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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.

1.2 PACKAGE CHECKLIST

- ✚ IDE Cable X 1 (optional)
- ✚ Serial ATA Cable X 2
- ✚ Rear I/O Panel for ATX Case X 1
- ✚ Installation Guide X 1
- ✚ Fully Setup Driver CD X 1 (full version manual files inside)
- ✚ FDD Cable X 1 (optional)
- ✚ USB 2.0 Cable X1 (optional)
- ✚ Serial ATA Power Cable X 1 (optional)

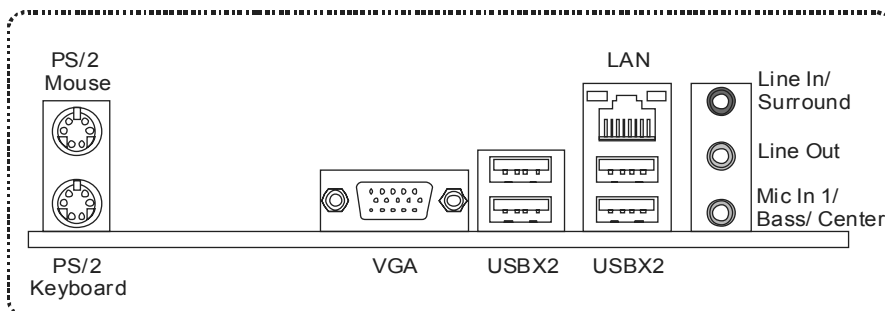
Note: The package contents may be differed by area or your motherboard version.

1.3 MOTHERBOARD FEATURES

| SPEC | | |
|-----------------------|--|---|
| CPU | LGA 775 Intel Core2Duo / Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx processor (Maximum Watt: 65W) | Supports Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology |
| FSB | Support 800 / 1066 / 1333 MHz | |
| Chipset | Intel G31 Intel ICH7 | |
| 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 256MB / 512MB / 1GB / 2GB DDR2 Max Memory Capacity 4GB | Dual Channel Mode DDR2 memory module Supports DDR2 800/667/533 Registered DIMM and ECC DIMM is not supported (CPU with FSB 533 MHz only supports DDR2 533) |
| Graphics | GMA 3100 | Max Shared Video Memory is 384MB (Depending on OS and memory size) |
| IDE | Integrated IDE Controller | Ultra DMA 33 / 66 / 100 Bus Master Mode supports PIO Mode 0~4 |
| SATA 2 | Integrated Serial ATA Controller | Data transfer rates up to 3.0 Gb/s. SATA Version 2.0 specification compliant |
| LAN | Realtek RTL 8103EL / RTL 8102EL | 10 / 100 Mb/s auto negotiation Half / Full duplex capability |
| Sound Codec | ALC662 / VT1708B | 5.1 channels audio out High Definition Audio |
| Slots | PCI slot x1 PCI Express x 16 slot x1 | Supports PCI expansion cards Supports PCI-E x16 expansion cards |
| On Board Connector | Floppy connector x1 Printer Port Connector x1 | Each connector supports 2 Floppy drives Each connector supports 1 Printer port |

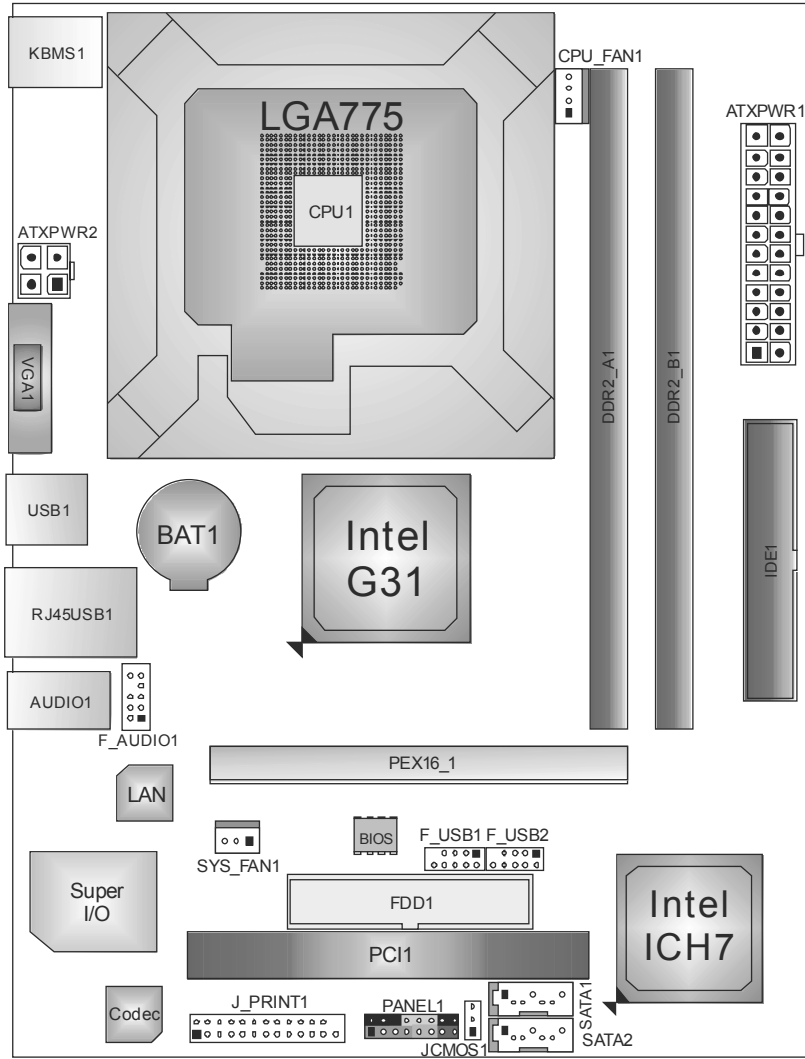
| SPEC | | | |
|-------------------|-------------------------------|----|---|
| | IDE Connector | x1 | Each connector supports 2 IDE device |
| | SATA Connector | x2 | Each connector supports 1 SATA devices |
| | Front Panel Connector | x1 | Supports front panel facilities |
| | Front Audio Connector | 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 |
| | USB connector | x2 | Each connector supports 2 front panel USB ports |
| | Power Connector (24pin) | x1 | Connects to Power supply |
| | Power Connector (4pin) | x1 | Connects to Power supply |
| Back Panel I/O | PS/2 Keyboard | x1 | Connects to PS/2 Keyboard |
| | PS/2 Mouse | x1 | Connects to PS/2 Mouse |
| | VGA port | x1 | Connect to D-SUB 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 | 170 (W) x 225 (L) mm | | |
| OS Support | Windows 2000 / XP / Vista / 7 | | Biostar reserves the right to add or remove support for any OS with or without notice |

1.4 REAR PANEL CONNECTORS



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.

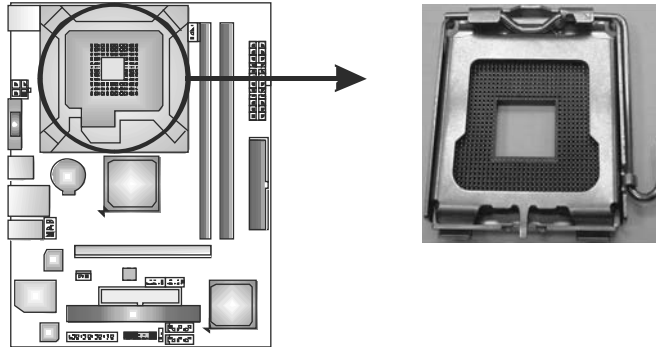
1.5 MOTHERBOARD LAYOUT



Note: ■ represents the 1st pin.

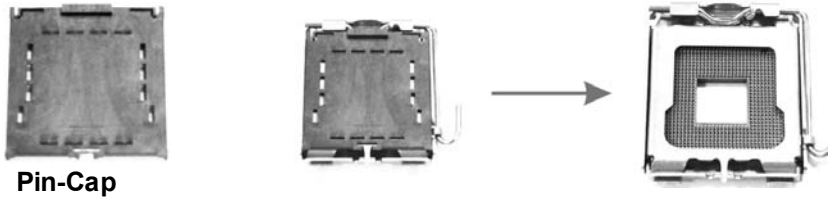
CHAPTER 2: HARDWARE INSTALLATION

2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)



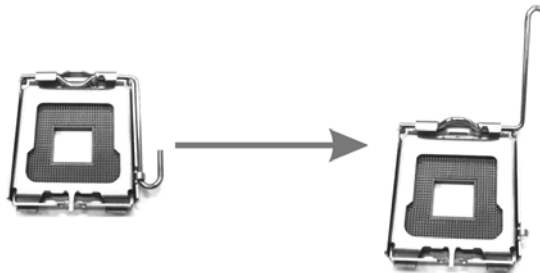
Special Notice:

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.



Pin-Cap

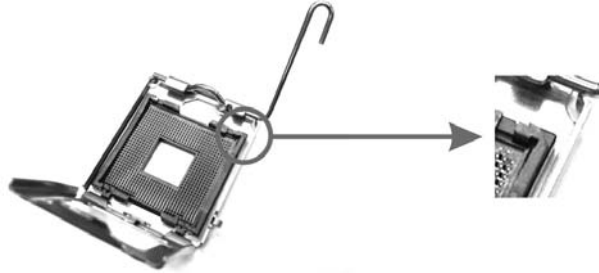
Step 1: Pull the socket locking lever out from the socket and then raise the lever up to a 90-degree angle.



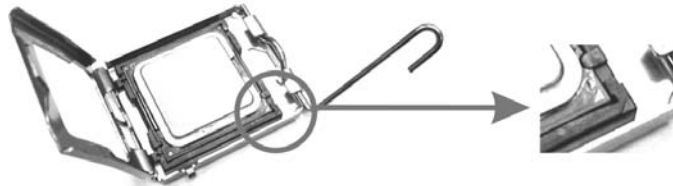
Motherboard Manual

Step 2: 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 2-1:



Step 2-2:



Step 3: Hold the CPU down firmly, and then lower the lever to locked position to complete the installation.

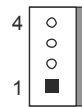
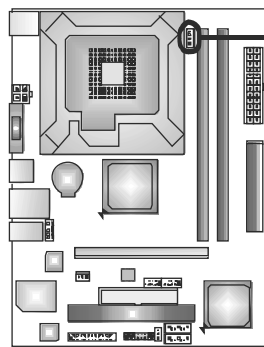


Step 4: Put the CPU Fan and heatsink assembly on the CPU and buckle it on the retention frame. Connect the CPU FAN power cable into the CPU_FAN1. This completes the installation.

2.2 FAN HEADERS

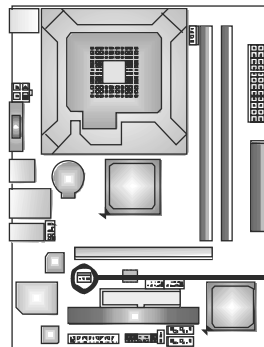
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

CPU_FAN1: CPU Fan Header



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

SYS_FAN1: System Fan Header



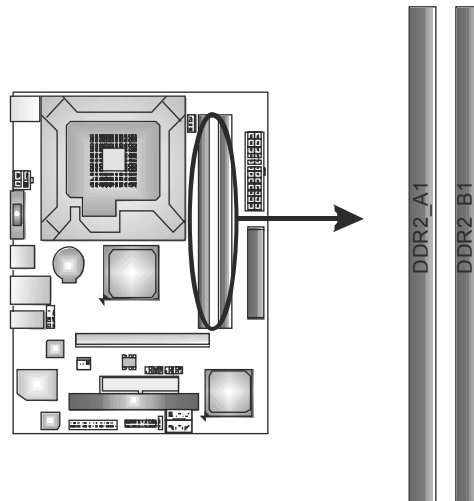
| Pin | Assignment |
|-----|--------------------|
| 1 | Ground |
| 2 | +12V |
| 3 | FAN RPM rate sense |

Note:

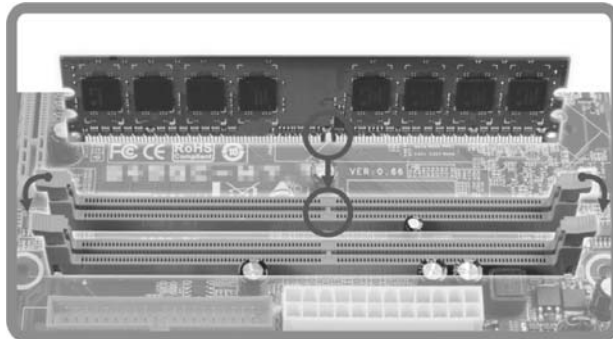
The CPU_FAN1 support 4-pin head connector and SYS_FAN1 support 3-pin head connector. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.3 INSTALLING SYSTEM MEMORY

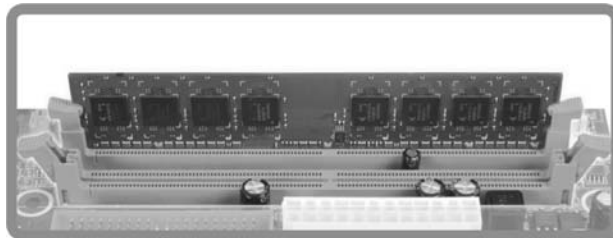
A. DDR2 module



1. Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot so 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 | DDR2 Module | Total Memory Size |
|----------------------|---------------------|-------------------|
| DDR2_A1 | 256MB/512MB/1GB/2GB | Max is 4GB. |
| DDR2_B1 | 256MB/512MB/1GB/2GB | |

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 | DDR2_A1 | DDR2_B1 |
|---------------------|---------|---------|
| Disabled | O | X |
| Disabled | X | O |
| Enabled | O | O |

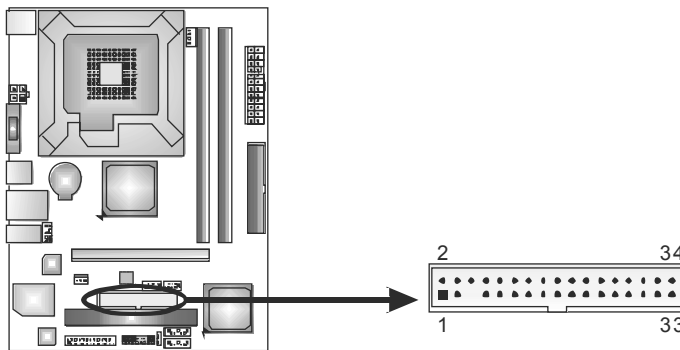
(O means memory installed, X means memory not installed.)

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

2.4 CONNECTORS AND SLOTS

FDD1: Floppy Disk Connector

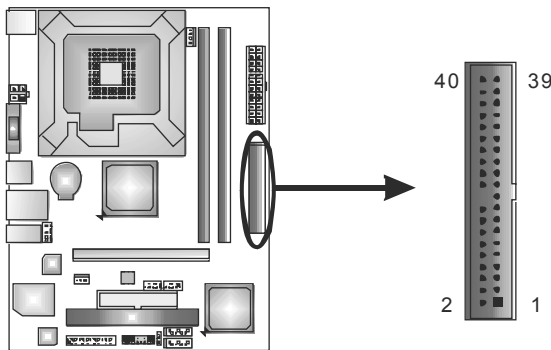
The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.



IDE1: IDE/ATAPI 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 functionality.

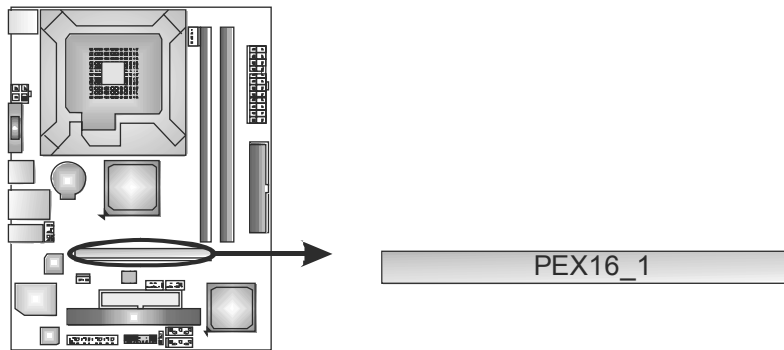
The IDE connector can connect a master and a slave drive, so you can connect up to two drives.



PEX16_1: PCI-Express x16 Slot

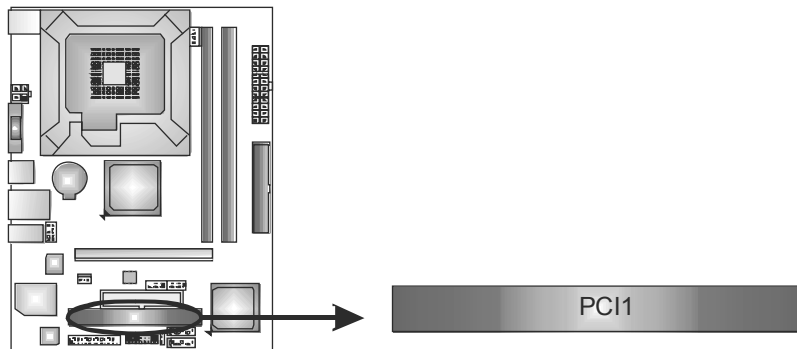
PCI-Express 1.0a compliant.

- Maximum theoretical realized bandwidth of 4GB/s simultaneously per direction, for an aggregate of 8GB/s totally.
- PCI-Express supports a raw bit-rate of 2.5Gb/s on the data pins.
- 2X bandwidth over the traditional PCI architecture.



PCI1: Peripheral Component Interconnect Slot

This motherboard is equipped with 1 standard PCI slot. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.



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

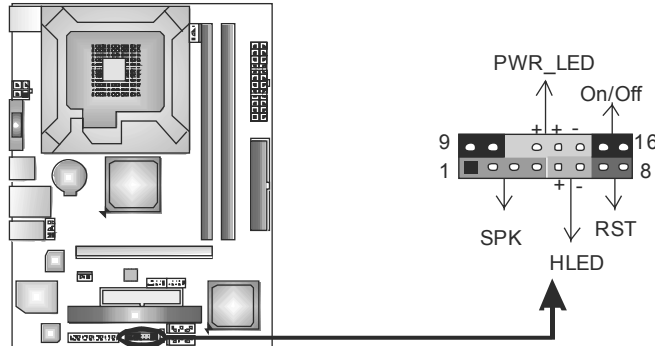


Pin1-2 closed

3.2 DETAIL SETTINGS

PANEL1: Front Panel Header

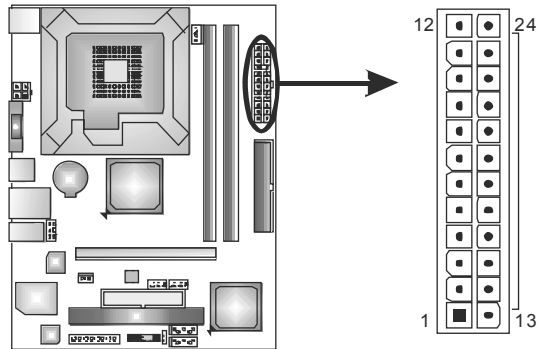
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, and speaker connection. It allows user to connect the PC case’s front panel switch functions.



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

ATXPWR1: ATX Power Source Connector

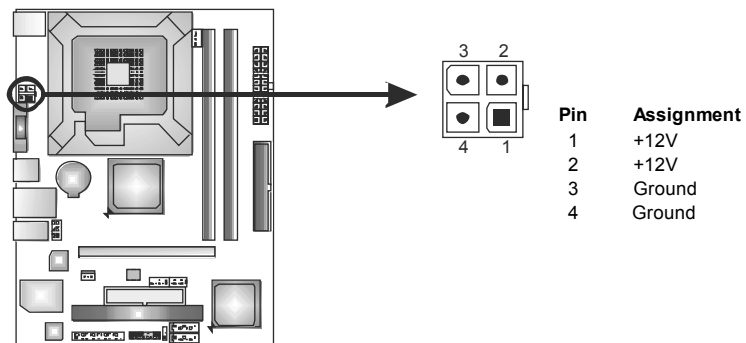
This connector allows user to connect 24-pin power connector on the ATX power supply.



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

ATXPWR2: ATX Power Source Connector

This connector provides +12V to CPU power circuit.

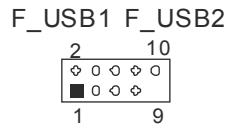
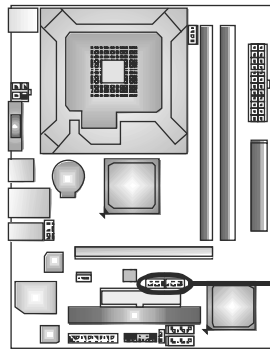


Note:

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

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

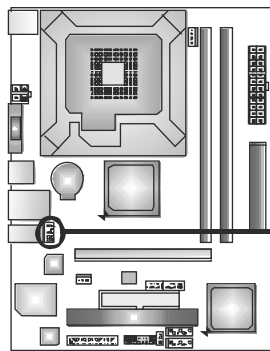
This motherboard provides 2 USB 2.0 headers, which allows user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



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

F_AUDIO1: Front Panel Audio Header

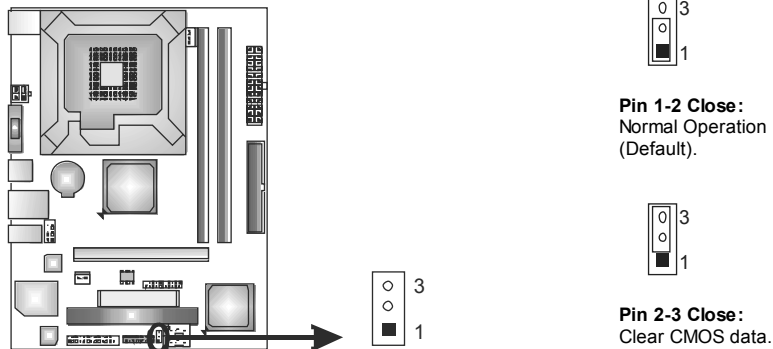
This header allows user to connect the front audio output cable with the PC front panel. This header allows only HD audio front panel connector; AC'97 connector is not acceptable.



| 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 |

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.

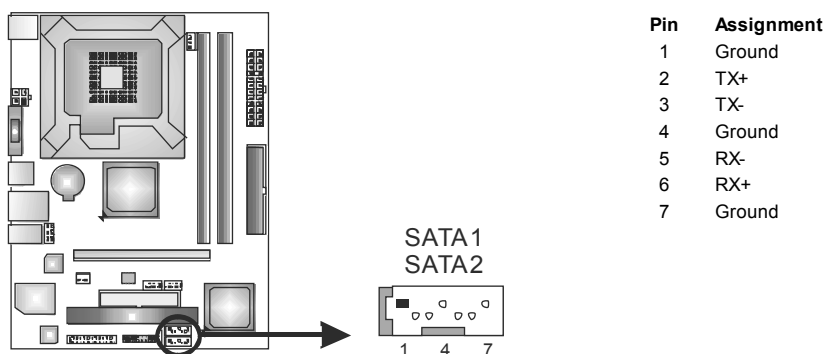


※ Clear CMOS Procedures:

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.

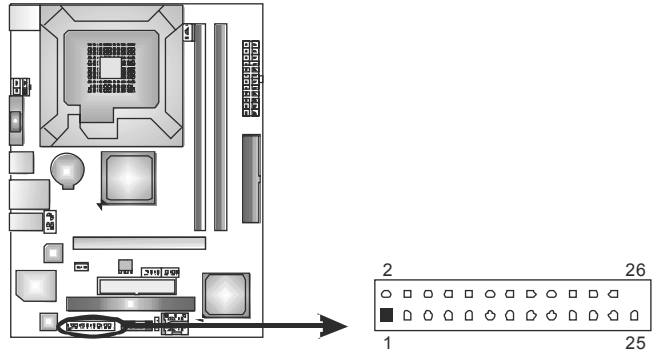
SATA1/SATA2: Serial ATA Connectors

The motherboard has a PCI to SATA Controller with 2channels SATA interface, it satisfies the SATA 2.0 spec and with transfer rate of 3Gb/s.



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 |

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

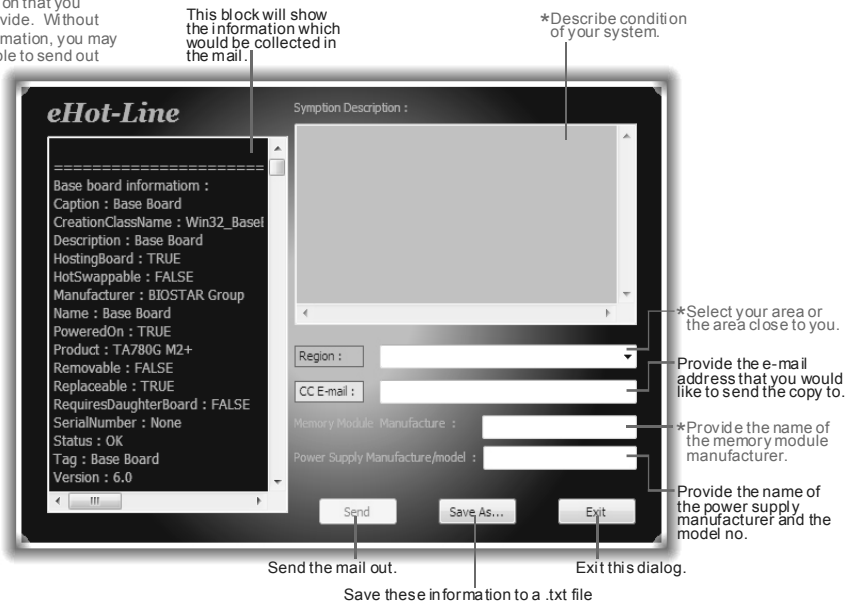
After the installation process, you will see the software icon “eHOT Line” / “BIOS Update” appears on the desktop. Double-click the icon to launch the utility.

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.



The screenshot shows the eHot-Line utility window. On the left, there is a list of system information under the heading "Base board information :". On the right, there is a "Symptom Description :" text area. Below these are input fields for "Region :", "CC E-mail :", "Memory Module Manufacture :", and "Power Supply Manufacture/model :". At the bottom, there are three buttons: "Send", "Save As...", and "Exit".

Annotations for the screenshot:

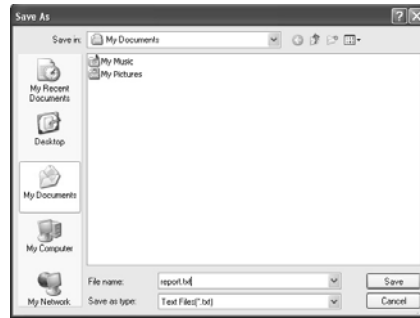
- "This block will show the information which would be collected in the mail." points to the system information list.
- "*Describe condition of your system." points to the Symptom Description text area.
- "*Select your area or the area close to you." points to the Region input field.
- "Provide the e-mail address that you would like to send the copy to." points to the CC E-mail input field.
- "*Provide the name of the memory module manufacturer." points to the Memory Module Manufacture input field.
- "Provide the name of the power supply manufacturer and the model no." points to the Power Supply Manufacture/model input field.
- "Send the mail out." points to the Send button.
- "Save these information to a .txt file" points to the Save As... button.
- "Exit this dialog." points to the Exit 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 concluded in the sent mail.



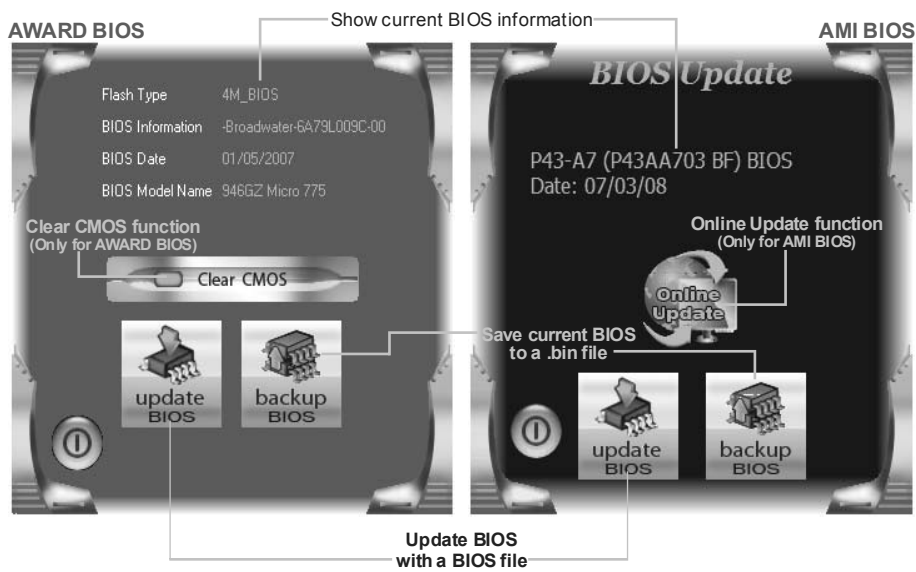
We will not share customer’s data with any other third parties, so please feel free to provide your system information while using eHot-Line service.



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.

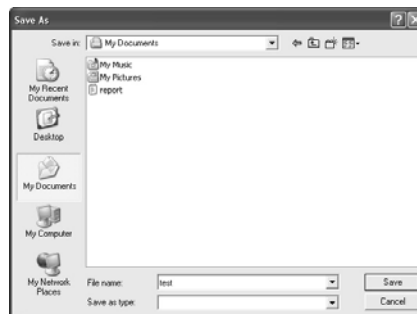
BIOS Update

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



<Backup BIOS>

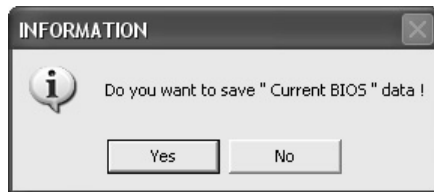
Once click on this button, the saving dialog will show. Choose the position to save file and enter file name. (We recommend that the file name should be English/number and no longer than 7 characters.) Then click **Save**.



<Update BIOS>

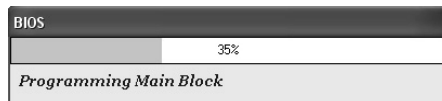
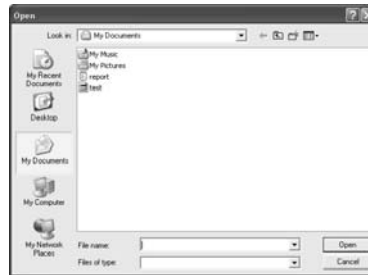
Before doing this, please download the proper BIOS file from the website.

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



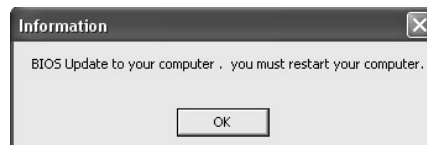
Then click Update BIOS button, a dialog will show for asking you backup current BIOS. Click **Yes** for BIOS backup and refer to the Backup BIOS procedure; or click **No** to skip this procedure.


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.



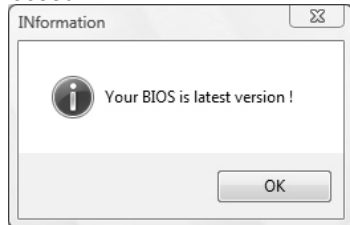
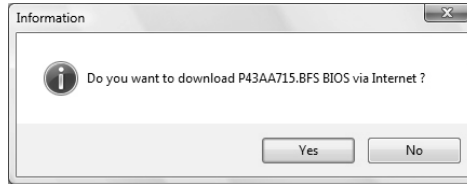
While the system boots up and the full screen logo shows, press  <Delete> key to enter BIOS setup.

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

<Online Update> (for AMI BIOS only)

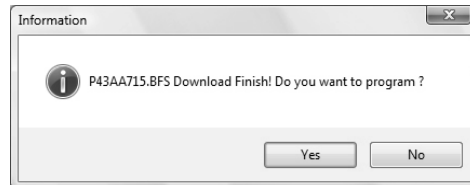
Automatically download and update the latest BIOS via internet; **make sure that the computer is connected to the internet before using this function.**

After clicking on the **Online Update** button, the utility will search for the latest BIOS from internet. If there is a new BIOS version, the utility will ask you to download it. Click **Yes** to proceed.

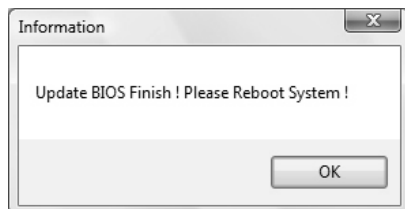


If there is no other newer BIOS version, the utility will also tell you that your BIOS has been the latest version.


Download completes; the utility will ask you to program (update) the BIOS. Click **Yes** to proceed.



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



After the updating process, the utility will ask you to reboot the system. Click **OK** to reboot.

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. Online Update is completed.



All the information and content above about the T-Series 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 | LGA 775 Intel Core2Duo / Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx Prozessoren (Maximales Watt: 65W) | Unterstützt Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology |
| FSB | 800 / 1066 / 1333 MHz | |
| Chipsatz | Intel G31 Intel ICH7 | |
| 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 | DDR2 DIMM-Steckplätze x 2 Jeder DIMM unterstützt 256MB / 512MB / 1GB / 2GB DDR2. Max. 4GB Arbeitsspeicher | Dual-Kanal DDR2 Speichermodul Unterstützt DDR2 800/667/533 registrierte DIMMs. ECC DIMMs werden nicht unterstützt. (CPU mit 533 MHz FSB unterstützt nur DDR2-533) |
| Grafik | GMA 3100 | Max. 384MB gemeinsam benutzter Videospeicher (Abhängig von OS und Speichergröße) |
| IDE | Integrierter IDE-Controller | Ultra DMA 33 / 66 / 100 Bus Master-Modus Unterstützt PIO-Modus 0~4, |
| SATA | Integrierter Serial ATA-Controller | Datentransferrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0. |
| LAN | Realtek RTL 8103EL / RTL 8102EL | 10 / 100 Mb/s Auto-Negotiation Halb-/ Vollduplex-Funktion |
| HD Audio-Unterstützung | ALC662 / VT1708B | Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe |
| Steckplätze | PCI-Steckplatz x1 PCI Express x16 Steckplatz x1 | |

| Spezifikationen | | | |
|---------------------------|-------------------------------|----|--|
| Onboard-Anschluss | Diskettenlaufwerkanschluss | x1 | Jeder Anschluss unterstützt 2 Diskettenlaufwerke |
| | Druckeranschluss Anschluss | x1 | Jeder Anschluss unterstützt 1 Druckeranschluss |
| | IDE-Anschluss | x1 | Jeder Anschluss unterstützt 2 IDE-Laufwerke |
| | SATA-Anschluss | x4 | Jeder Anschluss unterstützt 1 SATA-Laufwerk |
| | Fronttafelanschluss | x1 | Unterstützt die Fronttafel-Funktionen |
| | Front-Audioanschluss | x1 | Unterstützt die Fronttafel-Audioanschlussfunktion |
| | 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 |
| Stromanschluss (24-polig) | x1 | | |
| Stromanschluss (4-polig) | x1 | | |
| Rückseiten-E/A | PS/2-Tastatur | x1 | |
| | PS/2-Maus | x1 | |
| | VGA-Anschluss | x1 | |
| | LAN-Anschluss | x1 | |
| | USB-Anschluss | x4 | |
| Audioanschluss | x3 | | |
| Platinengröße | 170 mm (B) X 225 mm (L) | | |
| OS-Unterstützung | Windows 2000 / XP / Vista / 7 | | Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen. |

FRENCH

| <i>SPEC</i> | | |
|--------------------------|---|--|
| UC | LGA 775 Processeurs Intel Core2Duo /Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx (Watt maximum : 65W) | Prend en charge les technologies Hyper-Threading / d'exécution de bit de désactivation / Intel SpeedStep® optimisée/ d'architecture Intel 64 / de mémoire étendue 64 / de virtualisation |
| Bus frontal | 800 / 1066 / 1333 MHz | |
| Chipset | Intel G31 Intel ICH7 | |
| 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 DDR2 DIMM x 2 Chaque DIMM prend en charge des DDR2 de 256Mo / 512Mo / 1Go / 2Go Capacité mémoire maximale de 4Go | Module de mémoire DDR2 à mode à double voie Prend en charge la DDR2 800/667/533 Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge (UC avec FSB 533 MHz ne prend en charge que DDR2 533) |
| Graphiques | GMA 3100 | Mémoire vidéo partagée maximale de 384 Mo (Selon la capacité d'OS et de mémoire) |
| IDE | Contrôleur IDE intégré | Mode principale de Bus Ultra DMA 33 / 66 / 100 Prend en charge le mode PIO 0~4, |
| SATA | Contrôleur Serial ATA intégré | Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0 |
| LAN | Realtek RTL 8103EL / RTL 8102EL | 10 / 100 Mb/s négociation automatique Half / Full duplex capability |
| Prise en charge audio HD | ALC662 / VT1708B | Prise en charge de l'audio haute définition Sortie audio à 5.1 voies |
| Fentes | Fente PCI x1 Fente PCI Express x16 | |

| SPEC | | | |
|--|---|----|--|
| Connecteur embarqué | Connecteur de disquette | x1 | Chaque connector prend en charge 2 lecteurs de disquettes |
| | Connecteur de Port d'imprimante | x1 | Chaque connector prend en charge 1 Port d'imprimante |
| | Connecteur IDE | x1 | Chaque connecteur prend en charge 2 périphériques IDE |
| | Connecteur SATA | x4 | Chaque connecteur prend en charge 1 périphérique SATA |
| | Connecteur du panneau avant | x1 | Prend en charge les équipements du panneau avant |
| | Connecteur Audio du panneau avant | x1 | Prend en charge la fonction audio du panneau avant |
| | Embase de ventilateur UC | x1 | Alimentation électrique du ventilateur UC (avec fonction de ventilateur intelligent) |
| | 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 d'alimentation (24 broches) | x1 | |
| Connecteur d'alimentation (4 broches) | x1 | | |
| E/S du panneau arrière | Clavier PS/2 | x1 | |
| | Souris PS/2 | x1 | |
| | Port VGA | x1 | |
| | Port LAN | x1 | |
| | Port USB | x4 | |
| | Fiche audio | x3 | |
| Dimensions de la carte | 170 mm (l) X 225 mm (H) | | |
| Support SE | Windows 2000 / XP / Vista / 7 | | Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis. |

ITALIAN

| SPECIFICA | | |
|-----------------------|--|--|
| CPU | LGA 775 Processore Intel Core2Duo /Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx (Watt massimo: 65W) | Supporto di Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization |
| FSB | 800 / 1066 / 1333 MHz | |
| Chipset | Intel G31 Intel ICH7 | |
| Super I/O | ITE 8721 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 DDR2 x 2 Ciascun DIMM supporta DDR2 256MB / 512MB / 1GB / 2GB Capacità massima della memoria 4GB | Modulo di memoria DDR2 a canale doppio Supporto di DDR2 800/667/533 DIMM registrati e DIMM ECC non sono supportati (CPU con FSB a 533 MHz supporta solo DDR2 533) |
| Grafica | GMA 3100 | La memoria video condivisa massima è di 384MB (Secondo l'OS e la capacità di memoria) |
| IDE | Controller IDE integrato | Modalità Bus Master Ultra DMA 33 / 66 / 100 Supporto modalità PIO Mode 0-4 |
| SATA | Controller Serial ATA integrato | Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0. |
| LAN | Realtek RTL 8103EL / RTL 8102EL | Negoziazione automatica 10 / 100 Mb/s Capacità Half / Full Duplex |
| Supporto audio HD | ALC662 / VT1708B | Supporto audio High-Definition (HD) Uscita audio 5.1 canali |
| Alloggi | Alloggio PCI x1 Alloggio PCI Express x16 | |

| SPECIFICA | | | |
|--------------------------------------|--|----|---|
| Connettori su scheda | Connettore floppy | x1 | Ciascun connettore supporta 2 unità Floppy |
| | Connettore Porta stampante | x1 | Ciascun connettore supporta 1 Porta stampante |
| | 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 |
| | Collettore ventolina CPU | x1 | Alimentazione ventolina CPU (con funzione Smart Fan) |
| | Collettore ventolina sistema | x1 | Alimentazione ventolina di sistema |
| | Collettore cancellazione CMOS | x1 | |
| | Connettore USB | x2 | Ciascun connettore supporta 2 porte USB pannello frontale |
| Connettore alimentazione (24 pin) | x1 | | |
| Connettore alimentazione (4 pin) | x1 | | |
| I/O pannello posteriore | Tastiera PS/2 | x1 | |
| | Mouse PS/2 | x1 | |
| | Porta VGA | x1 | |
| | Porta LAN | x1 | |
| | Porta USB | x4 | |
| | Connettore audio | x3 | |
| Dimensioni i scheda | 170 mm (larghezza) x 225 mm (altezza) | | |
| Sistemi operativi supportati | Windows 2000 / XP / Vista / 7 | | Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso. |

SPANISH

| <i>Especificación</i> | | |
|-----------------------|---|---|
| CPU | LGA 775 Procesador Intel Core2Duo /Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx (Vatio máximo: 65W) | Admite Hyper-Threading / Bit de deshabilitación de ejecución / Intel SpeedStep® Mejorado / Intel Architecture-64 / Tecnología Extended Memory 64 / Tecnología de virtualización |
| FSB | 800 / 1066 / 1333 MHz | |
| Conjunto de chips | Intel G31 Intel ICH7 | |
| 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 | Alloggi DIMM DDR2 x 2 Ciascun DIMM supporta DDR2 256MB / 512MB / 1GB / 2GB Capacità massima della memoria 4GB | Modulo di memoria DDR2 a canale doppio Supporto di DDR2 800/667/533 DIMM registrati e DIMM ECC non sono supportati (CPU con FSB a 533 MHz supporta solo DDR2 533) |
| Gráficos | GMA 3100 | Memoria máxima de vídeo compartida de 384MB (Dependiendo de tamaño del OS y de la memoria) |
| IDE | Controlador IDE integrado | Modo bus maestro Ultra DMA 33 / 66 / 100 Soporte los Modos PIO 0~4, |
| SATA | Controlador ATA Serie Integrado | Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0. |
| Red Local | Realtek RTL 8103EL / RTL 8102EL | Negociación de 10 / 100 Mb/s Funciones Half / Full dúplex |
| Soporte de sonido HD | ALC662 / VT1708B | Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales |
| Ranuras | Ranura PCI X1 Ranura PCI Express x16 X1 | |

| Especificación | | | |
|--|-----------------------------------|----|--|
| Conectores en placa | Conector disco flexible | X1 | Cada conector soporta 2 unidades de disco flexible |
| | Conector Puerto de impresora | X1 | Cada conector soporta 1 Puerto de impresora |
| | Conector IDE | X1 | Cada conector soporta 2 dispositivos IDE |
| | Conector SATA | X4 | Cada conector soporta 1 dispositivos SATA |
| | Conector de panel frontal | X1 | Soporta instalaciones en el panel frontal |
| | Conector de sonido frontal | X1 | Soporta funciones de sonido en el panel frontal |
| | 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 alimentación (24 patillas) | X1 | | |
| Conector de alimentación (4 patillas) | X1 | | |
| Panel trasero de E/S | Teclado PS/2 | X1 | |
| | Ratón PS/2 | X1 | |
| | Puerto VGA | X1 | |
| | Puerto de red local | X1 | |
| | Puerto USB | X4 | |
| Conector de sonido | X3 | | |
| Tamaño de la placa | 170 mm. (A) X 225 Mm. (H) | | |
| Soporte de sistema operativo | Windows 2000 / 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 | LGA 775 Processador Intel Core2Duo /Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx (Watt máximo: 65W) | Suporta as tecnologias Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture -64 / Extended Memory 64 / Virtualization |
| FSB | 800 / 1066 / 1333 MHz | |
| Chipset | Intel G31 Intel ICH7 | |
| Especificação do 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 DDR2 x 2 Cada módulo DIMM suporta uma memória DDR2 de 256 MB / 512 MB / 1GB / 2GB Capacidade máxima de memória:4 GB | Módulo de memória DDR2 de canal duplo Suporta módulos DDR2 800/667/533 Os módulos DIMM registados e os DIMM ECC não são suportados (CPU com FSB 533 MHz só suporta DDR2 533) |
| Placa gráfica | GMA 3100 | Memória de vídeo máxima partilhada: 384 MB (Dependendo do tamanho do ósmio e de memória) |
| IDE | Controlador IDE integrado | Modo Bus master Ultra DMA 33 / 66 / 100 Suporta o modo PIO 0~4, |
| 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 RTL 8103EL / RTL 8102EL | Auto negociação de 10 / 100 Mb/s Capacidade semi/full-duplex |
| Suporte para áudio de alta definição | ALC662 / VT1708B | Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais |
| Ranuras | Ranura PCI x1 Ranura PCI Express x16 x1 | |

| ESPECIFICAÇÕES | | | |
|--|---------------------------------------|----|---|
| Conectores na placa | Conector da unidade de disquetes | x1 | Cada conector suporta 2 unidades de disquetes |
| | Conector da para impressora | x1 | Cada conector suporta 1 Porta para impressora |
| | Conector IDE | x1 | Cada conector suporta 2 dispositivos IDE |
| | 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 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 alimentação (24 pinos) | x1 | |
| Conector de alimentação (4 pinos) | x1 | | |
| Entradas/S aídas no painel traseiro | Teclado PS/2 | x1 | |
| | Rato PS/2 | x1 | |
| | Porta VGA | x1 | |
| | Porta LAN | x1 | |
| | Porta USB | x4 | |
| | Tomada de áudio | x3 | |
| Tamanho da placa | 170 mm (L) X 225 mm (A) | | |
| Sistemas operativos suportados | Windows 2000 / XP / Vista / 7 | | A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio. |

POLISH

| SPEC | | |
|---------------------|---|---|
| Procesor | LGA 775 Procesor Intel Core2Duo /Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx (Maksymalny Watt: 65W) | Obsługa Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology |
| FSB | 800 / 1066 / 1333 MHz | |
| Chipset | Intel G31 Intel ICH7 | |
| Pamięć główna | Gniazda DDR2 DIMM x 2 Każde gniazdo DIMM obsługuje moduły 256MB / 512MB / 1GB / 2GB Maks. wielkość pamięci 4GB | Moduł pamięci DDR2 z trybem podwójnego kanału Obsługa DDR2 800/667/533 Brak obsługi Registered DIMM oraz ECC DIMM (CPU z FSB 533 MHz tylko obsługuje pamięci DDR2 533) |
| Grafika | GMA 3100 | Maks. wielkość współdzielonej pamięci video wynosi 384MB (W zależności od wielkości pamięci i OS) |
| 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" |
| IDE | Zintegrowany kontroler IDE | Ultra DMA 33 / 66 / 100 Tryb Bus Master obsługa PIO tryb 0~4, |
| SATA | Zintegrowany kontroler Serial ATA | Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0. |
| LAN | Realtek RTL 8103EL / RTL 8102EL | 10 / 100 Mb/s z automatyczną negocjacją szybkości Działanie w trybie półwiznego / pełnego duplexu |
| Obsługa audio HD | ALC662 / VT1708B | Obsługa High-Definition Audio 5.1 kanałowe wyjście audio |
| Gniazda | Gniazdo PCI x1 Gniazdo PCI Express x16 x1 | |

| SPEC | | | |
|------------------------------|---|----|---|
| Złącza wbudowane | Złącze napędu dyskietek | x1 | Każde złącze obsługuje 2 napędy dyskietek |
| | Złącze Port drukarki | x1 | Każde złącze obsługuje 1 Port drukarki |
| | Złącze IDE | x1 | Każde złącze obsługuje 2 urządzenia IDE |
| | Złącze SATA | x4 | Każde złącze obsługuje 1 urządzenie SATA |
| | Złącze panela przedniego | x1 | Obsługa elementów panela przedniego |
| | Przednie złącze audio | x1 | Obsługa funkcji audio na panelu przednim |
| | 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 zasilania (24 pinowe) | x1 | |
| | Złącze zasilania (4 pinowe) | x1 | |
| Back Panel I/O | Klawiatura PS/2 | x1 | |
| | Mysz PS/2 | x1 | |
| | Port VGA | x1 | |
| | Port LAN | x1 | |
| | Port USB | x4 | |
| | Gniazdo audio | x3 | |
| Wymiary płyty | 170 mm (S) X 225 mm (W) | | |
| Obsługa systemu operacyjnego | Windows 2000 / XP / Vista / 7 | | Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia. |

RUSSIAN

| СПЕЦ | | |
|-----------------------------------|--|---|
| CPU (центральный процессор) | LGA 775 Процессор Intel Core2Duo /Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx (Максимальный ватт: 65W) | Поддержка технологий Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация |
| FSB | 800 / 1066 / 1333 МГц | |
| Набор микросхем | Intel G31 Intel ICH7 | |
| Основная память | Слоты DDR2 DIMM x 2 Каждый модуль DIMM поддерживает 256 МБ / 512МБ / 1ГБ / 2ГБ DDR2 Максимальная ёмкость памяти 4ГБ | Модуль памяти с двухканальным режимом DDR2 Поддержка DDR2 800/667/533 Не поддерживает зарегистрированные модули DIMM and ECC DIMM (Процессор с ФСБ 533 МГц поддерживает только DDR2 533) |
| Графика | GMA 3100 | Максимальная совместно используемая видео память составляет 384 МБ (В зависимости от осмия и размера запоминающего устройства) |
| 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) |
| IDE | Встроенное устройство управления встроенными интерфейсами устройств | Режим "хозяина" шины Ultra DMA 33 / 66 / 100 Поддержка режима PIO 0~4, |
| SATA | Встроенное последовательное устройство управления ATA | скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0. |
| Локальная сеть | Realtek RTL 8103EL / RTL 8102EL | Автоматическое согласование 10 / 100 Мб/с Частичная / полная дуплексная способность |
| Звуковая поддержка жесткого диска | ALC662 / VT1708B | Звуковая поддержка High-Definition 5.1канальный звуковой выход |
| Слоты | Слот PCI x1 Слот PCI Express x16 | |

| СПЕЦ | | | |
|---|---|----|--|
| Встроенны й разъём | Разъём НГМД | x1 | Каждый разъём поддерживает 2 накопителя на гибких магнитных дисках |
| | Разъём Порт подключения принтера | x1 | Каждый разъём поддерживает 1 Порт подключения принтера |
| | 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 |
| | 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 |
| Разъем питания (24 вывод) | x1 | | |
| Разъем питания (4 вывод) | x1 | | |
| Задняя панель средств ввода-выв ода | Клавиатура PS/2 | x1 | |
| | Мышь PS/2 | x1 | |
| | Порт VGA | x1 | |
| | Порт LAN | x1 | |
| | USB-порт | x4 | |
| Размер панели | Гнездо для подключения наушников | x3 | |
| | 170 мм (Ш) X 225 мм (В) | | |
| Поддержка OS | Windows 2000 / XP / Vista / 7 | | Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления. |

ARABIC

| للمواصفات | | |
|---|--|---------------------------|
| Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology | LGA 775 Intel Core2Duo / Pentium Dual-Core / Celeron Dual-Core / يتردد يصل إلى Celeron 4xx (و65: قصوى واط) | وحدة المعالجة المركزية |
| | ميجا هرتز 800 / 1066 / 1333 تردد | الثقل الأمامي الجليبي |
| | Intel G31 Intel ICH7 | مجموعة الشرائح |
| مزدوجة الذاكرة DDR2 وحدة ذاكرة سعت 800/667/533 ميجا بايت DDR2 تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة تدعم فقط ميفاهيرتر المركزية المعالجة وحدة مع ميجا هرتز (533 DDR2 533) | قذحة DDR2 DIMM عدد 2 سعة DDR2 تدعم ذاكرة من نوع DIMM كل قذحة ميجا بايت 2 و 1 جيجا بايت 256/512 سعة ذاكرة قصوى 4 جيجا بايت | الذاكرة الرئيسية |
| ميجا بايت 384 أقصى سعة لذاكرة الفيديو المشتركة (الذاكرة وحجم التثبيث نظم على اعتمادا) | GMA 3100 | بطاقة الرسومات |
| وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة | ITE 8721 الأكثر استخداماً Super I/O ووظيفة Low Pin Count Interface تدعم تقنية | Super I/O |
| وضع رئيسي Ultra DMA 33 / 66 / 100 نقل بتقنية PIO Mode 0~4 دعم وضع | متكامل IDE متحكم | منفذ IDE |
| جيجابت/ثانية 3.0 نقل البيانات بسرعت تصل إلى 2.0 الإصدار SATA مطابقة للمواصفات | متكامل Serial ATA متحكم | SATA |
| تفاوض تلقائي 100/10 ميجا بايت / ثانية إمكانية النقل المزدوج الكامل/القصفي | Realtek RTL 8103EL / RTL 8102EL | شبكة داخلية |
| تدعم تقنية الصوت عالي التعريف من 5.1 قنوات لخرج الصوت | ALC662 / VT1708B | دعم الصوت عالي التعريف |
| | قذحة PCI عدد 1 قذحة PCI Express x16 عدد 1 | الفتحات |

| المواصفات | | |
|--|-------|-----------------------------------|
| يدعم محرك الأقراص المرنة | عدد 1 | منفذ محرك أقراص مرنة |
| | عدد 1 | منفذ طباعة |
| IDE يدعم كل منفذ الثقب من أجهزة | عدد 1 | منفذ IDE |
| SATA يدعم كل منفذ واحد من أجهزة | عدد 4 | منفذ SATA |
| يدعم تجهيزات اللوحة الأممية | عدد 1 | منفذ اللوحة الأممية |
| يدعم وظيفة الصوت باللوحة الأممية | عدد 1 | منفذ الصوت الأممي |
| 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 مسح CMOS |
| باللوحة الأممية USB يدعم كل منفذ قحتي | عدد 2 | منفذ USB |
| | عدد 1 | منفذ توصيل الطاقة (24دبوس) |
| | عدد 1 | منفذ توصيل الطاقة (4دبوس) |
| | عدد 1 | لوحة مفاتيح PS/2 |
| | عدد 1 | ملوس PS/2 |
| | عدد 1 | منفذ VGA |
| | عدد 1 | منفذ شبكة اتصال محلية |
| | عدد 4 | منافذ USB |
| | عدد 3 | مقيس صوت |
| | | حجم اللوحة |
| | | 170 مم (عرض) X 225 مم (ارتفاع) |
| بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو بدون Biostar تحتفظ بإخطار . | | دعم أنظمة التشغيل |
| | | Windows 2000 / XP / Vista / 7 |

JAPANESE

| 仕様 | | |
|------------------|--|---|
| CPU | LGA 775 Intel Core2Duo / Pentium Dual-Core / Celeron Dual-Core / Celeron 4xx processor (最高のワット: 65W) | Hyper-Threading / Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technologyをサ ポートします |
| FSB | 800 / 1066 / 1333 MHz | |
| チップセット | Intel G31 Intel ICH7 | |
| メインメモリ | DDR2 DIMMスロット x 2 各DIMMは 256MB / 512MB / 1GB / 2GB DDR2をサポート 最大メモリ容量4GB | デュアル チャンネルモードDDR2 メモリモジュール DDR2 800/667/533をサポート 登録済みDIMMとECC DIMMはサポートされません (のCPUのFSBを533 MHzの唯一のDDR2 533をサポートし ています) |
| グラフィック ス | GMA 3100 | 最大の共有ビデオメモリは384MBです (OSとメモリのサイズにより異なります) |
| Super I/O | ITE 8721 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 |
| IDE | 統合IDEコントローラ | Ultra DMA 33 / 66 / 100バスマスタモード PIO Mode 0~4のサポート、 |
| 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仕様準拠。 |
| LAN | Realtek RTL 8103EL / RTL 8102EL | 10 / 100 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 / VT1708B | 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スロット x1 PCI Express x16スロット x1 | |

| 仕様 | | | |
|--------------|-------------------------------|----|---|
| オンボードコネクタ | フロッピーコネクタ | x1 | 各コネクタは2つのフロッピードライブをサポートします |
| | 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 |
| | IDEコネクタ | x1 | 各コネクタは2つのIDEデバイスをサポートします |
| | SATAコネクタ | x4 | 各コネクタは1つのSATAデバイスをサポートします |
| | フロントパネルコネクタ | x1 | フロントパネル機能をサポートします |
| | フロントオーディオコネクタ | x1 | フロントパネルオーディオ機能をサポートします |
| | CPUファンヘッダ | 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ダ | x1 | システムファン電源装置 |
| | CMOSクリアヘッダ | 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 |
| 電源コネクタ(24ピン) | x1 | | |
| 電源コネクタ(4ピン) | x1 | | |
| 背面パネル I/O | PS/2キーボード | x1 | |
| | PS/2マウス | x1 | |
| | VGAポート | x1 | |
| | LANポート | x1 | |
| | オーディオジャック | x3 | |
| ボードサイズ | 170 mm (幅) X 225 mm (高さ) | | |
| OSサポート | Windows 2000 / 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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