM x 2 Каждый модуль DIMM поддерживает 512МБ / 1ГБ / 2ГБ / 4ГБ DDR3 Максимальная ёмкость памяти 8ГБ	Модуль памяти с двухканальным режимом DDR3 Поддержка DDR3 1600(OC)/1333/1066/800 Не поддерживает зарегистрированные модули DIMM and ECC DIMM
Super I/O	ITE 8721 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	Встроенное последовательное устройство управления ATA	скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0.
Локальная сеть	Realtek RTL8111DL	Автоматическое согласование 10 / 100 / 1000 Мб/с Частичная / полная дуплексная способность
Звуковая поддержка жесткого диска	ALC662	Звуковая поддержка High-Definition 5.1канальный звуковой выход
Слоты	Слот PCI Express Gen2 x16 x1 Слот PCI Express Gen2 x1 x1 Слот PCI x2	
Встроенный разъём	Разъём Порт подключения принтера x1 Последовательный порт x1	Каждый разъём поддерживает 1 Порт подключения принтера

СПЕЦ			
	Разъём IDE	x1	Каждый разъём поддерживает 2 встроенных интерфейса накопителей
	Разъём SATA	x4	Каждый разъём поддерживает 1 устройство SATA
	Разъём на лицевой панели	x1	Поддержка устройств на лицевой панели
	Входной звуковой разъём	x1	Поддержка звуковых функций на лицевой панели
	Разъём вывода для S/PDIF	x1	Поддержка вывода цифровой звуковой функции
	Контактирующее приспособление вентилятора центрального процессора	x1	Источник питания для вентилятора центрального процессора (с функцией интеллектуального вентилятора)
	Контактирующее приспособление вентилятора системы	x1	Источник питания для вентилятора системы
	Открытое контактирующее приспособление CMOS	x1	
	USB-разъём	x2	Каждый разъём поддерживает 2 USB-порта на лицевой панели
	Разъём едока ИКБЙ	x1	
	Разъем питания (24 вывод)	x1	
	Разъем питания (4 вывод)	x1	
Задняя панель средств ввода-вывода	Клавиатура / Мышь PS/2	x1	
	Порт HDMI	x1	
	Порт VGA	x1	
	Порт DVI-D	x1	
	Порт LAN	x1	
	USB-порт	x4	
	Гнездо для подключения наушников	x3	
Размер панели	200мм (Ш) X 244 мм (В)		
Поддержка OS	Windows XP / Vista / 7		Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.

ARABIC

المواصفات		
Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1156 تردد Intel Core i7 / i5 / i3 / Pentium معلجت يصل إلى	وحدة المعالجة المركزية
	Intel H55	مجموعة الشرائح
مزدوجة القناة DDR3 وحدة ذاكرة سعتت 1600/1333/1066/800 (OC) ميجا DDR3 تدعم الذاكرة من نوع بليت ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	قحة DDR3 DIMM عدد2 سعة تدعم كل DDR3 تدعم ذاكرة من نوع DIMM دعم كل قحة ميجا بليت 512 سعة DDR3 تدعم ذاكرة من نوع DIMM قحة و1/2 و4 ميجا بليت سعة ذاكرة قصوى 8 جيجا بليت	الذاكرة الرئيسية
وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة	ITE 8721 الأكثر استخداماً Super I/O ووفر وظيفة Low Pin Count Interface تدعم تقنية	Super I/O
جيجابايت/ثانية 3.0 قبل البيانت بسرعت تصل إلى 2.0 الإصدار SATA مطابقة لمواصفات	متكامل Serial ATA	SATA
تفاوض تلقائي 100/10 ميجا بليت / ثانية و1 جيجا بايت/ثانية إمكانية نقل المزوج الكامل/الانصفي	Realtek RTL8111DL	شبكة داخلية
تدعم تقنية الصوت عالي التعريف من 5.1 قنوات لخروج الصوت	ALC662	دعم الصوت عالي التعريف
	قحة PCI Express Gen2 x16 عدد 1 قحة PCI Express Gen2 x1 عدد 1 قحة PCI عدد 2	الفتحات
ي دعم كل منفذ اثنين من أجهزة IDE SATA يدعم كل منفذ واحد من أجهزة يدعم تجهيزات اللوحة الأممية يدعم وظيفة الصوت باللوحة الأممية	منفذ طابعة عدد 1 منفذ تلسلي عدد 1 منفذ IDE عدد 1 منفذ SATA عدد 4 منفذ اللوحة الأممية عدد 1 منفذ الصوت الأممي عدد 1	المنفذ على سطح اللوحة

المواصفات		
يدعم وظيفة خرج الصوت الرقمي	عدد 1	منفذ خرج SPDIF
Smart Fan توصيل الطاقة لمروحة وحدة المعالجة مع وظيفة	عدد 1	وصلة مروحة وحدة المعالجة المركزية
توصيل الطاقة لمروحة النظام	عدد 1	وصلة مروحة النظام
	عدد 1	وصلة مسطح CMOS
بالوحة الامامية USB يدعم كل منفذ قحتي	عدد 2	منفذ USB
	عدد 1	منفذ الأحمر تحت مستهلكة
	عدد 1	منفذ توصيل الطاقة (24 بوس) ع
	عدد 1	منفذ توصيل الطاقة (4 إلبايس)
	عدد 1	لوحة مفاتيح / ماوس PS/2
	عدد 1	منافذ HDMI
	عدد 1	منافذ VGA
	عدد 1	منافذ DVI-D
	عدد 1	منفذ شبكة اتصال محلية
	عدد 4	منافذ USB
	عدد 3	مقيس صوت
		حجم اللوحة
		200مم (عرض) X 244مم (ارتفاع)
يحفظها في اإضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو بدون Biostar احتفظ إخطار.		دعم أنظمة التشغيل Windows XP / Vista / 7

JAPANESE

仕様		
CPU	Socket 1156 Intel Core i7 / i5 / i3 / Pentium プロセッサ	Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technologyをサポートします
チップセット	Intel H55	
メインメモリ	DDR3 DIMMスロット x 2 各DIMMは 512MB / 1GB / 2GB / 4GB DDR3をサポート 最大メモリ容量8GB	デュアル チャンネルモードDDR3 メモリモジュール DDR3 1600(OC)/1333/1066/800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	ITE 8721 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。 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	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 RTL8111DL	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
スロット	PCI Express Gen2 x16スロット x1 PCI Express Gen2 x1スロット x1 PCIスロット x2	
オンボードコネクタ	プリンタポートコネクタ x1 シリアルポート x1 IDEコネクタ x1 SATA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 S/PDIFアウトコネクタ 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 各コネクタは2つのIDEデバイスをサポートします 各コネクタは1つのSATA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 デジタルオーディオアウト機能をサポートします

仕様			
	CPUファンヘッド	x1	CPUファン電源装置(スマートファン機能を搭載)
	システムファンヘッド	x1	システムファン電源装置
	CMOSクリアヘッド	x1	
	USBコネクタ	x2	各コネクタは2つのフロントパネルUSBポートをサポートします
	消費者IRコネクタ	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 / マウス	x1	
	HDMIポート	x1	
	VGAポート	x1	
	DVI-Dポート	x1	
	LANポート	x1	
	USBポート	x4	
	オーディオジャック	x3	
ボードサイズ	200mm (幅) X 244 mm (高さ)		
OSサポート	Windows XP / Vista / 7		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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