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CE

Dichiarazione di conformità sintetica

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

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

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

quando ad esso applicabili

Short Declaration of conformity

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

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

whenever these laws may be applied

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 BEFORE YOU START

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

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

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
- USB 2.0 Cable X1 (optional)
- Serial ATA Power Cable X 1 (optional)

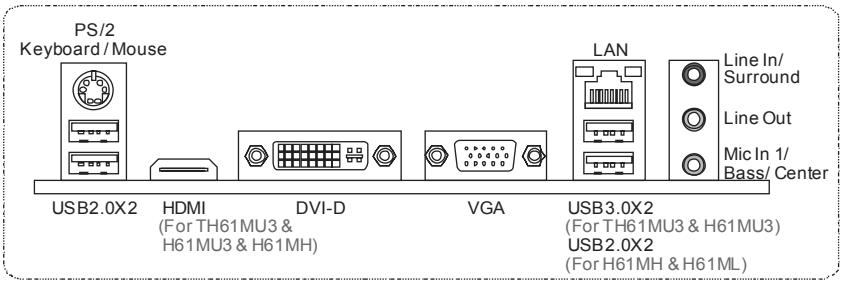
Note: The package contents may be different due to area or your motherboard version.

1.3 MOTHERBOARD FEATURES

	TH61MU3 / H61MU3	*H61MH / H61ML*
CPU	Socket 1155 Intel Core i7 / i5 / i3/ Pentium processor Supports Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 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 H61	Intel H61
Super I/O	ITE 8728 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	ITE 8728 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 1333/1066 Registered DIMM and ECC DIMM is not supported	DIMM Slots x 2 Each DIMM supports 512MB / 1GB / 2GB / 4GB DDR3 Max Memory Capacity 8GB Dual Channel Mode DDR3 memory module Supports DDR3 1333/1066 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	Integrated Serial ATA Controller Data transfer rates up to 3.0 Gb/s. SATA Version 2.0 specification compliant
LAN	Realtek RTL8111E 10 / 100 Mb/s / 1Gb/s auto negotiation	Realtek RTL8111E (H61MH) 10 / 100 Mb/s / 1Gb/s auto negotiation Realtek RTL8105E (H61ML) 10 / 100 Mb/s auto negotiation
Sound Codec	ALC662 5.1 channels audio out High Definition Audio	ALC662 5.1 channels audio out High Definition Audio
USB3.0	Asmedia ASM1042	
Slots	PCI Express Gen2 x16 Slot x1 PCI Express Gen2 x1 Slot x1 PCI Slot x2	PCI Express Gen2 x16 Slot x1 PCI Express Gen2 x1 Slot x1 PCI Slot x2
On Board Connectors	Printer Port Connector x1 Serial Port Connector x1 SATA Connector x4 Front Panel Connector x1 Front Audio Connector x1 S/PDIF out Connector x1	Printer Port Connector x1 Serial Port Connector x1 SATA Connector x4 Front Panel Connector x1 Front Audio Connector x1 S/PDIF out Connector x1

	TH61MU3 / H61MU3		H61MH / H61ML	
	CPU Fan Header	x1	CPU Fan Header	x1
	System Fan Header	x1	System Fan Header	x1
	Clear CMOS Header	x1	Clear CMOS Header	x1
	USB 2.0 Connector	x2	USB 2.0 Connector	x2
	Consumer IR Connector	x1	Consumer IR Connector	x1
	Power Connector (24pin)	x1	Power Connector (24pin)	x1
	Power Connector (4pin)	x1	Power Connector (4pin)	x1
Back Panel I/O	PS/2 Keyboard / Mouse	x1	PS/2 Keyboard / Mouse	x1
	HDMI Port	x1	HDMI Port (H61MH)	x1
	VGA Port	x1	VGA Port	x1
	DVI-D Port	x1	DVI-D Port	x1
	LAN Port	x1	LAN Port	x1
	USB2.0 Port (by H61)	x2	USB2.0 Port	x4
	USB3.0 Port (by ASM1042)	x2	Audio Jack	x3
	Audio Jack	x3		
Board Size	200 (W) x 244 (L) mm		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		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



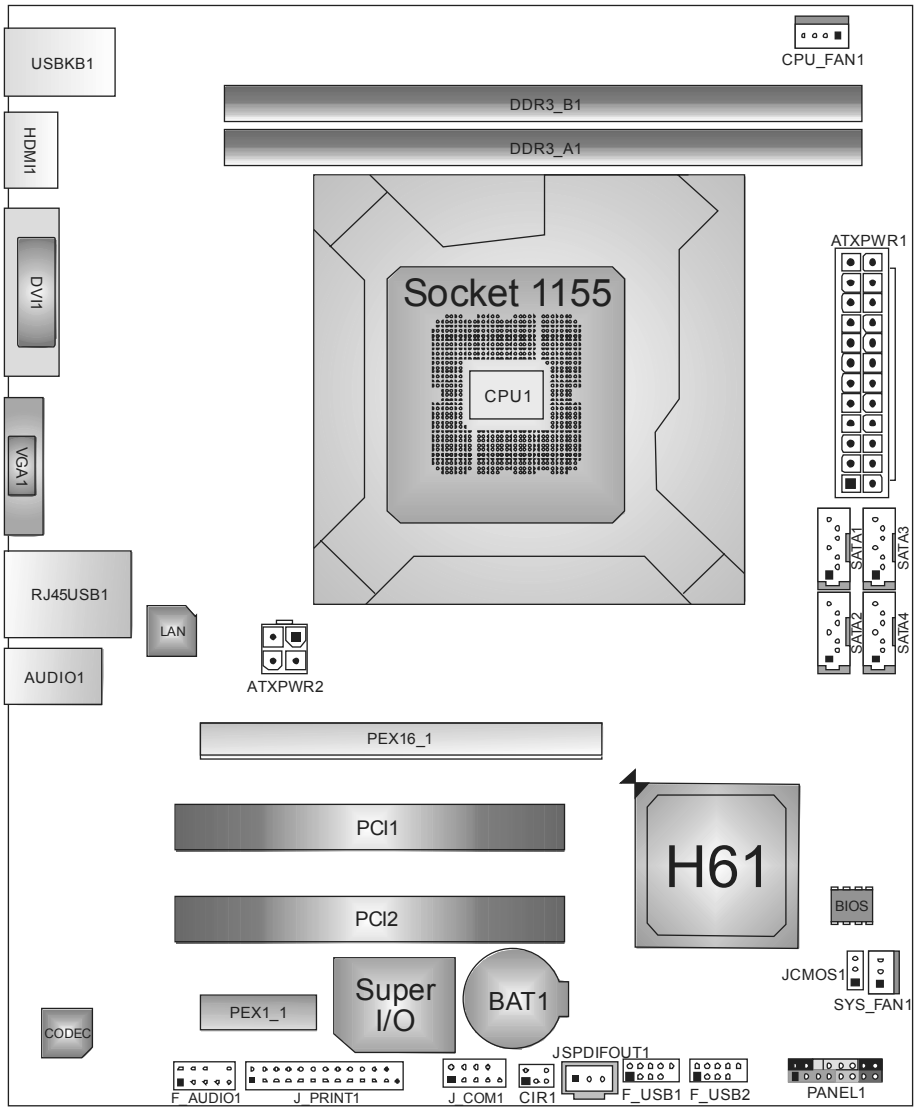
NOTE: HDMI / DVI-D / VGA Output require an Intel Core family processor with Intel Graphics Technology.

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	O

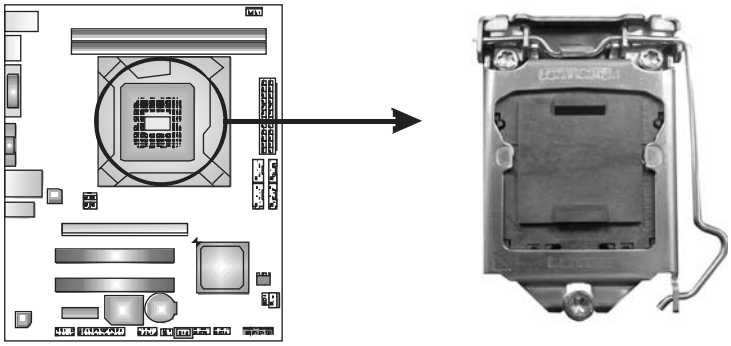
1.5 MOTHERBOARD LAYOUT



Note: ■ represents the 1st pin.

CHAPTER 2: HARDWARE INSTALLATION

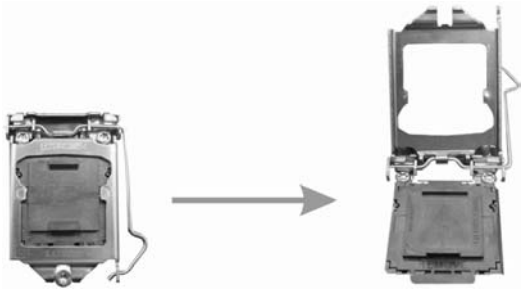
2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)



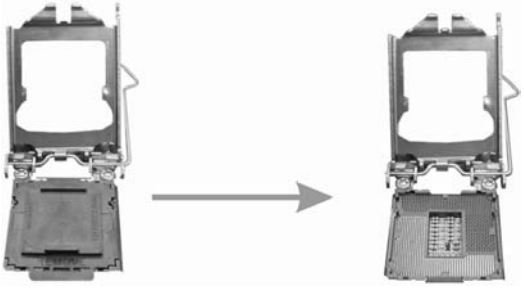
Special Notice:

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.

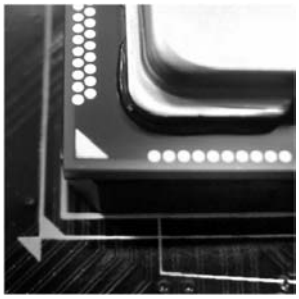
Step 1: Pull the socket locking lever out from the socket and then raise the lever up.



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.



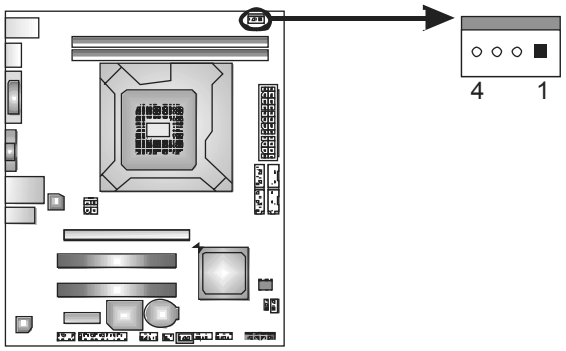
Step 4: Hold the CPU down firmly, and then lower the lever to locked position to complete the installation.

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

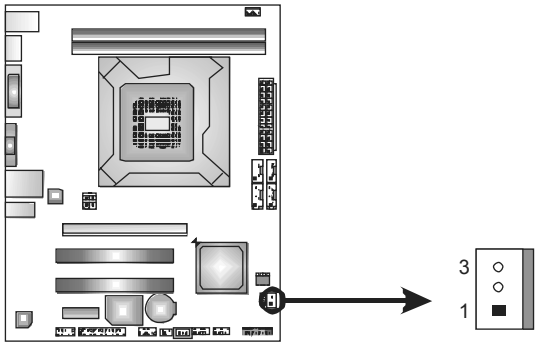
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different due to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

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



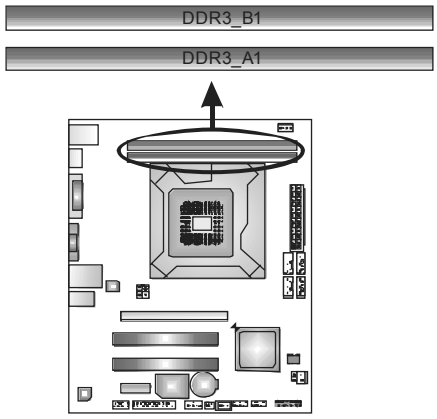
Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense

Note:

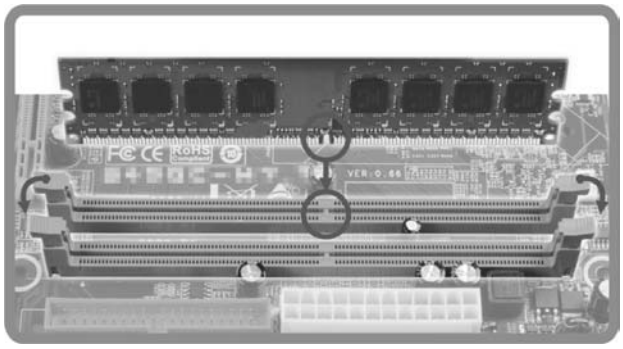
CPU_FAN1 supports 4-pin head connector; SYS_FAN1, 3-pin head one. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.3 INSTALLING SYSTEM MEMORY

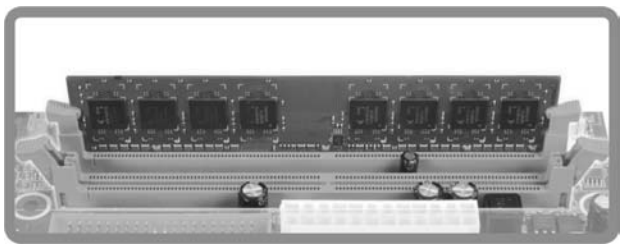
A. DDR3 module



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

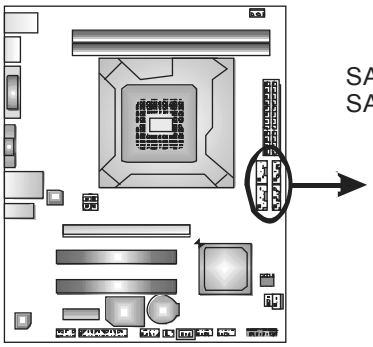
(O means memory installed; X, not installed.)

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

2.4 Connectors and Slots

SATA1~SATA4: Serial ATA Connectors

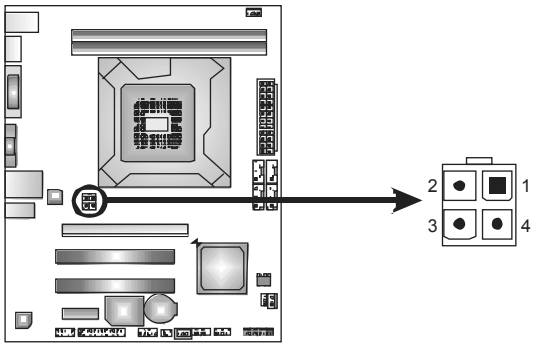
The motherboard has a PCI to SATA Controller with 4channels SATA interface, it satisfies the SATA 2.0 spec and with transfer rate of 3Gb/s.



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

ATXPWR2: ATX Power Source Connector

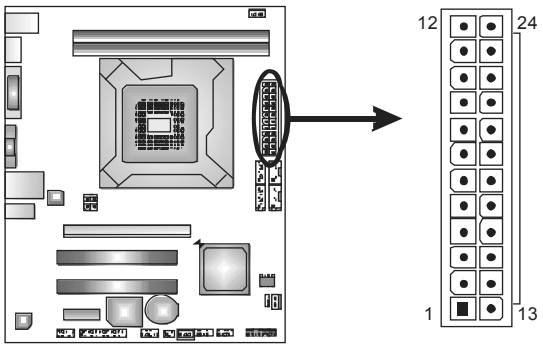
This connector provides +12V to CPU power circuit.



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

ATXPWR1: ATX Power Source Connector

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



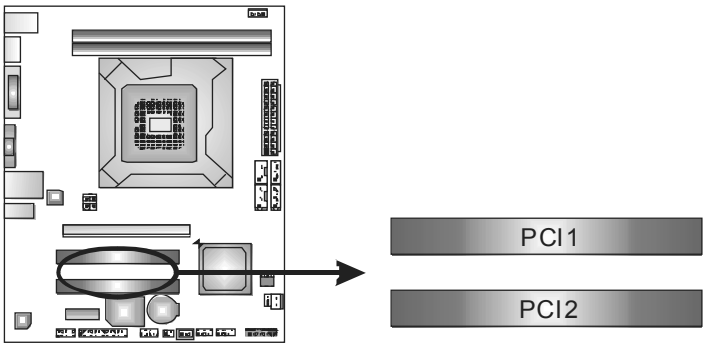
Pin	Assignment	Pin	Assignment
13	+3.3V	1	+3.3V
14	-12V	2	+3.3V
15	Ground	3	Ground
16	PS_ON	4	+5V
17	Ground	5	Ground
18	Ground	6	+5V
19	Ground	7	Ground
20	NC	8	PW_OK
21	+5V	9	Standby Voltage+5V
22	+5V	10	+12V
23	+5V	11	+12V
24	Ground	12	+3.3V

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.

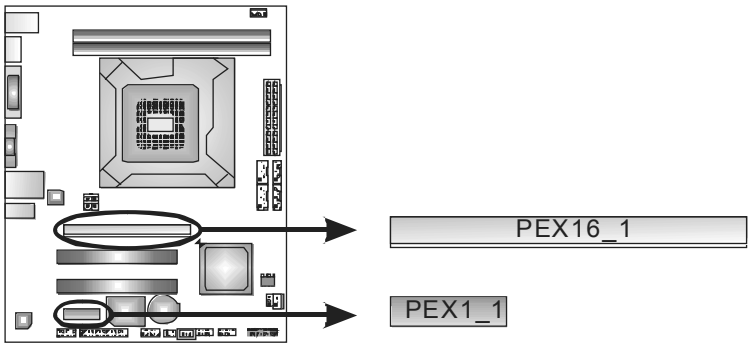


PEX16_1: PCI-Express Gen2 x16 Slot

- 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

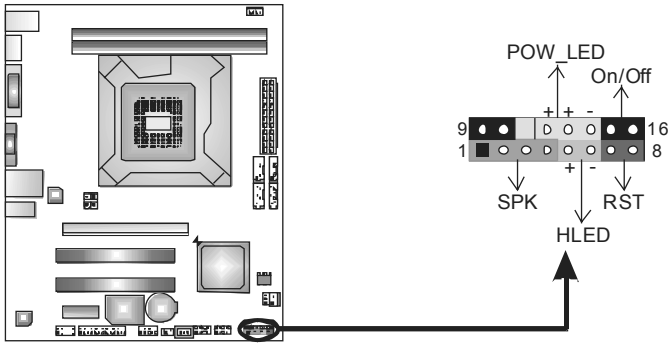
Pin closed

Pin1-2 closed

3.2 Detail Settings

PANEL1: Front Panel Header

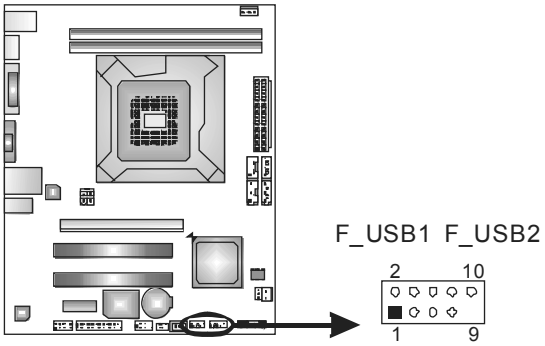
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, and speaker connection. It allows user to connect the PC case’s front panel switch functions.



Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	9	N/A	N/A
2	N/A		10	N/A	
3	N/A		11	N/A	N/A
4	Speaker		12	Power LED (+)	Power LED
5	HDD LED (+)	Hard drive 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

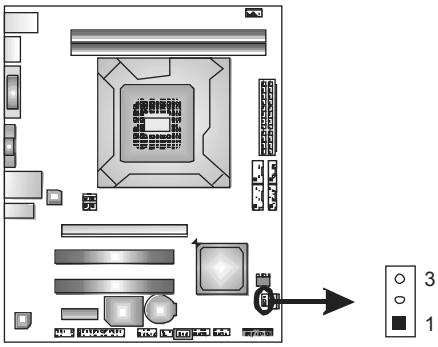
This motherboard provides 2 USB 2.0 headers, which allows user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



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

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).

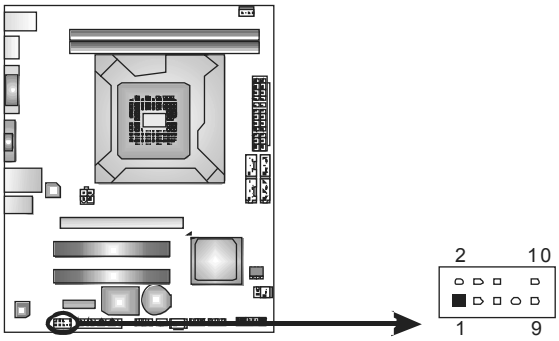
Pin 2-3 Close:
Clear CMOS data.

※ 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.

F_AUDIO1: Front Panel Audio Header

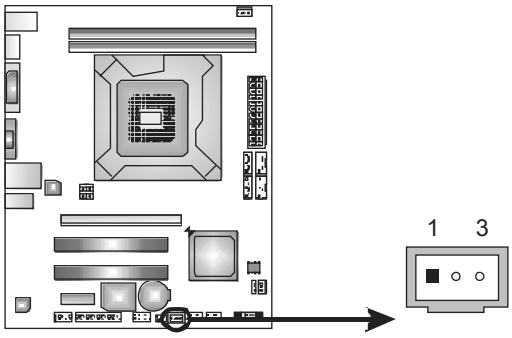
This header allows user to connect the front audio output cable with the PC front panel. This header allows only HD audio front panel connector, not AC'97.



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

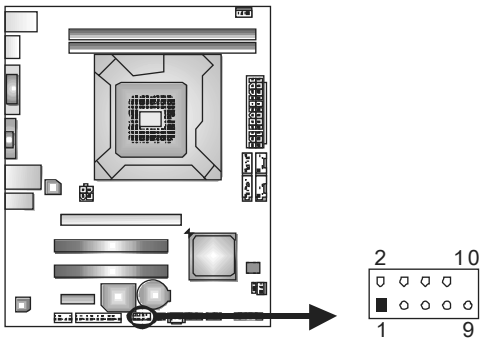
This connector allows user to connect the PCI bracket SPDIF output header.



Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

J_COM1: Serial port Connector

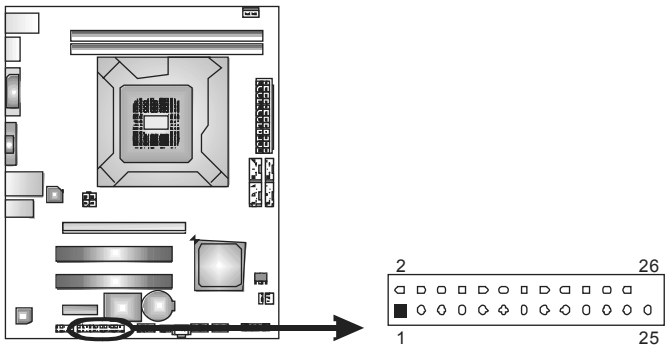
The motherboard has a Serial Port Connector for connecting RS-232 Port.



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

J_PRINT1: Printer Port Connector

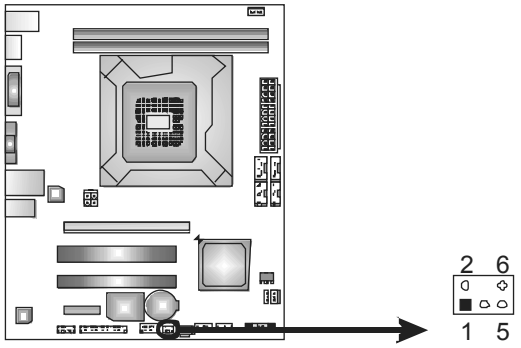
This header allows you to connector printer on the PC.



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	-Scltin	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

CIR1: Consumer IR Connector

This header is for infrared remote control and communication.



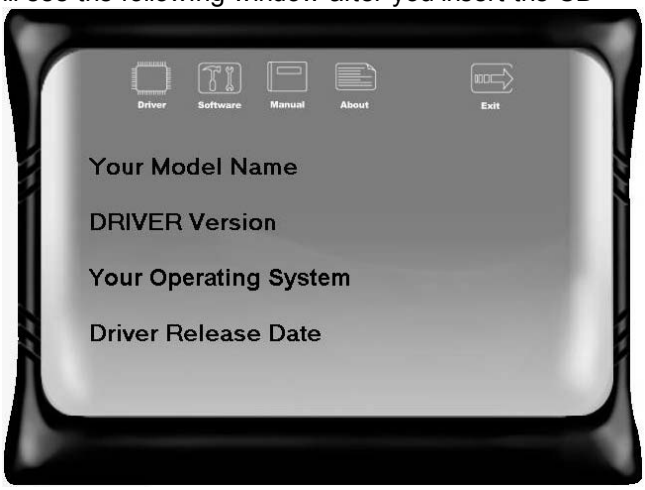
Pin	Assignment
1	IrDA serial input
2	Ground
3	Ground
4	Key
5	IrDA serial output
6	IR Power

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.

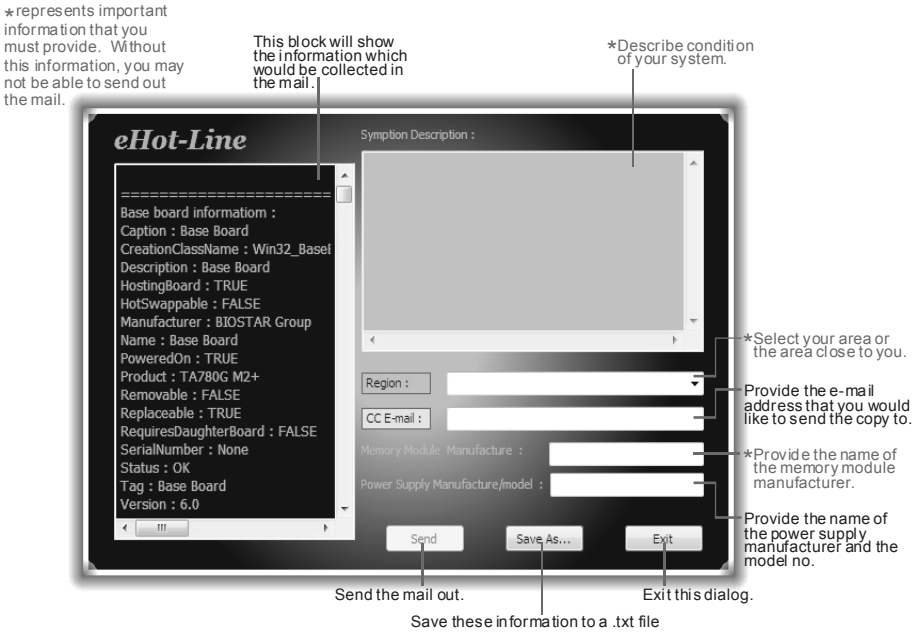
Launching Software

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.

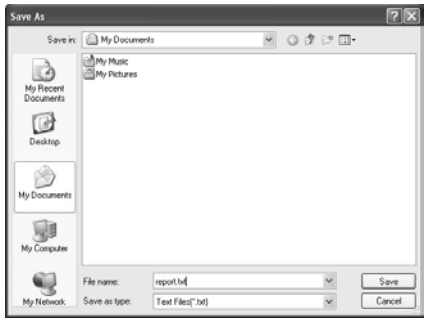
Before you use this utility, please set Outlook Express as your default e-mail client application program.



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.



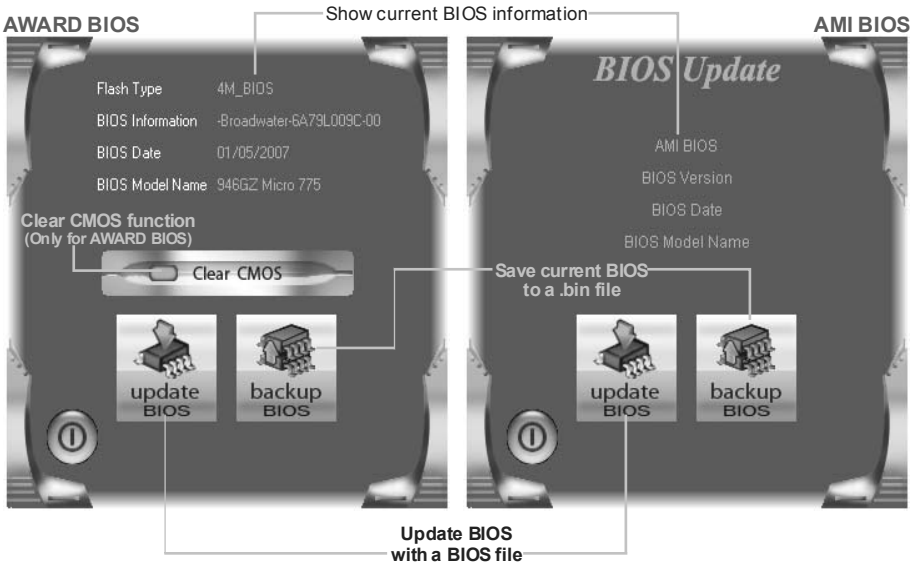
Open the saved .txt file, you will see your system information including motherboard/BIOS/CPU/video/ device/OS information. This information is also concluded in the sent mail.

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.

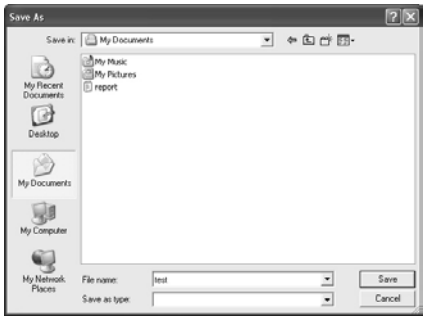
BIOS Update

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



<Backup BIOS>

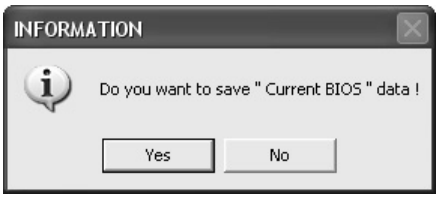
Once click on this button, the saving dialog will show. Choose the position to save file and enter file name. (We recommend that the file name should be English/number and no longer than 7 characters.) Then click **Save**.



<Update BIOS>

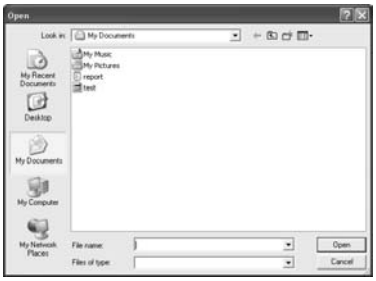
Before doing this, please download the proper BIOS file from the website.

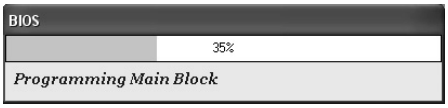
For AWARD BIOS, update BIOS procedure should be run with Clear CMOS function, so please check on Clear CMOS first.



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.

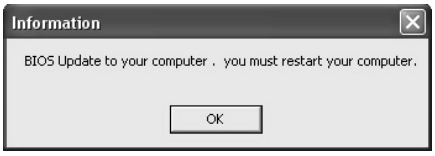
After the BIOS Backup procedure, the open dialog will show for requesting the BIOS file which is going to be updated. Please choose the proper BIOS file for updating, then click on **Open**.





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.

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 shuts down automatically after system is powered on for seconds, the phenomenon 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.

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	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. ● 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
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.	1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
System is inoperative. Keyboard lights are on, power indicator lights are lit, and hard drives are running.	Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.
System does not boot from a hard disk drive, but can be booted from optical drive.	1. Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup. 2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.
System only boots from an optical drive. Hard disks can be read, applications can be used, but system fails to boot from a hard disk.	1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
Screen message shows “Invalid Configuration” or “CMOS Failure.”	Review system’s equipment. Make sure correct information is in setup.
System cannot boot after user installs a second hard drive.	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

	TH61MU3 / H61MU3	*H61MH / H61ML*
CPU	Socket 1155 Intel Core i7 / i5 / i3/ Pentium Prozessoren Unterstützt Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 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 H61	Intel H61
Super E/A	ITE 8728 Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle Umgebungskontrolle, Hardware-Überwachung Lüfterdrehzahl-Controller/-Überwachung "Smart Guardian"-Funktion von ITE	ITE 8728 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 1333/1066 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.	DDR3 DIMM-Steckplätze x 2 Jeder DIMM unterstützt 512MB / 1GB / 2GB / 4GB DDR3. Max. 8GB Arbeitsspeicher Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 1333/1066 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
SATA 2	Integrierter Serial ATA-Controller Datentransferrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0.	Integrierter Serial ATA-Controller Datentransferrate bis zu 3.0Gb/s Konform mit der SATA-Spezifikation Version 2.0.
LAN	Realtek RTL8111E 10 / 100 / 1000 Mb/s Auto-Negotiation	Realtek RTL8111E (H61MH) 10 / 100 / 1000 Mb/s Auto-Negotiation Realtek RTL8105E (H61ML) 10 / 100 Mb/s Auto-Negotiation
HD Audio-Unterstützung	ALC662 Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe	ALC662 Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe
USB3.0	Asmedia ASM1042	
Steckplätze	PCI Express Gen2 x16 Steckplatz x1 PCI Express Gen2 x1 Steckplatz x1 PCI Steckplatz x2	PCI Express Gen2 x16 Steckplatz x1 PCI Express Gen2 x1 Steckplatz x1 PCI Steckplatz x2

	TH61MU3 / H61MU3		*H61MH / H61ML*	
Onboard-Anschluss	Druckeranschluss Anschluss	x1	Druckeranschluss Anschluss	x1
	Serieller Anschluss	x1	Serieller Anschluss	x1
	SATA-Anschluss	x4	SATA-Anschluss	x4
	Fronttafelanschluss	x1	Fronttafelanschluss	x1
	Front-Audioanschluss	x1	Front-Audioanschluss	x1
	S/PDIF- Ausgangsanschluss	x1	S/PDIF- Ausgangsanschluss	x1
	CPU-Lüfter-Sockel	x1	CPU-Lüfter-Sockel	x1
	System-Lüfter-Sockel	x1	System-Lüfter-Sockel	x1
	"CMOS löschen"-Sockel	x1	"CMOS löschen"-Sockel	x1
	USB 2.0-Anschluss	x2	USB 2.0-Anschluss	x2
	Verbraucher-IR Anschluss	x1	Verbraucher-IR Anschluss	x1
	Stromanschluss (24-polig)	x1	Stromanschluss (24-polig)	x1
	Stromanschluss (4-polig)	x1	Stromanschluss (4-polig)	x1
Rückseiten-E/A	PS/2-Tastatur / Maus	x1		
	HDMI-Anschluss	x1	PS/2-Tastatur / Maus	x1
	VGA-Anschluss	x1	HDMI-Anschluss (H61MH)	x1
	DVI-D-Anschluss	x1	VGA-Anschluss	x1
	LAN-Anschluss	x1	DVI-D-Anschluss	x1
	USB 2.0-Anschluss (durch H61)	x2	LAN-Anschluss	x1
	USB 3.0-Anschluss (durch ASM1042)	x2	USB 2.0-Anschluss	x4
	Audioanschluss	x3	Audioanschluss	x3
Platinengröße	200mm (B) X 244 mm (L)		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.		Windows XP / Vista / 7 Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.	

FRENCH

	TH61MU3 / H61MU3	*H61MH / H61ML*
UC	Socket 1155 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	Socket 1155 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 H61	Intel H61
Super E/S	ITE 8728 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	ITE 8728 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 1333/1066 Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge	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 1333/1066 Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge
SATA 2	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 3.0Go/s. Conforme à la spécification SATA Version 2.0
LAN	Realtek RTL8111E 10 / 100 / 1000 Mb/s négociation automatique	Realtek RTL8111E (H61MH) 10 / 100 / 1000 Mb/s négociation automatique Realtek RTL8105E (H61ML) 10 / 100 Mb/s négociation automatique
Prise en charge audio HD	ALC662 Prise en charge de l'audio haute définition Sortie audio à 5.1 voies	ALC662 Prise en charge de l'audio haute définition Sortie audio à 5.1 voies
USB3.0	Asmedia ASM1042	
Fentes	Fente PCI Express Gen2 x16 x1 Fente PCI Express Gen2 x1 x1 Fente PCI x2	Fente PCI Express Gen2 x16 x1 Fente PCI Express Gen2 x1 x1 Fente PCI x2

	TH61MU3 / H61MU3	*H61MH / H61ML*
Connecteur embarqué	Connecteur de Port d'imprimante x1 Port série x1 Connecteur SATA x4 Connecteur du panneau avant x1 Connecteur Audio du panneau avant x1 Connecteur de sortie S/PDIF x1 Embase de ventilateur UC x1 Embase de ventilateur système x1 Embase d'effacement CMOS x1 Connecteur USB 2.0 x2 Connecteur de IR du consommateur x1 Connecteur d'alimentation (24 broches) x1 Connecteur d'alimentation (4 broches) x1	Connecteur de Port d'imprimante x1 Port série x1 Connecteur SATA x4 Connecteur du panneau avant x1 Connecteur Audio du panneau avant x1 Connecteur de sortie S/PDIF x1 Embase de ventilateur UC x1 Embase de ventilateur système x1 Embase d'effacement CMOS x1 Connecteur USB 2.0 x2 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 2.0 (par H61) x2 Port USB 3.0 (par ASM1042) x2 Fiche audio x3	Clavier / Souris PS/2 x1 Port HDMI (H61MH) x1 Port VGA x1 Port DVI-D x1 Port LAN x1 Port USB 2.0 x4 Fiche audio x3
Dimensions de la carte	200mm (l) X 244 mm (H)	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.	Windows XP / Vista / 7 Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.

ITALIAN

	TH61MU3 / H61MU3	*H61MH / H61ML*
CPU	Socket 1155 Processore Intel Core i7 / i5 / i3/ Pentium Supporto di Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization	Socket 1155 Processore Intel Core i7 / i5 / i3/ Pentium Supporto di Execute Disable Bit / Enhanced Intel SpeedStep® / Architettura Intel 64 / Tecnologia Extended Memory 64 / Tecnologia Virtualization
Chipset	Intel H61	Intel H61
Super I/O	ITE 8728 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	ITE 8728 Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller / Monitoraggio velocità ventolina Funzione "Smart Guardian" di ITE
Memoria principale	Alloggi DIMM DDR3 x 2 Ciascun DIMM supporta DDR3 512MB / 1GB / 2GB / 4GB Capacità massima della memoria 8GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 1333/1066 DIMM registrati e DIMM ECC non sono supportati	Alloggi DIMM DDR3 x 2 Ciascun DIMM supporta DDR3 512MB / 1GB / 2GB / 4GB Capacità massima della memoria 8GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 1333/1066 DIMM registrati e DIMM ECC non sono supportati
SATA 2	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0.	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s. Compatibile specifiche SATA Versione 2.0.
LAN	Realtek RTL8111E Negoziazione automatica 10 / 100 / 1000Mb/s	Realtek RTL8111E (H61MH) Negoziazione automatica 10/100/1000Mb/s Realtek RTL8105E (H61ML) Negoziazione automatica 10/100Mb/s
Supporto audio HD	ALC662 Supporto audio High-Definition (HD) Uscita audio 5.1 canali	ALC662 Supporto audio High-Definition (HD) Uscita audio 5.1 canali
USB3.0	Asmedia ASM1042	
Alloggi	Alloggio PCI Express Gen2 x16 x1 Alloggio PCI Express Gen2 x1 x1 Alloggio PCI x2	Alloggio PCI Express Gen2 x16 x1 Alloggio PCI Express Gen2 x1 x1 Alloggio PCI x2

	TH61MU3 / H61MU3	*H61MH / H61ML*
Connettori su scheda	Connettore Porta stampante x1 Porta seriale x1 Connettore SATA x4 Connettore pannello frontale x1 Connettore audio frontale x1 Connettore output SPDIF x1 Collettore ventolina CPU x1 Collettore ventolina sistema x1 Collettore cancellazione CMOS x1 Connettore USB 2.0 x2 Connettore IR del consumatore x1 Connettore alimentazione (24 pin) x1 Connettore alimentazione (4 pin) x1	Connettore Porta stampante x1 Porta seriale x1 Connettore SATA x4 Connettore pannello frontale x1 Connettore audio frontale x1 Connettore output SPDIF x1 Collettore ventolina CPU x1 Collettore ventolina sistema x1 Collettore cancellazione CMOS x1 Connettore USB 2.0 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 2.0 (da H61) x2 Porta USB 3.0 (da ASM1042) x2 Connettore audio x3	Tastiera / Mouse PS/2 x1 Porta HDMI (H61MH) x1 Porta VGA x1 Porta DVI-D x1 Porta LAN x1 Porta USB 2.0 x4 Connettore audio x3
Dimensioni scheda	200mm (larghezza) x 244 mm (altezza)	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

	TH61MU3 / H61MU3	*H61MH / H61ML*
CPU	Socket 1155 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	Socket 1155 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 H61	Intel H61
Súper E/S	ITE 8728 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	ITE 8728 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 1333/1066 No admite DIMM registrados o DIMM compatibles con ECC	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 1333/1066 No admite DIMM registrados o DIMM compatibles con ECC
SATA 2	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0.	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s. Compatible con la versión SATA 2.0.
Red Local	Realtek RTL8111E Negociación de 10 / 100 / 1000 Mb/s	Realtek RTL8111E (H61MH) Negociación de 10 / 100 / 1000 Mb/s Realtek RTL8105E (H61ML) Negociación de 10 / 100 Mb/s
Soporte de sonido HD	ALC662 Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales	ALC662 Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales
USB3.0	Asmedia ASM1042	
Ranuras	Ranura PCI Express Gen2 x16 X1 Ranura PCI express Gen2 x1 X1 Ranura PCI X2	Ranura PCI Express Gen2 x16 X1 Ranura PCI express Gen2 x1 X1 Ranura PCI X2

	TH61MU3 / H61MU3		*H61MH / H61ML*	
Conectores en placa	Conector Puerto de impresora	X1	Conector Puerto de impresora	X1
	Puerto serie	X1	Puerto serie	X1
	Conector SATA	X4	Conector SATA	X4
	Conector de panel frontal	X1	Conector de panel frontal	X1
	Conector de sonido frontal	X1	Conector de sonido frontal	X1
	Conector de salida S/PDIF	X1	Conector de salida S/PDIF	X1
	Cabecera de ventilador de CPU	X1	Cabecera de ventilador de CPU	X1
	Cabecera de ventilador de sistema	X1	Cabecera de ventilador de sistema	X1
	Cabecera de borrado de CMOS	X1	Cabecera de borrado de CMOS	X1
	Conector USB 2.0	X2	Conector USB 2.0	X2
	Conector de IR del consumidor	X1	Conector de IR del consumidor	X1
	Conector de alimentación (24 patillas)	X1	Conector de alimentación (24 patillas)	X1
	Conector de alimentación (4 patillas)	X1	Conector de alimentación (4 patillas)	X1
Panel trasero de E/S	Teclado / Ratón PS/2	X1	Teclado / Ratón PS/2	X1
	Ratón HDMI	X1	Ratón HDMI (H61MH)	X1
	Puerto VGA	X1	Puerto VGA	X1
	Puerto DVI-D	X1	Puerto DVI-D	X1
	Puerto de red local	X1	Puerto de red local	X1
	Puerto USB 2.0 (por H61)	X2	Puerto USB 2.0	X4
	Puerto USB 3.0 (por ASM1042)	X2		
	Conector de sonido	X3	Conector de sonido	X3
Tamaño de la placa	200mm. (A) X 244 Mm. (H)		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.		Windows XP / Vista / 7 Biostar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.	

PORTUGUESE

	TH61MU3 / H61MU3	*H61MH / H61ML*
CPU	Socket 1155 Processador Intel Core i7 / i5 / i3/ Pentium Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Arquitecture -64 / Extended Memory 64 / Virtualization	Socket 1155 Processador Intel Core i7 / i5 / i3/ Pentium Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Arquitecture -64 / Extended Memory 64 / Virtualization
Chipset	Intel H61	Intel H61
Especificação Super I/O	ITE 8728 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	ITE 8728 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	Ranhuras 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 1333/1066 Os módulos DIMM registados e os DIMM ECC não são suportados	Ranhuras 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 1333/1066 Os módulos DIMM registados e os DIMM ECC não são suportados
SATA 2	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0.	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0.
LAN	Realtek RTL8111E Auto negociação de 10 / 100 / 1000 Mb/s	Realtek RTL8111E (H61MH) Auto negociação de 10 / 100 / 1000 Mb/s Realtek RTL8105E (H61ML) Auto negociação de 10 / 100 Mb/s
Suporte para áudio de alta definição	ALC662 Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais	ALC662 Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais
USB3.0	Asmedia ASM1042	
Ranhuras	Ranhura PCI Express Gen2 x16 x1 Ranhura PCI Express Gen2 x1 x1 Ranhura PCI x2	Ranhura PCI Express Gen2 x16 x1 Ranhura PCI Express Gen2 x1 x1 Ranhura PCI x2

	TH61MU3 / H61MU3		*H61MH / H61ML*	
Conectores na placa	Conector da para impressora	x1	Conector da para impressora	x1
	Porta série	x1	Porta série	x1
	Conector SATA	x4	Conector SATA	x4
	Conector do painel frontal	x1	Conector do painel frontal	x1
	Conector de áudio frontal	x1	Conector de áudio frontal	x1
	Conector de saída S/PDIF	x1	Conector de saída S/PDIF	x1
	Conector da ventoinha da CPU	x1	Conector da ventoinha da CPU	x1
	Conector da ventoinha do sistema	x1	Conector da ventoinha do sistema	x1
	Conector para limpeza do CMOS	x1	Conector para limpeza do CMOS	x1
	Conector USB 2.0	x2	Conector USB 2.0	x2
	Conector de IR do consumidor	x1	Conector de IR do consumidor	x1
	Conector de alimentação (24 pinos)	x1	Conector de alimentação (24 pinos)	x1
	Conector de alimentação (4 pinos)	x1	Conector de alimentação (4 pinos)	x1
Entradas/Saídas no painel traseiro	Teclado / Rato PS/2	x1	Teclado / Rato PS/2	x1
	Porta HDMI	x1	Porta HDMI (H61MH)	x1
	Porta VGA	x1	Porta VGA	x1
	Porta DVI-D	x1	Porta DVI-D	x1
	Porta LAN	x1	Porta LAN	x1
	Porta USB 2.0 (por H61)	x2	Porta USB 2.0	x4
	Porta USB 3.0 (por ASM1042)	x2	Tomada de áudio	x3
	Tomada de áudio	x3		
Tamanho da placa	200mm (L) X 244 mm (A)		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.		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

	TH61MU3 / H61MU3	*H61MH / H61ML*
Procesor	Socket 1155 Procesor Intel Core i7 / i5 / i3/ Pentium Obsługa Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 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 H61	Intel H61
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 1333/1066 Brak obsługi Registered DIMM oraz ECC DIMM	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 1333/1066 Brak obsługi Registered DIMM oraz ECC DIMM
Super I/O	ITE 8728 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"	ITE 8728 Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count Funkcje kontroli warunków pracy, Monitor H/W Kontroler/Monitor prędkości wentylatora Funkcja ITE "Smart Guardian"
SATA 2	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.
LAN	Realtek RTL8111E 10 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości	Realtek RTL8111E (H61MH) 10 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości Realtek RTL8105E (H61ML) 10 / 100 Mb/s z automatyczną negocjacją szybkości
Obsługa audio HD	ALC662 Obsługa High-Definition Audio 5.1 kanałowe wyjście audio	ALC662 Obsługa High-Definition Audio 5.1 kanałowe wyjście audio
USB3.0	Asmedia ASM1042	
Gniazda	Gniazdo PCI Express Gen2 x16 x1 Gniazdo PCI Express Gen2 x1 x1 Gniazdo PCI x2	Gniazdo PCI Express Gen2 x16 x1 Gniazdo PCI Express Gen2 x1 x1 Gniazdo PCI x2

	TH61MU3 / H61MU3		*H61MH / H61ML*	
Złącza wbudowane	Złącze Port drukarki	x1	Złącze Port drukarki	x1
	Port szeregowy	x1	Port szeregowy	x1
	Złącze SATA	x4	Złącze SATA	x4
	Złącze panela przedniego	x1	Złącze panela przedniego	x1
	Przednie złącze audio	x1	Przednie złącze audio	x1
	Złącze wyjścia S/PDIF	x1	Złącze wyjścia S/PDIF	x1
	Złącze głównkowe wentylatora procesora	x1	Złącze głównkowe wentylatora procesora	x1
	Złącze głównkowe wentylatora systemowego	x1	Złącze głównkowe wentylatora systemowego	x1
	Złącze głównkowe kasowania CMOS	x1	Złącze głównkowe kasowania CMOS	x1
	Złącze USB 2.0	x2	Złącze USB 2.0	x2
	Złącze Konsument IR	x1	Złącze Konsument IR	x1
	Złącze zasilania (24 pinowe)	x1	Złącze zasilania (24 pinowe)	x1
	Złącze zasilania (4 pinowe)	x1	Złącze zasilania (4 pinowe)	x1
Back Panel I/O	Klawiatura / Mysz PS/2	x1	Klawiatura / Mysz PS/2	x1
	Port HDMI	x1	Port HDMI (H61MH)	x1
	Port VGA	x1	Port VGA	x1
	Port DVI-D	x1	Port DVI-D	x1
	Port LAN	x1	Port LAN	x1
	Port USB 2.0 (przez H61)	x2	Port USB 2.0	x4
	Port USB 3.0 (przez ASM1042)	x2	Gniazdo audio	x3
	Gniazdo audio	x3		
Wymiary płyty	200mm (S) X 244 mm (W)		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.		Windows XP / Vista / 7 Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.	

RUSSIAN

	TH61MU3 / H61MU3	*H61MH / H61ML*
CPU (центральный процессор)	Socket 1155 Процессор Intel Core i7 / i5 / i3/ Pentium Поддержка технологий Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / технологии виртуализация	Socket 1155 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 H61	Intel H61
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 1333/1066 Не поддерживает зарегистрированные модули DIMM and ECC DIMM	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 1333/1066 Не поддерживает зарегистрированные модули DIMM and ECC DIMM
Super I/O	ITE 8728 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)	ITE 8728 Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости вентилятора/ монитор Функция ITE "Smart Guardian" (Интеллектуальная защита)
SATA 2	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0.	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с. Соответствие спецификации SATA версия 2.0.
Локальная сеть	Realtek RTL8111E Автоматическое согласование 10 / 100 / 1000 Мб/с	Realtek RTL8111E (H61MH) Автоматическое согласование 10/100/1000Мб/с Realtek RTL8105E (H61ML) Автоматическое согласование 10/100Мб/с
Звуковая поддержка жесткого диска	ALC662 Звуковая поддержка High-Definition 5.1канальный звуковой выход	ALC662 Звуковая поддержка High-Definition 5.1канальный звуковой выход
USB3.0	Asmedia ASM1042	
Слоты	Слот PCI Express Gen2 x16 x1 Слот PCI Express Gen2 x1 x1 Слот PCI x2	Слот PCI Express Gen2 x16 x1 Слот PCI Express Gen2 x1 x1 Слот PCI x2

	TH61MU3 / H61MU3	*H61MH / H61ML*
Встроенный разъём	Разъём Порт подключения принтера x1 Последовательный порт x1 Разъём SATA x4 Разъём на лицевой панели x1 Входной звуковой разъём x1 Разъём вывода для S/PDIF x1 Контактирующее приспособление вентилятора центрального процессора x1 Контактирующее приспособление вентилятора системы x1 Открытое контактирующее приспособление CMOS x1 USB 2.0-разъём x2 Разъём едока ИКЫЙ x1 Разъем питания (24 вывод) x1 Разъем питания (4 вывод) x1	Разъём Порт подключения принтера x1 Последовательный порт x1 Разъём SATA x4 Разъём на лицевой панели x1 Входной звуковой разъём x1 Разъём вывода для S/PDIF x1 Контактирующее приспособление вентилятора центрального процессора x1 Контактирующее приспособление вентилятора системы x1 Открытое контактирующее приспособление CMOS x1 USB 2.0-разъём x2 Разъём едока ИКЫЙ 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 2.0-порт (по H61) x2 USB 3.0-порт (по ASM1042) x2 Гнездо для подключения наушников x3	Клавиатура / Мышь PS/2 x1 Порт HDMI (H61MH) x1 Порт VGA x1 Порт DVI-D x1 Порт LAN x1 USB 2.0-порт x4 Гнездо для подключения наушников x3
Размер панели	200мм (Ш) X 244 мм (В)	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.	Windows XP / Vista / 7 Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.

ARABIC

	TH61MU3 / H61MU3	H61MH / H61ML
وحدة المعالجة المركزية	Socket 1155 بتردد يصل إلى Intel Core i7 / i5 / i3/ Pentium معالجات Execute Disable Bit / Enhanced Intel تدعم تقنيات SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 بتردد يصل إلى Intel Core i7 / i5 / i3/ Pentium معالجات Execute Disable Bit / Enhanced Intel تدعم تقنيات SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology
مجموعة الشرائح	Intel H61	Intel H61
الذاكرة الرئيسية	فتحة DDR3 DIMM عدد2 سعة تدعم كل فتحة DDR3 تدعم ذاكرة من نوع DIMM تدعم كل فتحة ميجا بايت و1/ و2/ 512 سعة DDR3 تدعم ذاكرة من نوع DIMM و4جيجا بايت سعة ذاكرة قصوى 8 جيجا بايت مزدوجة القناة DDR3 وحدة ذاكرة سعات 1333/1066 ميجا بايت DDR3 تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	فتحة DDR3 DIMM عدد2 سعة تدعم كل فتحة DDR3 تدعم ذاكرة من نوع DIMM تدعم كل فتحة ميجا بايت و1/ و2/ 512 سعة DDR3 تدعم ذاكرة من نوع DIMM و4جيجا بايت سعة ذاكرة قصوى 8 جيجا بايت مزدوجة القناة DDR3 وحدة ذاكرة سعات 1333/1066 ميجا بايت DDR3 تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة
Super I/O	ITE 8728 الأكثر استخداماً. Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة	ITE 8728 الأكثر استخداماً. Super I/O توفر وظيفة Low Pin Count Interface تدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة
SATA 2	متكامل Serial ATA متحكم جيجابت/ثانية. 3.0 نقل البيانات بسرعات تصل إلى 2.0. الإصدار SATA مطابقة لمواصفات	متكامل Serial ATA متحكم جيجابت/ثانية. 3.0 نقل البيانات بسرعات تصل إلى 2.0. الإصدار SATA مطابقة لمواصفات
شبكة داخلية	Realtek RTL8111E تفاوض تلقائي 100/10 ميجابايت / ثانية و 1 جيجابت/ثانية	Realtek RTL8111E (H61MH) تفاوض تلقائي 100/10 ميجابايت / ثانية و 1 جيجابت/ثانية Realtek RTL8105E (H61ML) تفاوض تلقائي 100/10 ميجابايت / ثانية
دعم الصوت عالي التعريف	ALC662 تدعم تقنية الصوت عالي التعريف من 5.1 قنوات لخرج الصوت	ALC662 تدعم تقنية الصوت عالي التعريف من 5.1 قنوات لخرج الصوت
USB3.0	Asmedia ASM1042	
القحات	فتحة PCI Express Gen2 x16 عدد 1 فتحة PCI Express Gen2 x1 عدد 1 فتحة PCI عدد2	فتحة PCI Express Gen2 x16 عدد 1 فتحة PCI Express Gen2 x1 عدد 1 فتحة PCI عدد2

	TH61MU3 / H61MU3		H61MH / H61ML	
المنافذ على سطح اللوحة	منفذ طابعة	عدد 1	منفذ طابعة	عدد 1
	منفذ تسلسلي	عدد1	منفذ تسلسلي	عدد1
	منفذ SATA	عدد 4	منفذ SATA	عدد 4
	منفذ اللوحة الأمامية	عدد 1	منفذ اللوحة الأمامية	عدد 1
	منفذ الصوت الأمامي	عدد 1	منفذ الصوت الأمامي	عدد 1
	منفذ خرج S/PDIF	عدد 1	منفذ خرج S/PDIF	عدد 1
	وصلة مروحة وحدة المعالجة المركزية	عدد 1	وصلة مروحة وحدة المعالجة المركزية	عدد 1
	وصلة مروحة النظام	عدد 1	وصلة مروحة النظام	عدد 1
	وصلة مسح CMOS	عدد 1	وصلة مسح CMOS	عدد 1
	منفذ USB 2.0	عدد 2	منفذ USB 2.0	عدد 2
	منفذ الأحمر تحت مستهلكة	عدد 1	منفذ الأحمر تحت مستهلكة	عدد 1
	منفذ توصيل الطاقة (24بوس) ع	دد 1	منفذ توصيل الطاقة (24بوس) ع	دد 1
	منفذ توصيل الطاقة (4دبابيس)	عدد 1	منفذ توصيل الطاقة (4دبابيس)	عدد 1
منافذ دخل/خرج اللوحة الخلفية	لوحة مفاتيح / ماوس PS/2	عدد 1	لوحة مفاتيح / ماوس PS/2	عدد 1
	منافذ HDMI	عدد 1	منافذ HDMI (H61MH)	عدد 1
	منافذ VGA	عدد 1	منافذ VGA	عدد 1
	منافذ DVI-D	عدد 1	منافذ DVI-D	عدد 1
	منفذ شبكة اتصل محلية	عدد 1	منفذ شبكة اتصل محلية	عدد 1
	منافذ USB2.0(قبل من H61)	عدد 2	منافذ USB 2.0	عدد 4
	منافذ USB3.0(قبل من ASM1042)	عدد 2		
	مقبس صوت	عدد 3	مقبس صوت	عدد 3
حجم اللوحة	200مم (عرض) X 244 مم (ارتفاع)		200مم (عرض) X 244 مم (ارتفاع)	
دعم أنظمة التشغيل	Windows XP / Vista / 7 بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار Biostar تحتفظ أو بدون إخطار.		Windows XP / Vista / 7 بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار Biostar تحتفظ أو بدون إخطار.	

JAPANESE

	TH61MU3 / H61MU3	H61MH / H61ML
CPU	Socket 1155 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	Socket 1155 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 H61	Intel H61
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 1333/1066をサポート 登録済みDIMMとECC DIMMはサポートされません	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 1333/1066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 8728 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	ITE 8728 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 2	統合シリアルATAコントローラ 最高3.0 Gb/秒のデータ転送速度 SATAバージョン2.0仕様に準拠。	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 RTL8111E 10 / 100 / 1000 Mb/秒のオートネゴシエーション	Realtek RTL8111E (H61MH) 10 / 100 / 1000 Mb/秒のオートネゴシエーション Realtek RTL8105E (H61ML) 10 / 100 Mb/秒のオートネゴシエーション
HDオーディオのサポート	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	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
USB3.0	Asmedia ASM1042	
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	PCI Express Gen2 x16スロット x1 PCI Express Gen2 x1スロット x1 PCIスロット x2

	TH61MU3 / H61MU3		*H61MH / H61ML*	
オンボードコネsクタ	プリンタポートコネクタ	x1	プリンタポートコネクタ	x1
	シリアルポート	x1	シリアルポート	x1
	SATAコネクタ	x4	SATAコネクタ	x4
	フロントパネルコネクタ	x1	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	フロントオーディオコネクタ	x1
	S/PDIFアウトコネクタ	x1	S/PDIFアウトコネクタ	x1
	CPUファンヘッダ	x1	CPUファンヘッダ	x1
	システムファンヘッダ	x1	システムファンヘッダ	x1
	CMOSクリアヘッダ	x1	CMOSクリアヘッダ	x1
	USB 2.0コネクタ	x2	USB 2.0コネクタ	x2
	消費者IRコネクタ	x1	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(24ピン)	x1
	電源コネクタ(4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	PS/2キーボード / マウス	x1
	HDMIポート	x1	HDMIポート(H61MH)	x1
	VGAポート	x1	VGAポート	x1
	DVI-Dポート	x1	DVI-Dポート	x1
	LANポート	x1	LANポート	x1
	USB 2.0ポート(で H61)	x2	USB 2.0ポート	x4
	USB 3.0ポート(で ASM1042)	x2	オーディオジャック	x3
	オーディオジャック	x3		
ボードサイズ	200mm (幅) X 244 mm (高さ)		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。		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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