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### **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

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## **CHAPTER 1: INTRODUCTION**

### **1.1 BEFORE YOU START**

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

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

### **1.2 PACKAGE CHECKLIST**

- ✚ Serial ATA Cable X 3
- ✚ 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.

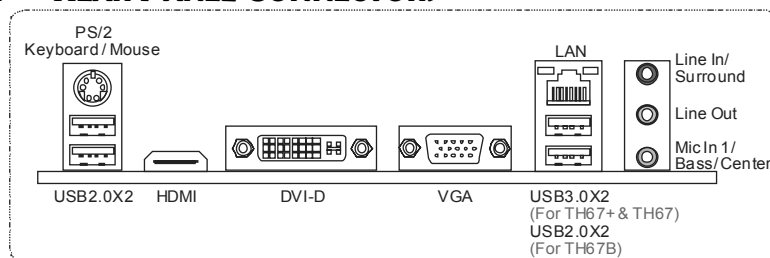
### 1.3 MOTHERBOARD FEATURES

	TH67+ / TH67	TH67B
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 H67	Intel H67
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 4 Each DIMM supports 512MB / 1GB / 2GB / 4GB DDR3 Max Memory Capacity 16GB Dual Channel Mode DDR3 memory module Supports DDR3 1333/1066 Registered DIMM and ECC DIMM is not supported	DIMM Slots x 4 Each DIMM supports 512MB / 1GB / 2GB / 4GB DDR3 Max Memory Capacity 16GB Dual Channel Mode DDR3 memory module Supports DDR3 1333/1066 Registered DIMM and ECC DIMM is not supported
SATA 2 & 3	Integrated Serial ATA Controller Data transfer rates up to 3.0 Gb/s / 6.0 Gb/s. SATA Version 2.0 / 3.0 specification compliant	Integrated Serial ATA Controller Data transfer rates up to 3.0 Gb/s / 6.0 Gb/s. SATA Version 2.0 / 3.0 specification compliant
LAN	Realtek RTL8111E 10 / 100 Mb/s / 1Gb/s auto negotiation	Realtek RTL8111E 10 / 100 Mb/s / 1Gb/s auto negotiation
Sound Codec	ALC892 5.1 channels audio out High Definition Audio	ALC892 5.1 channels audio out High Definition Audio
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Slots	PCI slot x1 PCI-E Gen2 x16 @ x16 slot x1 PCI-E Gen2 x16 @ x4 slot x1 PCI-E Gen2 x1 slot x1	PCI slot x1 PCI-E Gen2 x16 @ x16 slot x1 PCI-E Gen2 x16 @ x4 slot x1 PCI-E Gen2 x1 slot x1

## TH67+ / TH67 / TH67B

	<i>TH67+ / TH67</i>	<i>TH67B</i>		
On Board Connectors	Serial Port Connector	x1	Serial Port Connector	x1
	SATA 3 Connector	x2	SATA 3 Connector	x2
	SATA 2 Connector	x4	SATA 2 Connector	x4
	Front Panel Connector	x1	Front Panel Connector	x1
	Front Audio Connector	x1	Front Audio Connector	x1
	S/PDIF out Connector	x1	S/PDIF out Connector	x1
	CPU Fan Header	x1	CPU Fan Header	x1
	System Fan Header	x2	System Fan Header	x2
	Clear CMOS Header	x1	Clear CMOS Header	x1
	USB 2.0 Connector	x3	USB 2.0 Connector	x3
	Consumer IR Connector	x1	Consumer IR Connector	x1
	Power Connector (24pin)	x1	Power Connector (24pin)	x1
	Power Connector (8pin)	x1	Power Connector (4pin)	x1
Back Panel I/O	PS/2 Keyboard / Mouse	x1	PS/2 Keyboard / Mouse	x1
	HDMI Port	x1	HDMI Port	x1
	VGA Port	x1	VGA Port	x1
	DVI-D Port	x1	DVI-D Port	x1
	LAN Port	x1	DVI-D Port	x1
	USB2.0 Port (by H67)	x2	LAN Port	x1
	USB3.0 Port (by NEC uPD720200 / Asmedia ASM1042)	x2	USB2.0 Port	x4
	Audio Jack	x3	Audio Jack	x3
Board Size	230 (W) x 244 (L) mm		230 (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	

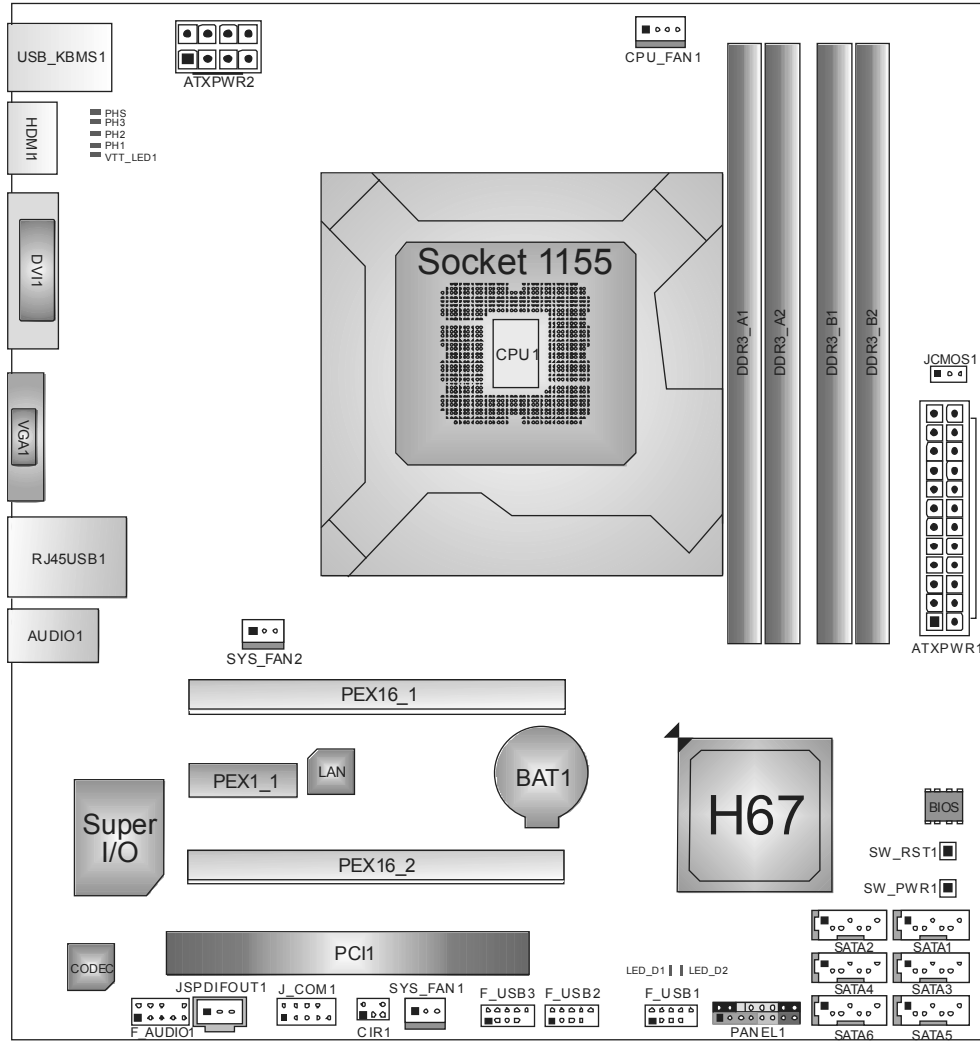
### 1.4 REAR PANEL CONNECTORS



**NOTE:** Any of 2 HDMI / DVI-D / VGA can provide digital video signals out-put function.

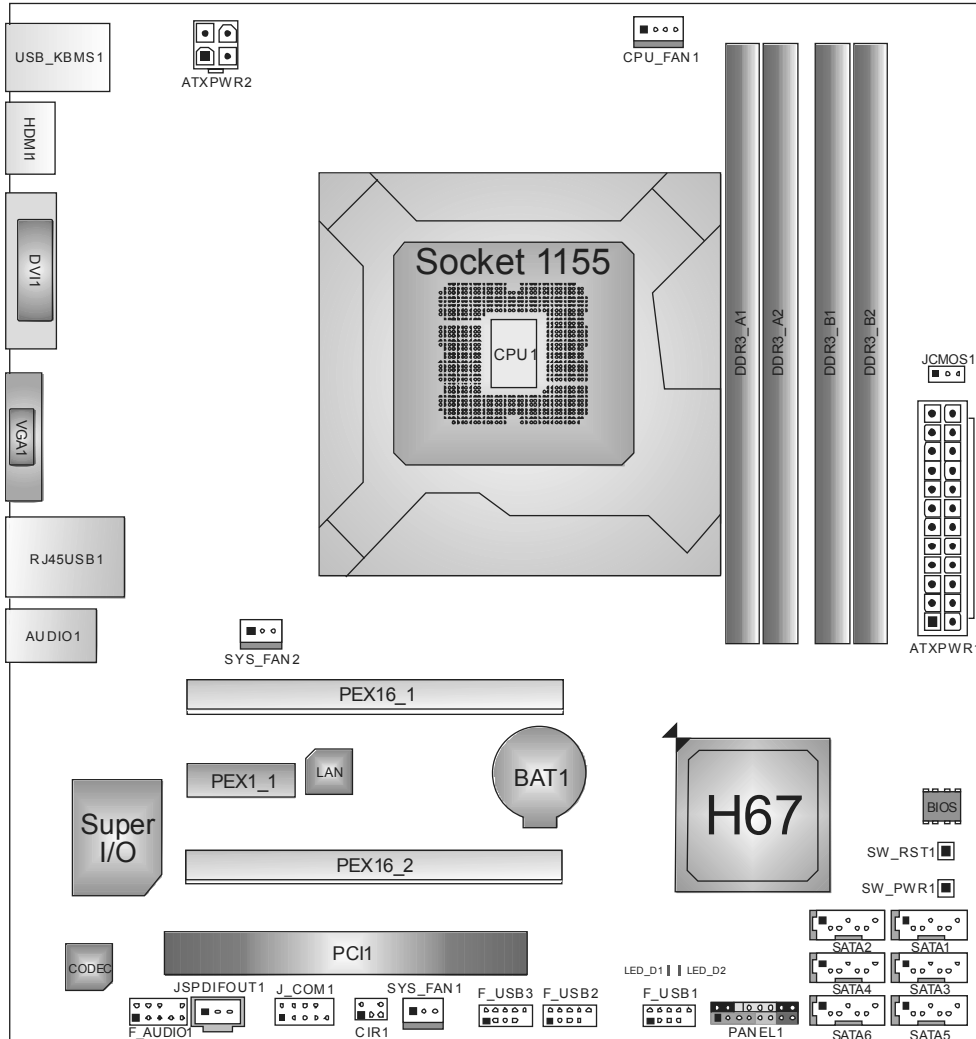
**NOTE:** USB3.0 ports are backward compatible with USB2.0/USB1.X devices. USB3.0 is controlled by NEC uPD720200 / Asmedia ASM1042, but, USB2.0/USB1.X is controlled by H67.

## 1.5 MOTHERBOARD LAYOUT (TH67+ / TH67)



**Note:** ■ represents the 1<sup>st</sup> pin.

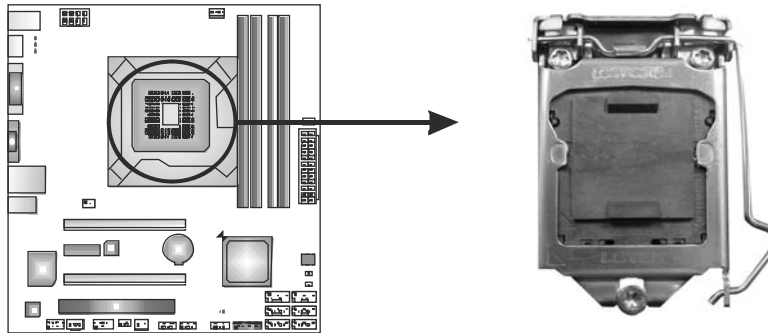
### 1.6 MOTHERBOARD LAYOUT (TH67B)



**Note:** ■ represents the 1<sup>st</sup> pin.

## CHAPTER 2: HARDWARE INSTALLATION

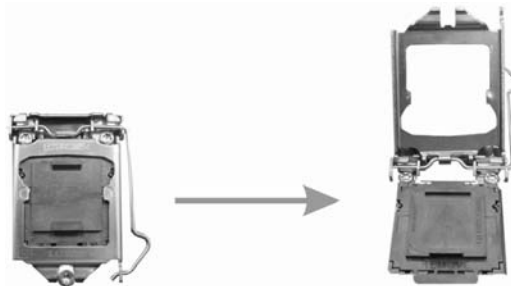
### 2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)



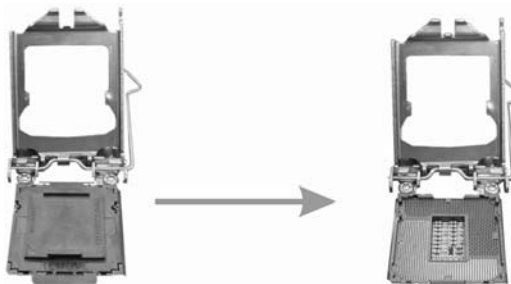
*Special Notice:*

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.



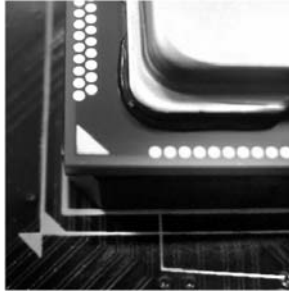


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**TH67+/TH67/TH67B**

**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.

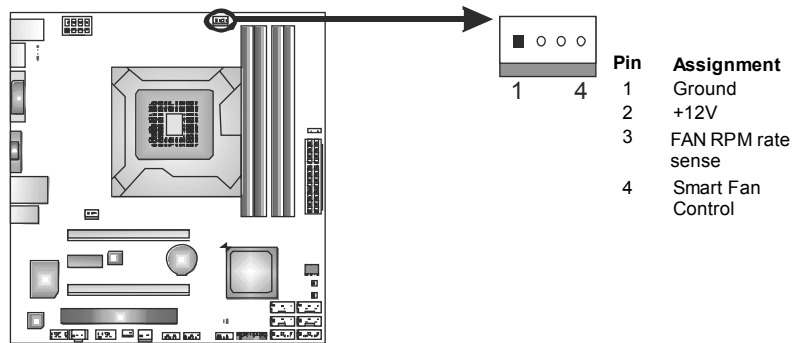


**Step 5:** Put the CPU Fan and heatsink assembly on the CPU and buckle it on the retention frame. Connect the CPU FAN power cable into the CPU\_FAN1 to complete the installation.

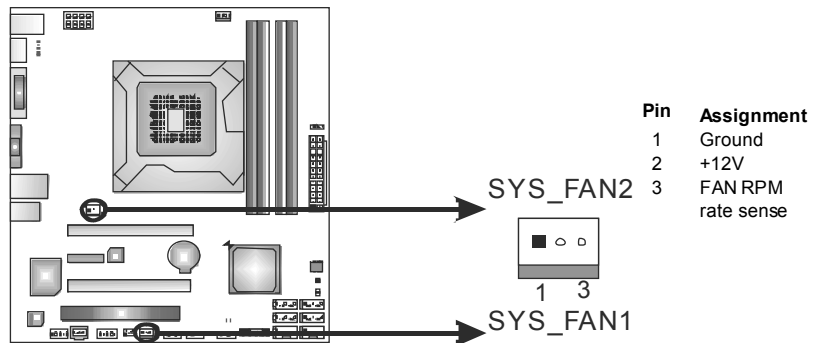
## 2.2 FAN HEADERS

These fan headers support cooling-fans built in the computer. The fan cable and connector may be different 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



### SYS\_FAN1/SYS\_FAN2: System Fan Headers

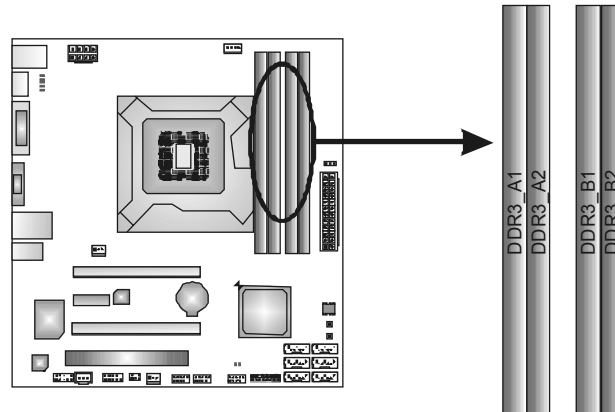


**Note:**

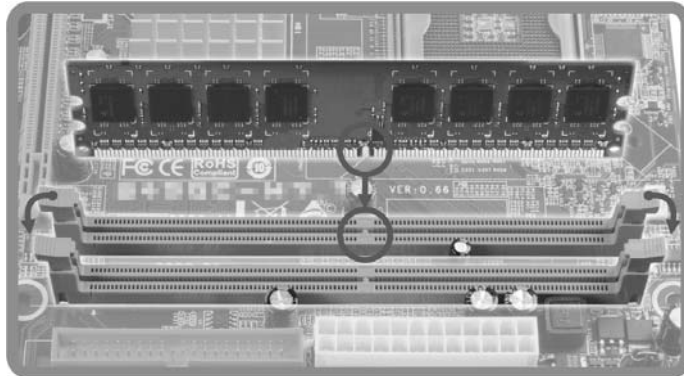
The SYS\_FAN1/SYS\_FAN2 support 3-pin head connectors; the CPU\_FAN1 supports 4-pin head connector. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

## 2.3 INSTALLING SYSTEM MEMORY

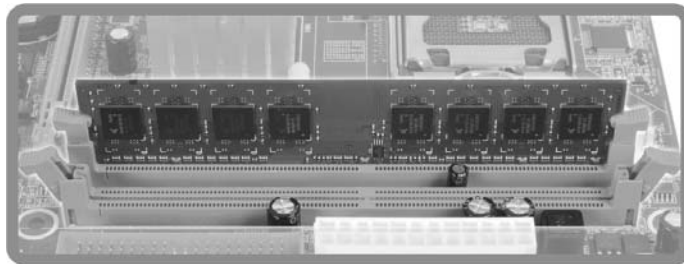
### A. Memory Modules



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 16GB.
DDR3_A2	512MB/1GB/2GB/4GB	
DDR3_B1	512MB/1GB/2GB/4GB	
DDR3_B2	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_A2	DDR3_B1	DDR3_B2
Enabled	X	O	X	O
Enabled	O	O	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)

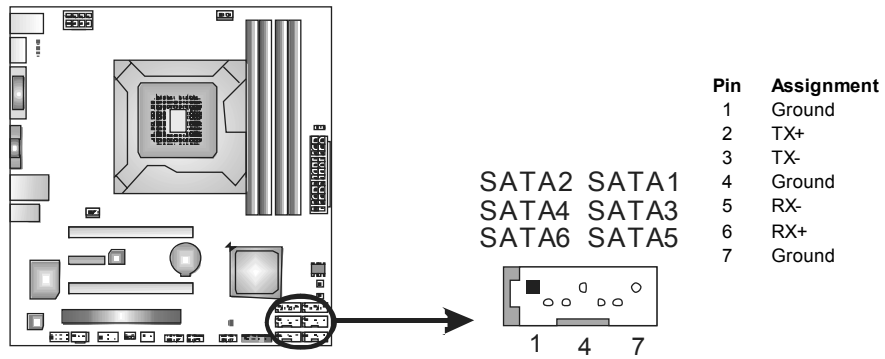
**Note:**

Memory module must be installed in DDR3-A2 or DDR3-B2 to boot the system.

## 2.4 CONNECTORS AND SLOTS

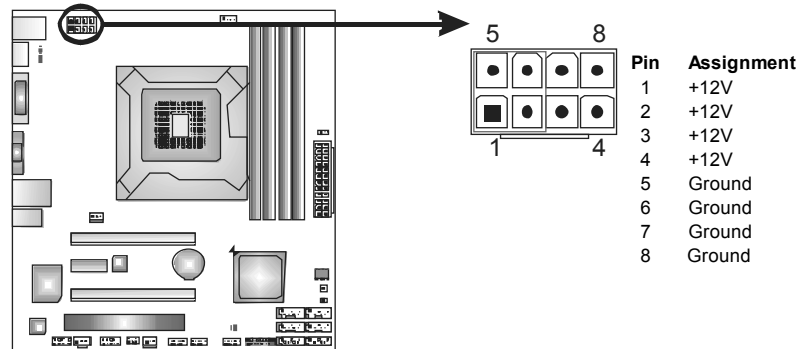
### SATA1 ~ SATA6: Serial ATA Connectors

The motherboard has a PCI to SATA Controller with 6 channels SATA interface. SATA1 & SATA2 satisfy the SATA 3.0 spec and with transfer rate of 6.0Gb/s; SATA3 ~ SATA6 satisfy the SATA 2.0 spec and with transfer rate of 3.0Gb/s.



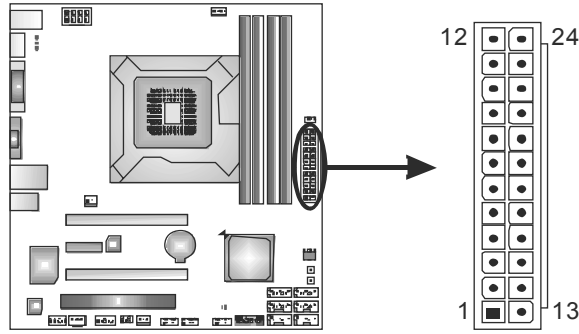
### ATXPWR2: ATX Power Source Connector (TH67+ / TH67)

This connector provides +12V to CPU power circuit. If the CPU power plug is 4-pin, please plug it into Pin 1-2-5-6 of ATXPWR2.



**ATXPWR1: ATX Power Source Connector**

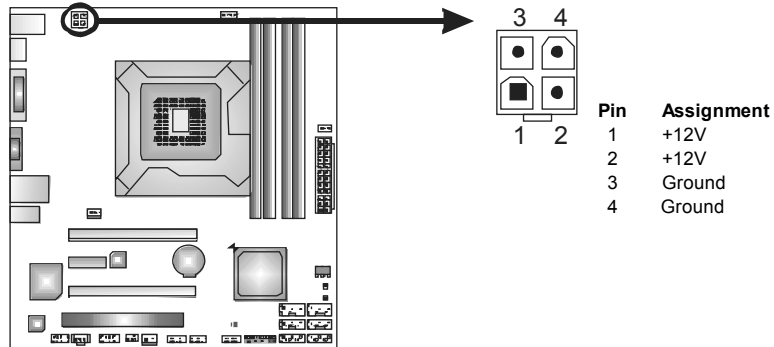
This connector allows user to connect 24-pin power connector on the ATX power supply.



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 (TH67B)**

This connector provides +12V to CPU power circuit.



**Note:**

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

**PEX16\_1: PCI-Express Gen2 x16 Slot**

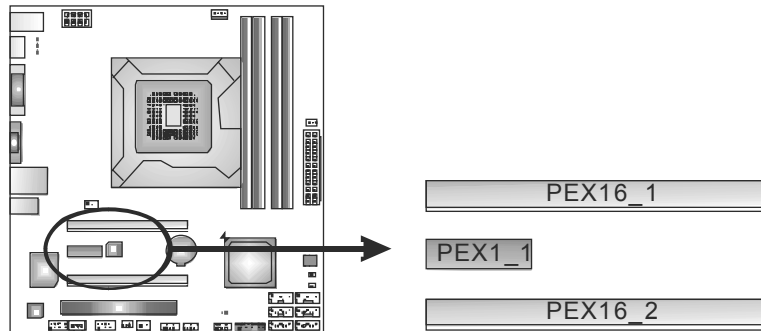
- PCI-Express 2.0 compliant.
- Maximum theoretical realized bandwidth of 8GB/s simultaneously per direction, for an aggregate of 16GB/s totally.
- PCI-Express Gen2 supports a raw bit-rate of 5.0Gb/s on the data pins.
- 2X bandwidth over the PCI-Express 1.1 architecture.

**PEX16\_2: PCI-Express Gen2 x4 Slot**

- PCI-Express 2.0 compliant.
- Maximum theoretical realized bandwidth of 2GB/s simultaneously per direction, for an aggregate of 4GB/s totally.

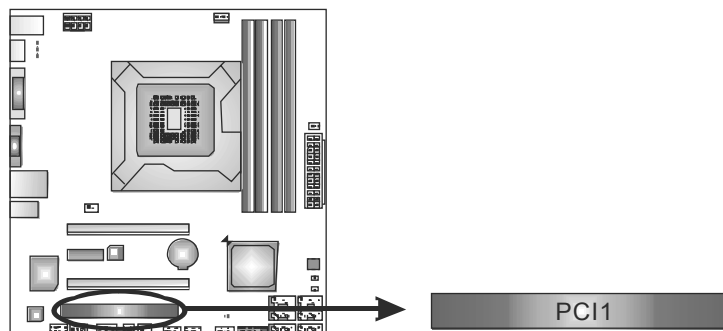
**PEX1\_1: PCI-Express Gen2 x1 Slot**

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



**PCI1: Peripheral Component Interconnect Slot**

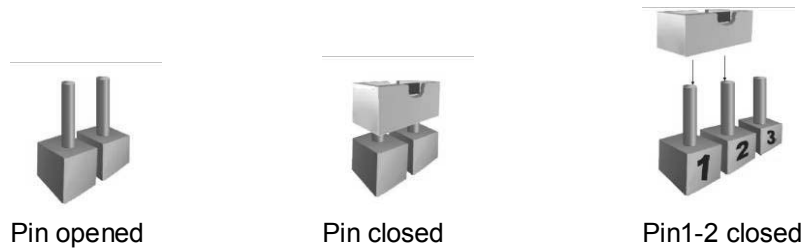
This motherboard is equipped with 1 standard PCI slot. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.



## CHAPTER 3: HEADERS & JUMPERS SETUP

### 3.1 HOW TO SETUP JUMPERS

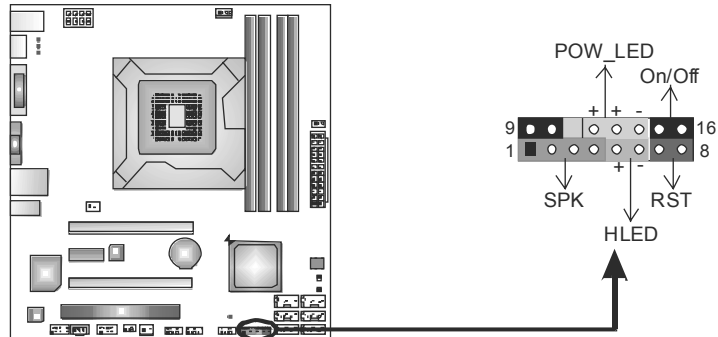
The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.



### 3.2 DETAIL SETTINGS

#### PANEL1: Front Panel Header

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

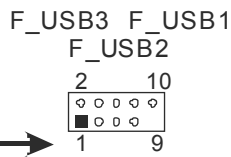
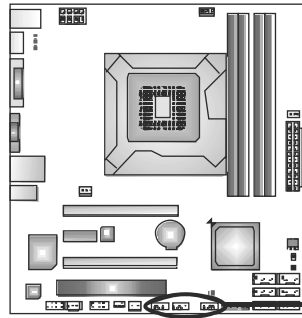


Pin	Assignment	Function	Pin	Assignment	Function
1	+5V		9	N/A	N/A
2	N/A	Speaker Connector	10	N/A	N/A
3	N/A		11	N/A	N/A
4	Speaker		12	Power LED (+)	Power LED
5	HDD LED (+)	Hard drive LED	13	Power LED (+)	
6	HDD LED (-)		14	Power LED (-)	
7	Ground	Reset button	15	Power button	Power-on button
8	Reset control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



### F\_USB1/F\_USB2/F\_USB3: Headers for USB 2.0 Ports at Front Panel

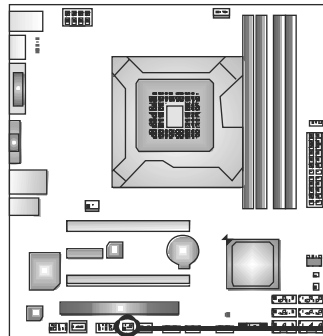
These headers allow user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



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

### CIR1: Consumer IR Connector

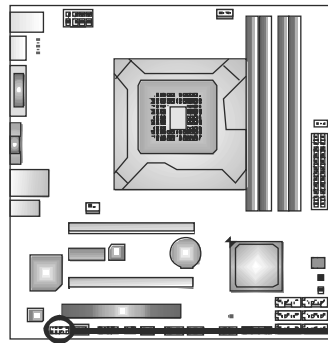
This header is for infrared remote control and communication.



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

### F\_AUDIO1: Front Panel Audio Header

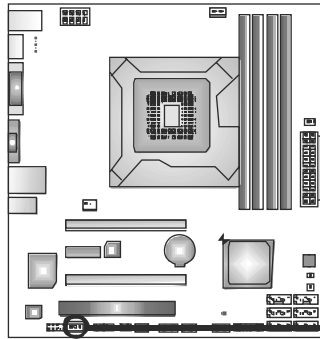
This header allows user to connect the front audio output cable with the PC front panel. This header allows only HD audio front panel connector; AC'97 connector is not acceptable.



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

### JSPDIFOUT1: Digital Audio-out Connector

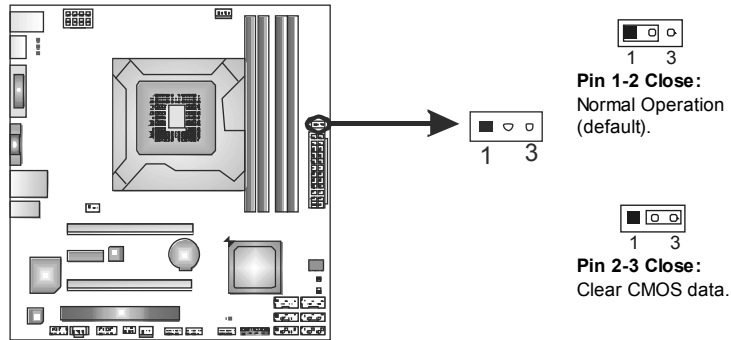
This connector allows user to connect the PCI bracket SPDIF output header.



Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

**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.

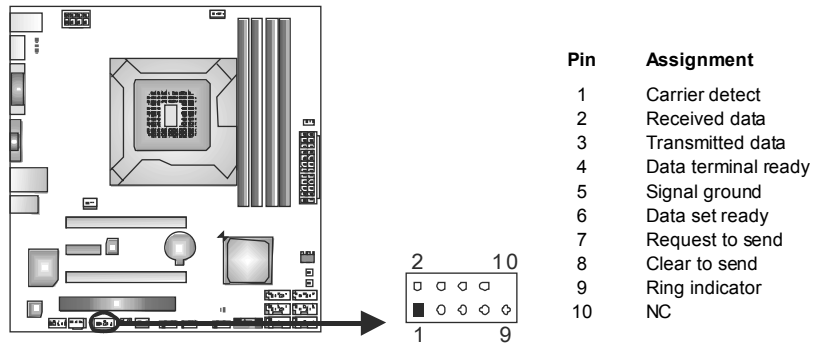


**※ Clear CMOS Procedures:**

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.

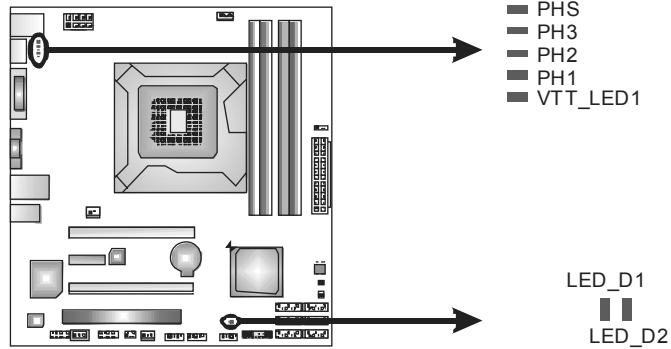
**J\_COM1: Serial Port Connector**

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



### On-Board LED Indicators

There are 7 LED indicators on the motherboard showing system status.



**LED\_D1 & LED\_D2:** Debug Indicators

**PHS / PH1 ~ PH3 / VTT\_LED1 (TH67+ / TH67):** Power Status Indicators

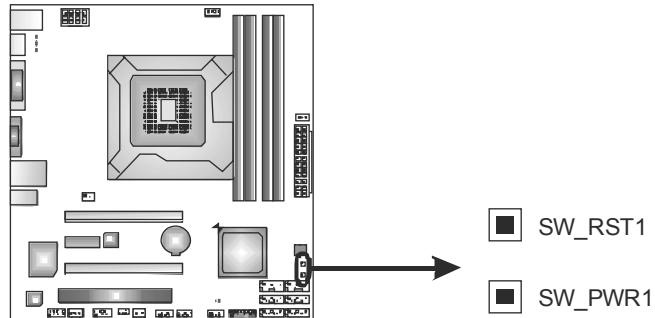
Please refer to the tables below for specific messages:

LED_D1	LED_D2	Message
ON	ON	Normal
ON	OFF	Memory Error
OFF	ON	VGA Error
OFF	OFF	Abnormal: CPU / Chipset error.

PHS PH1~PH3 VTT_LED	Phase Indicator (TH67+ / TH67)
ON	Phase Active
OFF	Phase Inactive

### On-Board Buttons

There are 2 on-board buttons.



**SW\_RST1:** Reset button.

**SW\_PWR1:** Power Switch button.

## CHAPTER 4: RAID FUNCTIONS

### 4.1 OPERATING SYSTEM

Supports Windows Vista and Windows 7.

### 4.2 RAID ARRAYS

RAID supports the following types of RAID arrays:

**RAID 0:** RAID 0 defines a disk striping scheme that improves disk read and write times for many applications.

**RAID 1:** RAID 1 defines techniques for mirroring data.

**RAID 10:** RAID 10 combines the techniques used in RAID 0 and RAID 1.

**RAID 5:** RAID 5 provides fault tolerance and better utilization of disk capacity.

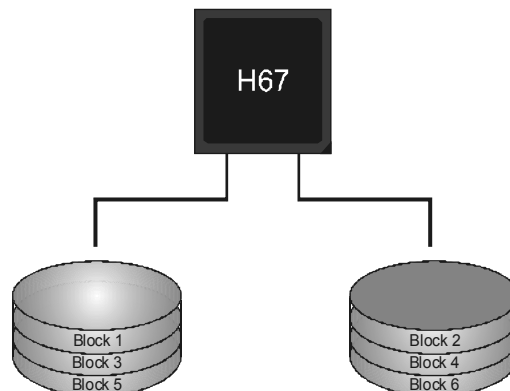
### 4.3 How RAID WORKS

#### RAID 0:

The controller “stripes” data across multiple drives in a RAID 0 array system. It breaks up a large file into smaller blocks and performs disk reads and writes across multiple drives in parallel. The size of each block is determined by the stripe size parameter, which you set during the creation of the RAID set based on the system environment. This technique reduces overall disk access time and offers high bandwidth.

#### Features and Benefits

- **Drives:** Minimum 2, and maximum is up to 6 or 8. Depending on the platform.
- **Uses:** Intended for non-critical data requiring high data throughput, or any environment that does not require fault tolerance.
- **Benefits:** provides increased data throughput, especially for large files. No capacity loss penalty for parity.
- **Drawbacks:** Does not deliver any fault tolerance. If any drive in the array fails, all data is lost.
- **Fault Tolerance:** No.

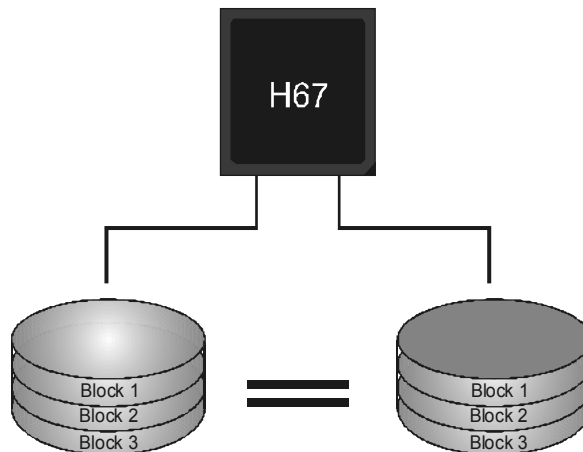


**RAID 1:**

Every read and write is actually carried out in parallel across 2 disk drives in a RAID 1 array system. The mirrored (backup) copy of the data can reside on the same disk or on a second redundant drive in the array. RAID 1 provides a hot-standby copy of data if the active volume or drive is corrupted or becomes unavailable because of a hardware failure. RAID techniques can be applied for high-availability solutions, or as a form of automatic backup that eliminates tedious manual backups to more expensive and less reliable media.

**Features and Benefits**

- **Drives:** Minimum 2, and maximum is 2.
- **Uses:** RAID 1 is ideal for small databases or any other application that requires fault tolerance and minimal capacity.
- **Benefits:** Provides 100% data redundancy. Should one drive fail, the controller switches to the other drive.
- **Drawbacks:** Requires 2 drives for the storage space of one drive. Performance is impaired during drive rebuilds.
- **Fault Tolerance:** Yes.

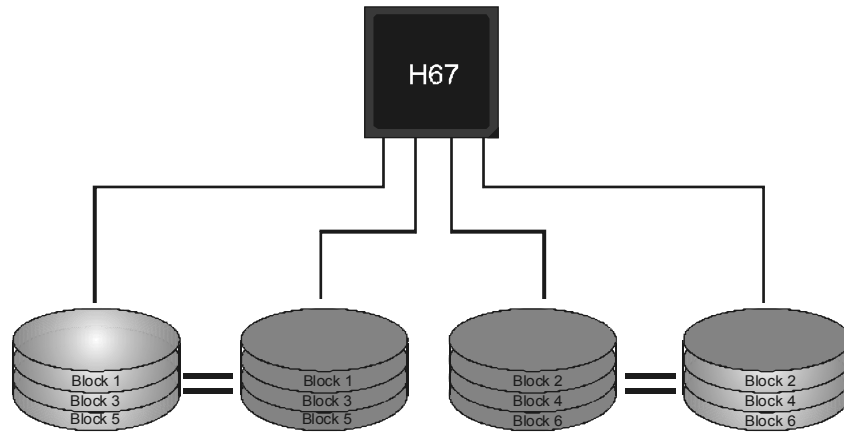


**RAID 10:**

RAID 1 drives can be striped using RAID 0 techniques. Resulting in a RAID 10 solution for improved resiliency, performance and rebuild performance.

**Features and Benefits**

- **Drives:** Minimum 4, and maximum is 6 or 8, depending on the platform.
- **Benefits:** Optimizes for both fault tolerance and performance, allowing for automatic redundancy. May be simultaneously used with other RAID levels in an array, and allows for spare disks.
- **Drawbacks:** Requires twice the available disk space for data redundancy, the same as RAID level 1.
- **Fault Tolerance:** Yes.

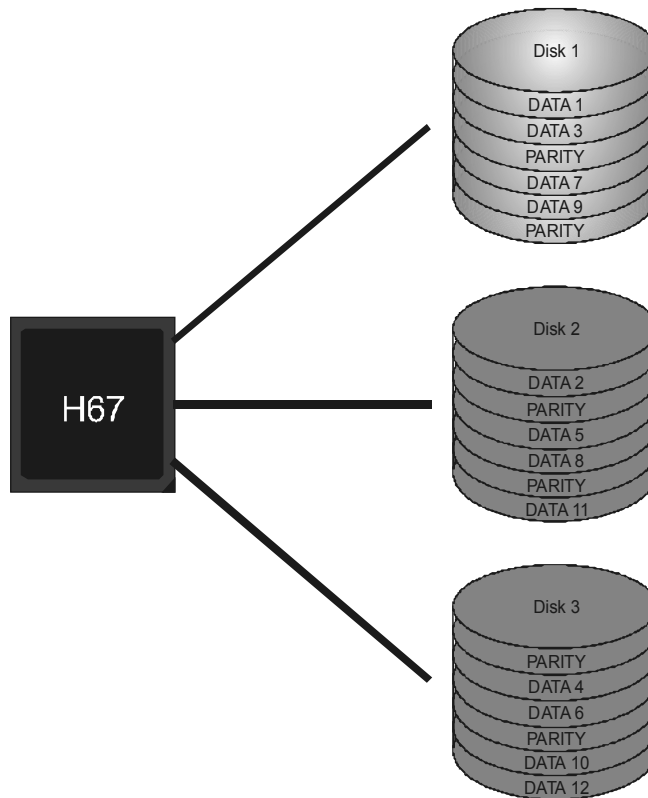


**RAID 5:**

RAID 5 stripes both data and parity information across three or more drives. It writes data and parity blocks across all the drives in the array. Fault tolerance is maintained by ensuring that the parity information for any given block of data is placed on a different drive from those used to store the data itself.

**Features and Benefits**

- **Drives:** Minimum 3.
- **Uses:** RAID 5 is recommended for transaction processing and general purpose service.
- **Benefits:** An ideal combination of good performance, good fault tolerance, and high capacity and storage efficiency.
- **Drawbacks:** Individual block data transfer rate same as a single disk. Write performance can be CPU intensive.
- **Fault Tolerance:** Yes.





## CHAPTER 5: T-SERIES BIOS & SOFTWARE

### 5.1 T-SERIES UEFI BIOS

#### T-Series UEFI BIOS Features

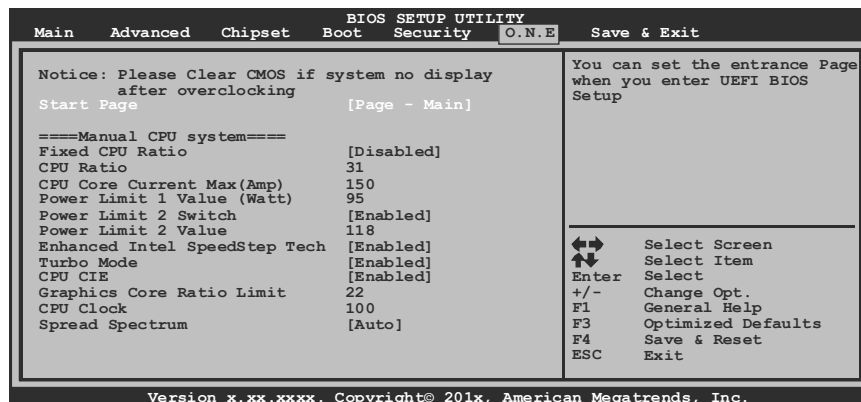
- Overclocking Navigator Engine (O.N.E.)
- Self Recovery System (S.R.S)
- Smart Fan Function
- BIO-Flasher: Update UEFI BIOS file from USB Flash Drive

#### **!! WARNING !!**

For better system performance, the UEFI BIOS firmware is being continuously updated. The UEFI BIOS information described below in this manual is for your reference only and the actual UEFI BIOS information and settings on board may be different from this manual. For further information of setting up the UEFI BIOS, please refer to the UEFI BIOS Manual in the Setup CD.

#### A. Overclocking Navigator Engine (O.N.E.)

O.N.E provides 4 systems allowing users to customize personal overclock settings: Manual CPU System, Manual Memory System, Manual PWM System, and Manual Voltage System.



#### Notice:

Not all types of Intel CPU perform above overclock setting ideally; the difference will be based on the selected CPU model.

**NOTE**

Overclock is an optional process, but not a “must-do” process; it is not recommended for inexperienced users. Therefore, we will not be responsible for any hardware damage which may be caused by overclocking. We also would not guarantee any overclocking performance.

**B. Self Recovery System (S.R.S.)**

This function can't be seen under UEFI BIOS setup, and is always on whenever the system starts up.

However, it can prevent system hang-up due to inappropriate overclock actions.

When the system hangs up, S.R.S. will automatically log in the default UEFI BIOS setting, and all overclock settings will be re-configured.

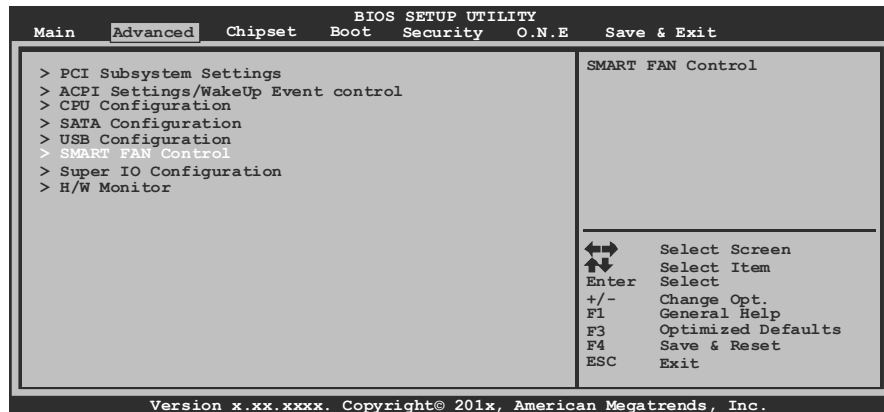
**C. Smart Fan Function**

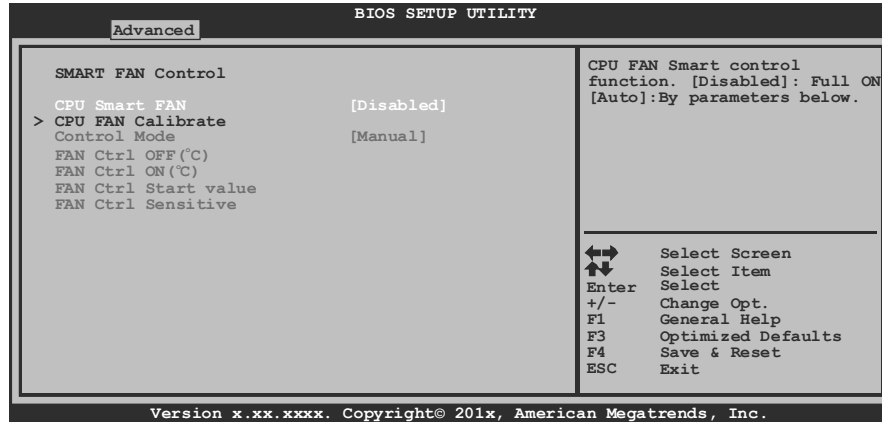
Smart Fan Function is under “Smart Fan Control” in “Advanced Menu”.

This is a brilliant feature to control CPU/System Temperature vs. Fan speed.

When enabling Smart Fan function, Fan speed is controlled automatically by CPU/System temperature.

This function will protect CPU/System from overheat problem and maintain the system temperature at a safe level.





**CPU Smart FAN**

This item allows you to control the CPU Smart Fan function.

**CPU FAN Calibrate**

Press [ENTER] to calibrate CPU FAN.

**Control Mode**

This item provides several operation modes of the fan.

**Fan Ctrl OFF(°C)**

When CPU temperature is lower than this value, the CPU fan will keep lowest RPM. The range is from 0~127, with an interval of 1.

**Fan Ctrl On(°C)**

When CPU temperature is higher than this value, the CPU fan controller will turn on. The range is from 0~127, with an interval of 1.

**Fan Ctrl Start Value**

This item sets CPU FAN Start Speed Value. The range is from 0~127, with an interval of 1.

**Fan Ctrl Sensitive**

The bigger the numeral is, the higher the FAN speed is. The range is from 0~127, with an interval of 1.

## 5.2 T-SERIES SOFTWARE

### Installing T-Series Software

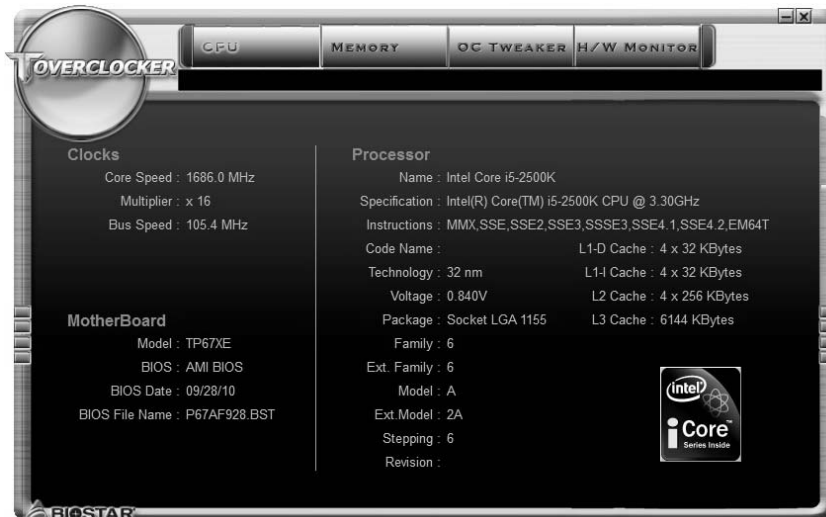
1. Insert the Setup CD to the optical drive. The driver installation program would appear if the Auto-run function has been enabled.
2. Select **Software Installation**, and then click on the respective software title.
3. Follow the on-screen instructions to complete the installation.

### Launching T-Series Software

After the installation process is completed, you will see the software icon showing on the desktop. Double-click the icon to launch it.

### TOverclocker

TOverclocker presents a simple Windows-based system performance enhancement and manageability utility. It features several powerful and easy to use tools such as Overclocking for enhancing system performance, also for special enhancement on CPU and Memory. Smart-Fan management and PC health are for monitoring system status. This utility also allows you to make overclocking profiles saving unlimitedly, and pre-set OC modes are for easy OC. (The illustration below is for reference only)





The **CPU** tab provides information on the CPU and motherboard.



The **Memory** tab provides information on the memory module(s).

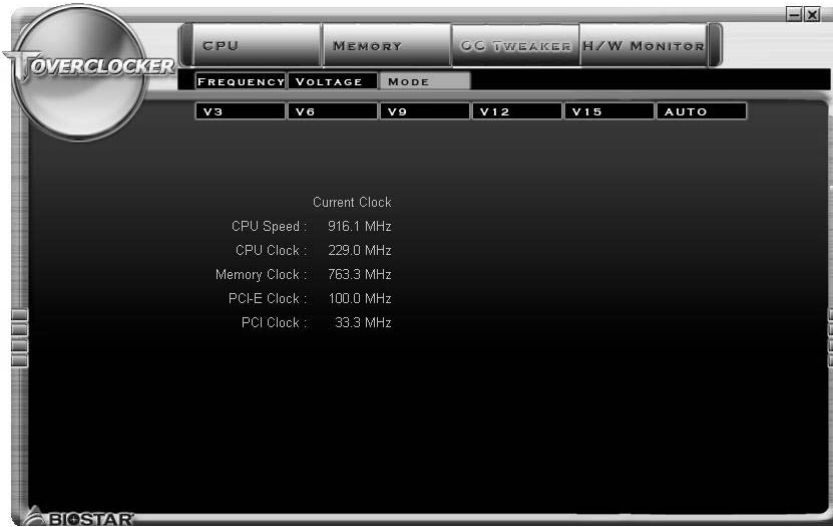
You can select memory module on a specific slot to see its information.



The **OC Tweaker** tab allows you to change system clock settings and voltages settings. It also provides six pre-set modes for you:



**3 Pre-set Modes: V6, V12, AUTO** for different overclocking experience.



The **HW Monitor** tab allows you to monitor hardware voltage, fan speed, and temperature. Besides, you also can set related values for CPU Smart Fan.



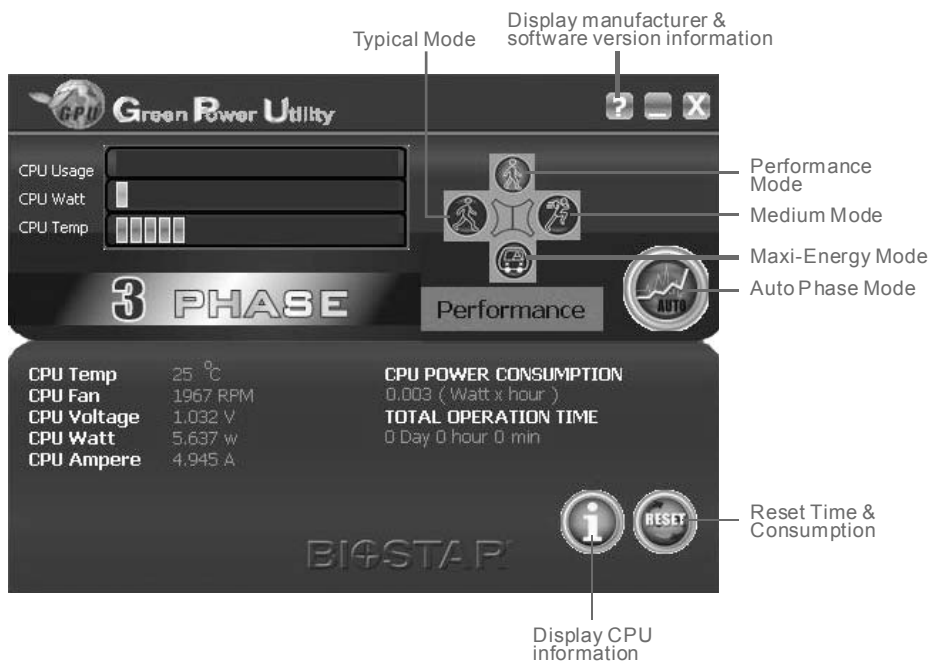


Pressing **TOVERCLOCKER** logo displays information about manufacturer and software version. You can update current version by clicking the button “Live Update.”



### Green Power II Utility

BIOSTAR G.P.U II (Green Power Utility) is a new function. The utility enhances energy efficiency by disabling extra phases while CPU is on light loading; it features 4+1 power phases, current power saving, and total power saving. This tool integrates a friendly GUI to monitor your CPU Usage, CPU Watt, and CPU Temperature. Moreover, it optimizes power saving and best power efficiency on your system. (The illustration below is for reference only)



### **G.P.U Mode Setting**

This utility provides five modes, upon your requirements, to improve system performance or to save power consumption.

**Note:** Even if the modes saving more power consumption are chosen, the system still can keep excellent performance.

- **Auto Phase Mode**

System switches the mode automatically according to current system loading condition.

- **Performance Mode**

This is the mode saving power consumption most. Least energy will be used in the system.

- **Typical Mode**

Compared with that in Performance Mode, energy consumption in this mode is a little bit more.

- **Medium Mode**

This is the standard system power saving mode.

- **Maxi-Energy Mode**

This is the best system performance mode.



### 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.

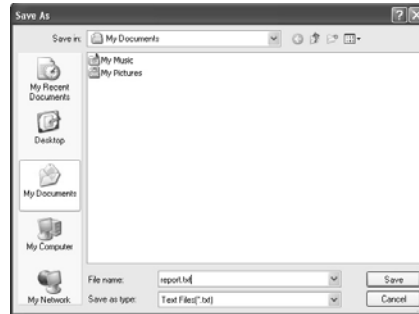
\* represents important information that you must provide. Without this information, you may not be able to send out the mail.

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



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

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



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



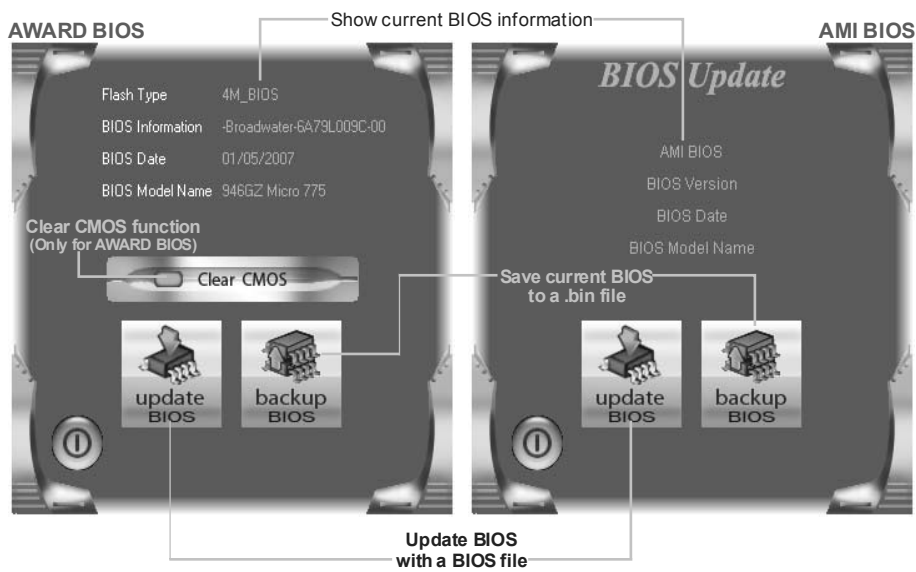
**We will not share customer’s data with any other third parties,** so please feel free to provide your system information while using eHot-Line service.



If you are not using Outlook Express as your default e-mail client application, you may need to save the system information to a .txt file and send the file to our tech support with other e-mail application.

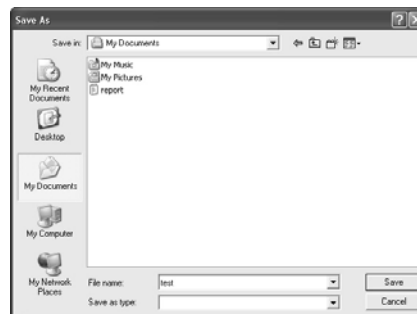
## BIOS Update

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



### <Backup BIOS>

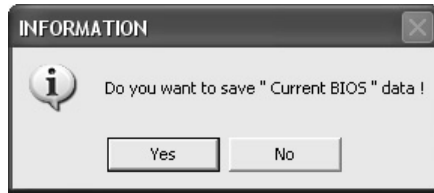
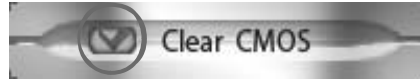
Once click on this button, the saving dialog will show. Choose the position to save file and enter file name. (We recommend that the file name should be English/number and no longer than 7 characters.) Then click **Save**.



<Update BIOS>

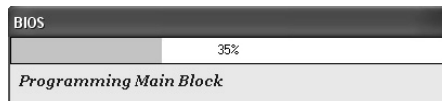
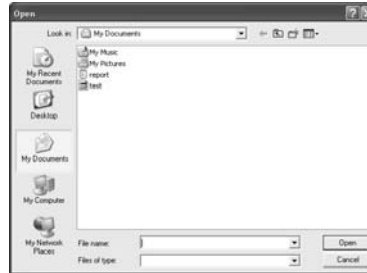
Before doing this, please download the proper BIOS file from the website.

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



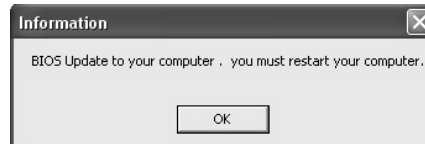
Then click Update BIOS button, a dialog will show for asking you backup current BIOS. Click **Yes** for BIOS backup and refer to the Backup BIOS procedure; or click **No** to skip this procedure.


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 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.

### ***BIOScreen Utility (Optional)***

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



Please follow the following instructions to update boot logo:

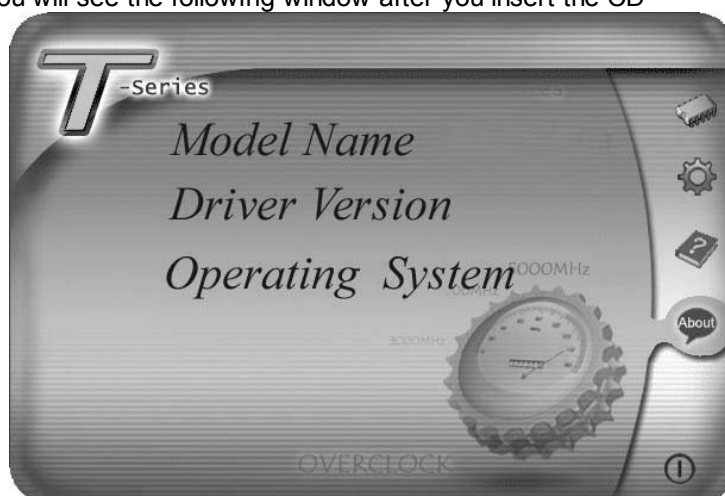
1. **Load Image** : Choose the picture as the boot logo.
2. **Transform** : Transform the picture for BIOS and preview the result.
3. **Update Bios** : Write the picture to BIOS Memory to complete the update.

## CHAPTER 6: USEFUL HELP

### 6.1 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>

## 6.2 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.

### 6.3 TROUBLESHOOTING

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



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**APPENDIX: SPEC IN OTHER LANGUAGES**

**GERMAN**

	<b>TH67+ / TH67</b>	<b>TH67B</b>
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 H67	Intel H67
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 4 Jeder DIMM unterstützt 512MB / 1GB / 2GB / 4GB DDR3. Max. 16GB Arbeitsspeicher Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 1333/1066 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.	DDR3 DIMM-Steckplätze x 4 Jeder DIMM unterstützt 512MB / 1GB / 2GB / 4GB DDR3. Max. 16GB Arbeitsspeicher Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 1333/1066 registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
SATA 2 & 3	Integrierter Serial ATA-Controller Datenferrate bis zu 3.0Gb/s / 6.0 Gb/s Konform mit der SATA-Spezifikation Version 2.0 / 3.0.	Integrierter Serial ATA-Controller Datenferrate bis zu 3.0Gb/s / 6.0 Gb/s Konform mit der SATA-Spezifikation Version 2.0 / 3.0.
LAN	Realtek RTL8111E 10 / 100 / 1000 Mb/s Auto-Negotiation	Realtek RTL8111E 10 / 100 / 1000 Mb/s Auto-Negotiation
HD Audio-Unterstützung	ALC892 Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe	ALC892 Unterstützt High-Definition Audio 5.1-Kanal-Audioausgabe
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Steckplätze	PCI-Steckplatz x1 PCI-E Gen2 x 16 @ x16 Steckplatz x1 PCI-E Gen2 x 16 @ x4 Steckplatz x1 PCI-E Gen2 x1-Steckplatz x1	PCI-Steckplatz x1 PCI-E Gen2 x 16 @ x16 Steckplatz x1 PCI-E Gen2 x 16 @ x4 Steckplatz x1 PCI-E Gen2 x1-Steckplatz x1

## TH67+ / TH67 / TH67B

		<b>TH67+ / TH67</b>	<b>TH67B</b>
Onboard-Anschluss	Serieller Anschluss	x1	Serieller Anschluss x1
	SATA 3-Anschluss	x2	SATA 3-Anschluss x2
	SATA 2-Anschluss	x4	SATA 2-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	x2	System-Lüfter-Sockel x2
	"CMOS löschen"-Sockel	x1	"CMOS löschen"-Sockel x1
	USB 2.0-Anschluss	x3	USB 2.0-Anschluss x3
	Verbraucher-IR Anschluss	x1	Verbraucher-IR Anschluss x1
	Stromanschluss (24-polig)	x1	Stromanschluss (24-polig) x1
Stromanschluss (8-polig)	x1	Stromanschluss (4-polig) x1	
Rückseiten-E/A	PS/2-Tastatur / Maus	x1	PS/2-Tastatur / Maus x1
	HDMI-Anschluss	x1	HDMI-Anschluss x1
	VGA-Anschluss	x1	VGA-Anschluss x1
	DVI-D-Anschluss	x1	DVI-D-Anschluss x1
	LAN-Anschluss	x1	LAN-Anschluss x1
	USB 2.0-Anschluss (durch H67)	x2	USB 2.0-Anschluss x4
	USB 3.0-Anschluss (durch NEC uPD720200 / Asmedia ASM1042)	x2	Audioanschluss x3
	Audioanschluss	x3	
Platinengröße	230mm (B) X 244 mm (L)	230mm (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**

	<b>TH67+ / TH67</b>	<b>TH67B</b>
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 H67	Intel H67
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 4 Chaque DIMM prend en charge des DDR3 de 512Mo / 1Go / 2Go / 4Go Capacité mémoire maximale de 16Go 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 4 Chaque DIMM prend en charge des DDR3 de 512Mo / 1Go / 2Go / 4Go Capacité mémoire maximale de 16Go 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 & 3	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 3.0Go/s / 6.0 Gb/s. Conforme à la spécification SATA Version 2.0 / 3.0	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 3.0Go/s / 6.0 Gb/s. Conforme à la spécification SATA Version 2.0 / 3.0
LAN	Realtek RTL8111E 10 / 100 / 1000 Mb/s négociation automatique	Realtek RTL8111E 10 / 100 / 1000 Mb/s négociation automatique
Prise en charge audio HD	ALC892 Prise en charge de l'audio haute définition Sortie audio à 5.1 voies	ALC892 Prise en charge de l'audio haute définition Sortie audio à 5.1 voies
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Fentes	Fente PCI x1 Fente PCI-E Gen2 x 16 @ x16 x1 Fente PCI-E Gen2 x 16 @ x4 x1 Fente PCI-E Gen2 x1 x1	Fente PCI x1 Fente PCI-E Gen2 x 16 @ x16 x1 Fente PCI-E Gen2 x 16 @ x4 x1 Fente PCI-E Gen2 x1 x1

## TH67+ / TH67 / TH67B

	<b>TH67+ / TH67</b>	<b>TH67B</b>		
Connecteur embarqué	Port série	x1	Port série	x1
	Connecteur SATA 3	x2	Connecteur SATA 3	x2
	Connecteur SATA 2	x4	Connecteur SATA 2	x4
	Connecteur du panneau avant	x1	Connecteur du panneau avant	x1
	Connecteur Audio du panneau avant	x1	Connecteur Audio du panneau avant	x1
	Connecteur de sortie S/PDIF	x1	Connecteur de sortie S/PDIF	x1
	Embase de ventilateur UC	x1	Embase de ventilateur UC	x1
	Embase de ventilateur système	x2	Embase de ventilateur système	x2
	Embase d'effacement CMOS	x1	Embase d'effacement CMOS	x1
	Connecteur USB 2.0	x3	Connecteur USB 2.0	x3
	Connecteur de IR du consommateur	x1	Connecteur de IR du consommateur	x1
	Connecteur d'alimentation (24 broches)	x1	Connecteur d'alimentation (24 broches)	x1
	Connecteur d'alimentation (8 broches)	x1	Connecteur d'alimentation (4 broches)	x1
	E/S du panneau arrière	Clavier / Souris PS/2	x1	Clavier / Souris PS/2
Port HDMI		x1	Port HDMI	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 (par H67)		x2	Port LAN	x1
Port USB 3.0 (par NEC uPD720200 / Asmedia ASM1042)		x2	Port USB 2.0	x4
Fiche audio		x3	Fiche audio	x3
Dimensions de la carte	230mm (l) X 244 mm (H)		230mm (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**

	<b>TH67+ / TH67</b>	<b>TH67B</b>
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 H67	Intel H67
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 4 Ciascun DIMM supporta DDR3 512MB / 1GB / 2GB / 4GB Capacità massima della memoria 16GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 1333/1066 DIMM registrati e DIMM ECC non sono supportati	Alloggi DIMM DDR3 x 4 Ciascun DIMM supporta DDR3 512MB / 1GB / 2GB / 4GB Capacità massima della memoria 16GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 1333/1066 DIMM registrati e DIMM ECC non sono supportati
SATA 2 & 3	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s / 6.0 Gb/s. Compatibile specifiche SATA Versione 2.0 / 3.0.	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3.0Gb/s / 6.0 Gb/s. Compatibile specifiche SATA Versione 2.0 / 3.0.
LAN	Realtek RTL8111E Negoziazione automatica 10 / 100 / 1000Mb/s	Realtek RTL8111E Negoziazione automatica 10 / 100 / 1000Mb/s
Supporto audio HD	ALC892 Supporto audio High-Definition (HD) Uscita audio 5.1 canali	ALC892 Supporto audio High-Definition (HD) Uscita audio 5.1 canali
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Alloggi	Alloggio PCI x1 Alloggio PCI-E Gen2 x16 @ x16 x1 Alloggio PCI-E Gen2 x16 @ x4 x1 Alloggio PCI Express Gen2 x1 x1	Alloggio PCI x1 Alloggio PCI-E Gen2 x16 @ x16 x1 Alloggio PCI-E Gen2 x16 @ x4 x1 Alloggio PCI Express Gen2 x1 x1

## TH67+ / TH67 / TH67B

	<b>TH67+ / TH67</b>	<b>TH67B</b>		
Connettori su scheda	Porta seriale	x1	Porta seriale	x1
	Connettore SATA 3	x2	Connettore SATA 3	x2
	Connettore SATA 2	x4	Connettore SATA 2	x4
	Connettore pannello frontale	x1	Connettore pannello frontale	x1
	Connettore audio frontale	x1	Connettore audio frontale	x1
	Connettore output SPDIF	x1	Connettore output SPDIF	x1
	Collettore ventolina CPU	x1	Collettore ventolina CPU	x1
	Collettore ventolina sistema	x2	Collettore ventolina sistema	x2
	Collettore cancellazione CMOS	x1	Collettore cancellazione CMOS	x1
	Connettore USB 2.0	x3	Connettore USB 2.0	x3
	Connettore IR del consumatore	x1	Connettore IR del consumatore	x1
	Connettore alimentazione (24 pin)	x1	Connettore alimentazione (24 pin)	x1
	Connettore alimentazione (8 pin)	x1	Connettore alimentazione (4 pin)	x1
	I/O pannello posteriore	Tastiera / Mouse PS/2	x1	Tastiera / Mouse PS/2
Porta HDMI		x1	Porta HDMI	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 (da H67)		x2	Porta USB 2.0	x4
Porta USB 3.0 (da NEC uPD720200 / Asmedia ASM1042)		x2	Connettore audio	x3
Connettore audio		x3		
Dimensioni scheda	230mm (larghezza) x 244 mm (altezza)	230mm (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.	Windows XP / Vista / 7 Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.		

**SPANISH**

	<b>TH67+ / TH67</b>	<b>TH67B</b>
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 H67	Intel H67
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 4 Cada DIMM admite DDR de 512MB / 1GB / 2GB / 4GB Capacidad máxima de memoria de 16GB 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 4 Cada DIMM admite DDR de 512MB / 1GB / 2GB / 4GB Capacidad máxima de memoria de 16GB Módulo de memoria DDR3 de canal Doble Admite DDR3 de 1333/1066 No admite DIMM registrados o DIMM compatibles con ECC
SATA 2 & 3	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s / 6.0 Gb/s. Compatible con la versión SATA 2.0 / 3.0.	Controlador ATA Serie Integrado Tasas de transferencia de hasta 3.0 Gb/s / 6.0 Gb/s. Compatible con la versión SATA 2.0 / 3.0.
Red Local	Realtek RTL8111E Negociación de 10 / 100 / 1000 Mb/s	Realtek RTL8111E Negociación de 10 / 100 / 1000 Mb/s
Soporte de sonido HD	ALC892 Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales	ALC892 Soporte de sonido de Alta Definición Salida de sonido de 5.1 canales
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Ranuras	Ranura PCI X1 Ranura PCI-E Gen2 x16 @ x16 X1 Ranura PCI-E Gen2 x16 @ x4 X1 Ranura PCI-E Gen2 x 1 X1	Ranura PCI X1 Ranura PCI-E Gen2 x16 @ x16 X1 Ranura PCI-E Gen2 x16 @ x4 X1 Ranura PCI-E Gen2 x 1 X1



## TH67+ / TH67 / TH67B

		<b>TH67+ / TH67</b>	<b>TH67B</b>
Conectores en placa	Puerto serie	X1	Puerto serie X1
	Conector SATA 3	X2	Conector SATA 3 X2
	Conector SATA 2	X4	Conector SATA 2 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	X2	Cabecera de ventilador de sistema X2
	Cabecera de borrado de CMOS	X1	Cabecera de borrado de CMOS X1
	Conector USB 2.0	X3	Conector USB 2.0 X3
	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 (8 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 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 H67)	X2	Puerto USB 2.0 X4
	Puerto USB 3.0 (por NEC uPD720200 / Asmedia ASM1042)	X2	Conector de sonido X3
	Conector de sonido	X3	
Tamaño de la placa	230mm. (A) X 244 Mm. (H)		230mm. (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**

	<b>TH67+ / TH67</b>	<b>TH67B</b>
CPU	Socket 1155 Processador Intel Core i7 / i5 / i3/ Pentium Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture -64 / Extended Memory 64 / Virtualization	Socket 1155 Processador Intel Core i7 / i5 / i3/ Pentium Suporta as tecnologias Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture -64 / Extended Memory 64 / Virtualization
Chipset	Intel H67	Intel H67
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	Ranuras DIMM DDR3 x 4 Cada módulo DIMM suporta uma memória DDR3 de 512 MB / 1GB / 2GB / 4GB Capacidade máxima de memória:16GB Módulo de memória DDR3 de canal duplo Suporta módulos DDR3 1333/1066 Os módulos DIMM registados e os DIMM ECC não são suportados	Ranuras DIMM DDR3 x 4 Cada módulo DIMM suporta uma memória DDR3 de 512 MB / 1GB / 2GB / 4GB Capacidade máxima de memória:16GB 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 & 3	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s / 6.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0 / 3.0.	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3.0 Gb/s / 6.0 Gb/s. Compatibilidade com a especificação SATA versão 2.0 / 3.0.
LAN	Realtek RTL8111E Auto negociação de 10 / 100 / 1000 Mb/s	Realtek RTL8111E Auto negociação de 10 / 100 / 1000 Mb/s
Suporte para áudio de alta definição	ALC892 Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais	ALC892 Suporta a especificação High-Definition Audio Saída de áudio de 5.1 canais
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Ranuras	Ranhura PCI x1 Ranhura PCI-E Gen2 x16 @ x16 x1 Ranhura PCI-E Gen2 x16 @ x4 x1 Ranhura PCI-E Gen2 x 1 x1	Ranhura PCI x1 Ranhura PCI-E Gen2 x16 @ x16 x1 Ranhura PCI-E Gen2 x16 @ x4 x1 Ranhura PCI-E Gen2 x 1 x1

## TH67+ / TH67 / TH67B

		<b>TH67+ / TH67</b>	<b>TH67B</b>
Conectores na placa	Porta série	x1	Porta série x1
	Conector SATA 3	x2	Conector SATA 3 x2
	Conector SATA 2	x4	Conector SATA 2 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	x2	Conector da ventoinha do sistema x2
	Conector para limpeza do CMOS	x1	Conector para limpeza do CMOS x1
	Conector USB 2.0	x3	Conector USB 2.0 x3
	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 (8 pinos)	x1	Conector de alimentação (4 pinos) x1
	Entradas/Saídas no painel traseiro	Teclado / Rato PS/2	x1
Porta HDMI		x1	Porta HDMI 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 H67)		x2	Porta USB 2.0 x4
Porta USB 3.0 (por NEC uPD720200 / Asmedia ASM1042)		x2	Tomada de áudio x3
Tomada de áudio	x3		
Tamanho da placa	230mm (L) X 244 mm (A)		230mm (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**

	<b>TH67+ / TH67</b>	<b>TH67B</b>
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 H67	Intel H67
Pamięć główna	Gniazda DDR3 DIMM x 4 Każde gniazdo DIMM obsługuje moduły 512MB / 1GB / 2GB / 4GB Maks. wielkość pamięci 16GB Moduł pamięci DDR3 z trybem podwójnego kanału Obsługa DDR3 1333/1066 Brak obsługi Registered DIMM oraz ECC DIMM	Gniazda DDR3 DIMM x 4 Każde gniazdo DIMM obsługuje moduły 512MB / 1GB / 2GB / 4GB Maks. wielkość pamięci 16GB 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 & 3	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s / 6.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0 / 3.0.	Zintegrowany kontroler Serial ATA Transfer danych do 3.0 Gb/s / 6.0 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0 / 3.0.
LAN	Realtek RTL8111E 10 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości	Realtek RTL8111E 10 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości
Obsługa audio HD	ALC892 Obsługa High-Definition Audio 5.1 kanałowe wyjście audio	ALC892 Obsługa High-Definition Audio 5.1 kanałowe wyjście audio
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Gniazda	Gniazdo PCI x1 Gniazdo PCI-E Gen2 x16 @ x16 x1 Gniazdo PCI-E Gen2 x16 @ x4 x1 Gniazdo PCI-E Gen2 x 1 x1	Gniazdo PCI x1 Gniazdo PCI-E Gen2 x16 @ x16 x1 Gniazdo PCI-E Gen2 x16 @ x4 x1 Gniazdo PCI-E Gen2 x 1 x1

## TH67+ / TH67 / TH67B

		<b>TH67+ / TH67</b>	<b>TH67B</b>
Złącza wbudowane	Port szeregowy	x1	Port szeregowy x1
	Złącze SATA 3	x2	Złącze SATA 3 x2
	Złącze SATA 2	x4	Złącze SATA 2 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 główkowe wentylatora procesora	x1	Złącze główkowe wentylatora procesora x1
	Złącze główkowe wentylatora systemowego	x2	Złącze główkowe wentylatora systemowego x2
	Złącze główkowe kasowania CMOS	x1	Złącze główkowe kasowania CMOS x1
	Złącze USB 2.0	x3	Złącze USB 2.0 x3
	Złącze Konsument IR	x1	Złącze Konsument IR x1
	Złącze zasilania (24 pinowe)	x1	Złącze zasilania (24 pinowe) x1
	Złącze zasilania (8 pinowe)	x1	Złącze zasilania (4 pinowe) x1
	Back Panel I/O	Klawiatura / Mysz PS/2	x1
Port HDMI		x1	Port HDMI 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 H67)		x2	Port USB 2.0 x4
Port USB 3.0 (przez NEC uPD720200 / Asmedia ASM1042)		x2	Gniazdo audio x3
Gniazdo audio		x3	
Wymiary płyty	230mm (S) X 244 mm (W)		230mm (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

	<b>TH67+ / TH67</b>	<b>TH67B</b>
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 H67	Intel H67
Основная память	Слоты DDR3 DIMM x 4 Каждый модуль DIMM поддерживает 512МБ / 1ГБ / 2ГБ / 4ГБ DDR3 Максимальная ёмкость памяти 16ГБ Модуль памяти с двухканальным режимом DDR3 Поддержка DDR3 1333/1066 Не поддерживает зарегистрированные модули DIMM and ECC DIMM	Слоты DDR3 DIMM x 4 Каждый модуль DIMM поддерживает 512МБ / 1ГБ / 2ГБ / 4ГБ DDR3 Максимальная ёмкость памяти 16ГБ 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 & 3	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с / 6.0 гигабит/с. Соответствие спецификации SATA версия 2.0 / 3.0.	Встроенное последовательное устройство управления ATA скорость передачи данных до 3.0 гигабит/с / 6.0 гигабит/с. Соответствие спецификации SATA версия 2.0 / 3.0.
Локальная сеть	Realtek RTL8111E Автоматическое согласование 10 / 100 / 1000 Мб/с	Realtek RTL8111E Автоматическое согласование 10 / 100 / 1000 Мб/с
Звуковая поддержка жесткого диска	ALC892 Звуковая поддержка High-Definition 5.1канальный звуковой выход	ALC892 Звуковая поддержка High-Definition 5.1канальный звуковой выход
USB3.0	NEC uPD720200 / Asmedia ASM1042	
Слоты	Слот PCI x1 Слот PCI-E Gen2 x16 @ x16 x1 Слот PCI-E Gen2 x16 @ x4 x1 Слот PCI-E Gen2 x 1 x1	Слот PCI x1 Слот PCI-E Gen2 x16 @ x16 x1 Слот PCI-E Gen2 x16 @ x4 x1 Слот PCI-E Gen2 x 1 x1

## TH67+ / TH67 / TH67B

		<b>TH67+ / TH67</b>	<b>TH67B</b>
Встроенный разъем	Последовательный порт	x1	Последовательный порт x1
	Разъем SATA 3	x2	Разъем SATA 3 x2
	Разъем SATA 2	x4	Разъем SATA 2 x4
	Разъем на лицевой панели	x1	Разъем на лицевой панели x1
	Входной звуковой разъем	x1	Входной звуковой разъем x1
	Разъем вывода для S/PDIF	x1	Разъем вывода для S/PDIF x1
	Контактирующее приспособление		Контактирующее приспособление
	вентилятора центрального процессора	x1	вентилятора центрального процессора x1
	Контактирующее приспособление		Контактирующее приспособление
	вентилятора системы	x2	вентилятора системы x2
	Открытое контактирующее приспособление CMOS	x1	Открытое контактирующее приспособление CMOS x1
	USB 2.0-разъем	x3	USB 2.0-разъем x3
	Разъем едока ИКБЙ	x1	Разъем едока ИКБЙ x1
Разъем питания (24 вывод)	x1	Разъем питания (24 вывод) x1	
Разъем питания (8 вывод)	x1	Разъем питания (4 вывод) x1	
Задняя панель средств ввода-вывода	Клавиатура / Мышь PS/2	x1	Клавиатура / Мышь PS/2 x1
	Порт HDMI	x1	Порт HDMI x1
	Порт VGA	x1	Порт VGA x1
	Порт DVI-D	x1	Порт DVI-D x1
	Порт LAN	x1	Порт LAN x1
	USB 2.0-порт (по H67)	x2	Порт LAN x1
	USB 3.0-порт (по NEC uPD720200 / Asmedia ASM1042)	x2	USB 2.0-порт x4
Гнездо для подключения наушников	x3	Гнездо для подключения наушников x3	
Размер панели	230мм (Ш) X 244 мм (В)		230мм (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

TH67B	TH67+ / TH67	
Socket 1155 يتردد يصل إلى Intel Core i7 / i5 / i3 / Pentium معملجات Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	Socket 1155 يتردد يصل إلى Intel Core i7 / i5 / i3 / Pentium معملجات Execute Disable Bit / Enhanced Intel SpeedStep® / Intel Architecture-64 / Extended Memory 64 Technology / Virtualization Technology	وحدة المعالجة المركزية
Intel H67	Intel H67	مجموعة الشرائح
4 عدد قحة DDR3 DIMM سعة تدعم كل قحة DDR3 تدعم ذاكرة من نوع DIMM كل قحة ميغا بايت و1/2 و512 سعة DDR3 تدعم ذاكرة من نوع DIMM و4 ميجا بايت سعة ذاكرة قصوى 16 جيجا بايت مزوجة القاعة DDR3 وحدة ذاكرة سعت 1333/1066 ميجا بايت DDR3 تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	4 عدد قحة DDR3 DIMM سعة تدعم كل قحة DDR3 تدعم ذاكرة من نوع DIMM كل قحة ميغا بايت و1/2 و512 سعة DDR3 تدعم ذاكرة من نوع DIMM و4 ميجا بايت سعة ذاكرة قصوى 16 جيجا بايت مزوجة القاعة DDR3 وحدة ذاكرة سعت 1333/1066 ميجا بايت DDR3 تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	الذاكرة الرئيسية
ITE 8728 الأكثر استخداماً، Super I/O يوفر 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 يوفر وظيفة Low Pin Count Interface تدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة ITE من "Smart Guardian" وظيفة	Super I/O
متكامل Serial ATA-3 ثانية/جيجابايت 3.0 إلى تصل بسرعات البيانات نقل ثانية/جيجابايت 6.0 الإصدار SATA مطابقة لمواصفات 2.0 / 3.0.	متكامل Serial ATA-3 ثانية/جيجابايت 3.0 إلى تصل بسرعات البيانات لنق ثانية/جيجابايت 6.0 الإصدار SATA مطابقة لمواصفات	SATA 2 & 3
Realtek RTL8111E تفاوض تلقائي 100/10 ميجا بايت / ثانية و1 جيجا بايت/ثانية	Realtek RTL8111E تفاوض تلقائي 100/10 ميجا بايت / ثانية و1 جيجا بايت/ثانية	شبكة داخلية
ALC892 تدعم تقنية الصوت عالي التعريف من 5.1 قنوات لخرج الصوت	ALC892 تدعم تقنية الصوت عالي التعريف من 5.1 قنوات لخرج الصوت	دعم الصوت عالي التعريف
	NEC uPD720200 / Asmedia ASM1042	USB3.0
1 عدد قحة PCI قحة PCI-E Gen2 x16 @ x16 قحة PCI-E Gen2 x16 @ x4 قحة PCI-E Gen2 x1	1 عدد قحة PCI قحة PCI-E Gen2 x16 @ x16 قحة PCI-E Gen2 x16 @ x4 قحة PCI-E Gen2 x1	القحات



TH67+ / TH67 / TH67B

TH67B		TH67+ / TH67		
عدد 1	منفذ تسلسلي	عدد 1	منفذ تسلسلي	المنافذ على سطح اللوحة
عدد 2	منفذ SATA 3	عدد 2	منفذ SATA 3	
عدد 4	منفذ SATA 2	عدد 4	منفذ SATA 2	
عدد 1	منفذ اللوحة الأممية	عدد 1	منفذ اللوحة الأممية	
عدد 1	منفذ الصوت الأممي	عدد 1	منفذ الصوت الأممي	
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 2	وصلة مروحة النظام	عدد 2	وصلة مروحة النظام	
عدد 1	وصلة مسح CMOS	عدد 1	وصلة مسح CMOS	
عدد 3	منفذ USB 2.0	عدد 3	منفذ USB 2.0	
عدد 1	منفذ الأحمر تحت مستهلكة	عدد 1	منفذ الأحمر تحت مستهلكة	
عدد 1	منفذ توصيل الطاقة (24 دبوس)	عدد 1	منفذ توصيل الطاقة (24 دبوس)	
عدد 1	منفذ توصيل الطاقة (4 دبوس)	عدد 1	منفذ توصيل الطاقة (8 دبوس)	
عدد 1	لوحة مفاتيح / ملوس PS/2	عدد 1	لوحة مفاتيح / ملوس PS/2	
عدد 1	لوحه مفاتيح / ملوس PS/2	عدد 1	منافذ HDMI	
عدد 1	منافذ HDMI	عدد 1	منافذ VGA	
عدد 1	منافذ VGA	عدد 1	منافذ DVI-D	
عدد 1	منافذ DVI-D	عدد 1	منفذ شبكة اتصال محلية	
عدد 1	منفذ شبكة اتصال محلية	عدد 2	منافذ USB2.0 (قبل من H67)	
عدد 4	منافذ 2.0 USB	عدد 2	منافذ USB3.0 / NEC uPD720200	
عدد 3	مقيس صوت	عدد 2	(قبل من Asmedia ASM1042)	
		عدد 3	مقيس صوت	
230مم (عرض) X 244مم (ارتفاع)		230مم (عرض) X 244مم (ارتفاع)		حجم اللوحة
Windows XP / Vista / 7 بحفها في اضافة أو ازالة الدعم لأي نظام تشغيل بإخطار Biostar أو بدون إخطار.		Windows XP / Vista / 7 بحفها في اضافة أو ازالة الدعم لأي نظام تشغيل بإخطار Biostar أو بدون إخطار.		دعم أنظمة التشغيل

**JAPANESE**

	<b>TH67+ / TH67</b>	<b>TH67B</b>
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 H67	Intel H67
メインメモリ	DDR3 DIMMスロット x 4 各DIMMは 512MB / 1GB / 2GB / 4GB DDR3をサポート 最大メモリ容量16GB 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 4 各DIMMは 512MB / 1GB / 2GB / 4GB DDR3をサポート 最大メモリ容量16GB 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 もともと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 もともと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 & 3	統合シリアルATA コントローラ 最高3.0 Gb/秒 / 6.0 Gb/秒のデータ転送速度 SATAバージョン2.0 / 3.0仕様に準拠。	統合シリアルATA コントローラ 最高3.0 Gb/秒 / 6.0 Gb/秒のデータ転送速度 SATAバージョン2.0 / 3.0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 10 / 100 / 1000 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	ALC892 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	ALC892 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	NEC uPD720200 / Asmedia ASM1042	
スロット	PCIスロット x1 PCI-E Gen2 x16 @ x16スロット x1 PCI-E Gen2 x16 @ x4スロット x1 PCI Express Gen2 x 1スロット x1	PCIスロット x1 PCI-E Gen2 x16 @ x16スロット x1 PCI-E Gen2 x16 @ x4スロット x1 PCI Express Gen2 x 1スロット x1

TH67+ / TH67 / TH67B

		TH67+ / TH67	TH67B
オンボードコネクタ	シリアルポート	x1	シリアルポート x1
	SATA 3コネクタ	x2	SATA 3コネクタ x2
	SATA 2コネクタ	x4	SATA 2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	x2	システムファンヘッダ x2
	CMOSクリアヘッダ	x1	CMOSクリアヘッダ x1
	USB 2.0コネクタ	x3	USB 2.0コネクタ x3
	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(8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 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 H67)	x2	USB 2.0ポート x4
	USB 3.0ポート(で NEC uPD720200 / Asmedia 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	230mm (幅) X 244 mm (高さ)	230mm (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。	

2011/04/14