

## **FCC Information and Copyright**

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation.

The vendor makes no representations or warranties with respect to the contents here and specially disclaims any implied warranties of merchantability or fitness for any purpose. Further the vendor reserves the right to revise this publication and to make changes to the contents here without obligation to notify any party beforehand.

Duplication of this publication, in part or in whole, is not allowed without first obtaining the vendor's approval in writing.

The content of this user's manual is subject to be changed without notice and we will not be responsible for any mistakes found in this user's manual. All the brand and product names are trademarks of their respective companies.

---

---

## Table of Contents

---

---

<b>Chapter 1: Introduction</b> .....	<b>1</b>
<b>1.1 Before You Start</b> .....	1
<b>1.2 Package Checklist</b> .....	1
<b>1.3 Motherboard Features</b> .....	2
<b>1.4 Rear Panel Connectors (for Ver 5.x)</b> .....	4
<b>1.5 Rear Panel Connectors (for Ver 6.x)</b> .....	4
<b>1.6 Motherboard Layout</b> .....	5
<b>Chapter 2: Hardware Installation</b> .....	<b>6</b>
<b>2.1 Installing Central Processing Unit (CPU)</b> .....	6
<b>2.2 FAN Headers</b> .....	8
<b>2.3 Installing System Memory</b> .....	9
<b>2.4 Connectors and Slots</b> .....	11
<b>Chapter 3: Headers &amp; Jumpers Setup</b> .....	<b>14</b>
<b>3.1 How to Setup Jumpers</b> .....	14
<b>3.2 Detail Settings</b> .....	14
<b>Chapter 4: NVIDIA SLI Function</b> .....	<b>22</b>
<b>4.1 Requirements</b> .....	22
<b>4.2 Installing SLI-Ready Graphics Cards</b> .....	22
<b>4.3 Enabling Multi-GPU Feature in Windows</b> .....	24
<b>Chapter 5: NVIDIA RAID Functions</b> .....	<b>25</b>
<b>5.1 Operation System</b> .....	25
<b>5.2 Raid Arrays</b> .....	25
<b>5.3 How RAID Works</b> .....	25
<b>Chapter 6: OverClock Quick Guide</b> .....	<b>29</b>
<b>6.1 T-Power Introduction</b> .....	29
<b>6.2 T-Power BIOS Feature</b> .....	30
<b>6.3 T-Power Windows Feature</b> .....	38
<b>Chapter 7: Useful Help</b> .....	<b>43</b>
<b>7.1 Driver Installation Note</b> .....	43
<b>7.2 Award BIOS Beep Code</b> .....	44
<b>7.3 Extra Information</b> .....	44
<b>7.4 Troubleshooting</b> .....	45
<b>Appendencies: SPEC In Other Language</b> .....	<b>46</b>
<b>German</b> .....	46
<b>France</b> .....	48
<b>Italian</b> .....	50
<b>Spanish</b> .....	52
<b>Portuguese</b> .....	54
<b>Polish</b> .....	56
<b>Russian</b> .....	58
<b>Arabic</b> .....	60
<b>Japanese</b> .....	62

---

---

## **CHAPTER 1: INTRODUCTION**

### **1.1 BEFORE YOU START**

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

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

### **1.2 PACKAGE CHECKLIST**

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

**Note:** The package contents may differ by area or your motherboard version.

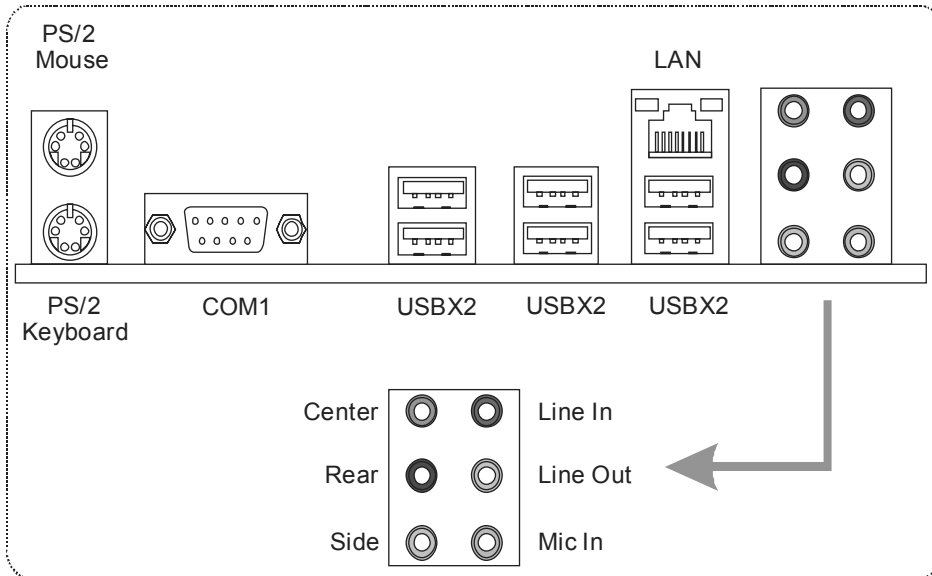
### 1.3 MOTHERBOARD FEATURES

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
CPU	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ processors AMD 64 Architecture enables 32 and 64 bit computing Supports Hyper Transport and Cool'nQuiet	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ processors AMD 64 Architecture enables 32 and 64 bit computing Supports Hyper Transport and Cool'nQuiet
FSB	Support HyperTransport Supports up to 1 GHz Bandwidth	Support HyperTransport Supports up to 1 GHz Bandwidth
Chipset	nForce 570 LT SLI	nForce 570 LT SLI
Super I/O	ITE 8718F Provides the most commonly used legacy Super I/O functionality. Low Pin Count Interface Environment Control initiatives, H/W Monitor Fan Speed Controller ITE's "Smart Guardian" function	ITE 8718F Provides the most commonly used legacy Super I/O functionality. Low Pin Count Interface Environment Control initiatives, H/W Monitor Fan Speed Controller ITE's "Smart Guardian" function
Main Memory	DIMM Slots x 4 Each DIMM supports 256/512/1024/2048MB DDR2 Max Memory Capacity 8GB Dual Channel Mode DDR2 memory module Supports DDR2 533 / 667 / 800 Supports DDR2 1066 (by AM2+ CPU) Registered DIMM and ECC DIMM is not supported	DIMM Slots x 4 Each DIMM supports 256/512/1024/2048MB DDR2 Max Memory Capacity 8GB Dual Channel Mode DDR2 memory module Supports DDR2 533 / 667 / 800 Supports DDR2 1066 (by AM2+ CPU) Registered DIMM and ECC DIMM is not supported
IDE	Integrated IDE Controller Ultra DMA 33 / 66 / 100 / 133 Bus Master Mode supports PIO Mode 0~4,	Integrated IDE Controller Ultra DMA 33 / 66 / 100 / 133 Bus Master Mode supports PIO Mode 0~4,
SATA II	Integrated Serial ATA Controller Data transfer rates up to 3 Gb/s. SATA Version 2.0 specification compliant.	Integrated Serial ATA Controller Data transfer rates up to 3 Gb/s. SATA Version 2.0 specification compliant.
LAN	Realtek 8110SC 10 / 100 Mb/s and 1Gb/s Auto-Negotiation	Realtek 8110SC 10 / 100 Mb/s and 1Gb/s Auto-Negotiation

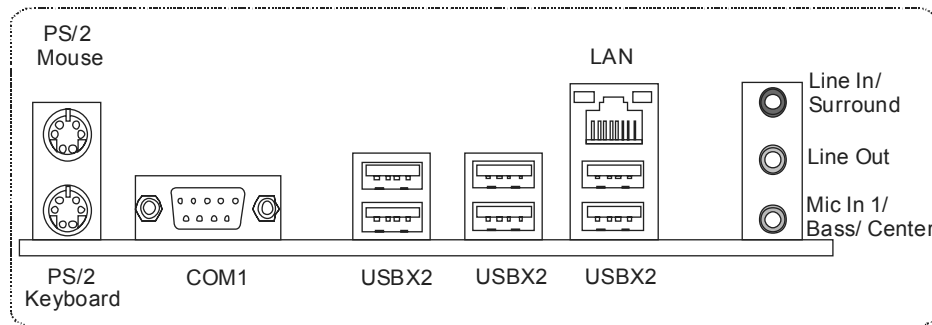
**TF570 SLI A2+**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
Sound	ALC888 7.1 channels audio out Supports HD Audio	ALC662 5.1 channels audio out Supports HD Audio
Slots	PCI slot x2 PCI Express x16 slot (x16/x8) x1 PCI Express x16 slot (x8) x1 PCI Express x 1 slot x2	PCI slot x2 PCI Express x16 slot (x16/x8) x1 PCI Express x16 slot (x8) x1 PCI Express x 1 slot x2
On Board Connector	Floppy connector x1 Printer Port connector x1 IDE Connector x1 SATA Connector x4 Front Panel Connector x1 Front Audio Connector x1 CD-in Connector x1 S/PDIF out connector x1 CPU Fan header x1 System Fan header x2 Chassis open header (optional) x1 CMOS clear header x1 USB connector x2 Power Connector (24pin) x1 Power Connector (8pin) x1 Power Connector (4pin) x1	Floppy connector x1 Printer Port connector x1 IDE Connector x1 SATA Connector x4 Front Panel Connector x1 Front Audio Connector x1 CD-in Connector x1 S/PDIF out connector x1 CPU Fan header x1 System Fan header x2 Chassis open header (optional) x1 CMOS clear header x1 USB connector x2 Power Connector (24pin) x1 Power Connector (8pin) x1 Power Connector (4pin) x1
Back Panel I/O	PS/2 Keyboard x1 PS/2 Mouse x1 Serial Port x1 LAN port x1 USB Port x6 Audio Jack x6	PS/2 Keyboard x1 PS/2 Mouse x1 Serial Port x1 LAN port x1 USB Port x6 Audio Jack x3
Board Size	244 mm (W) x 305 mm (L)	244 mm (W) x 305 mm (L)
Special Features	NVIDIA nTunes RAID 0 / 1 / 0+1 / 5 support	NVIDIA nTunes RAID 0 / 1 / 0+1 / 5 support
OS Support	Windows 2000 / XP / VISTA Biostar Reserves the right to add or remove support for any OS With or without notice.	Windows 2000 / XP / VISTA Biostar Reserves the right to add or remove support for any OS With or without notice.

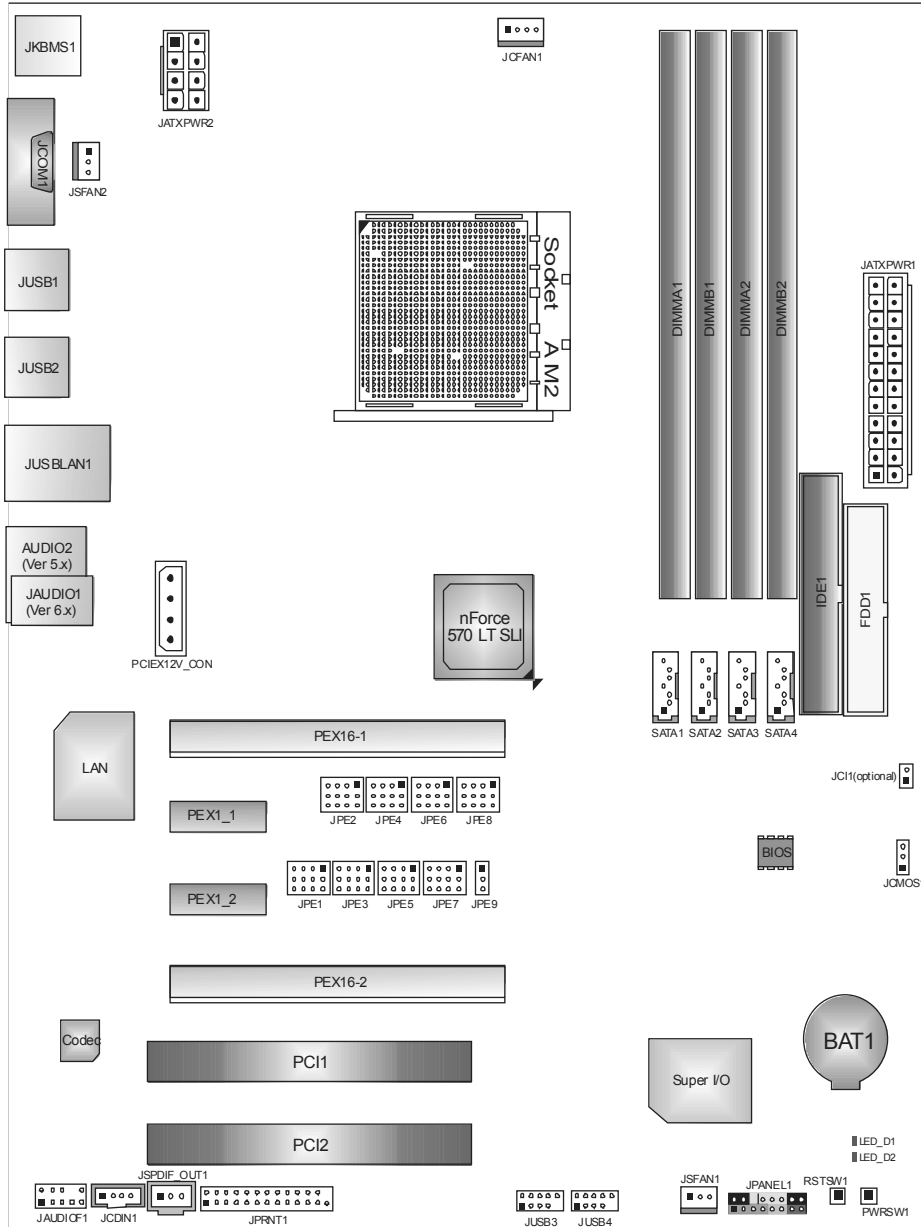
### 1.4 REAR PANEL CONNECTORS (FOR VER 5.x)



### 1.5 REAR PANEL CONNECTORS (FOR VER 6.x)



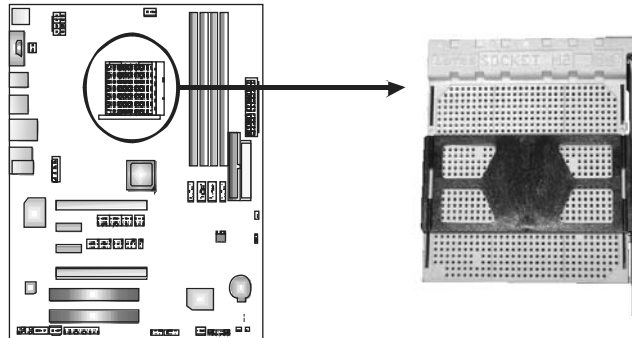
## 1.6 MOTHERBOARD LAYOUT



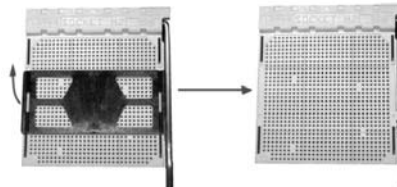
**Note:** ■ represents the 1<sup>st</sup> pin.

## CHAPTER 2: HARDWARE INSTALLATION

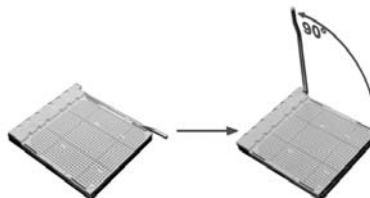
### 2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)



**Step 1:** Remove the socket protection cap.



**Step 2:** Pull the lever toward direction A from the socket and then raise the lever up to a 90-degree angle.

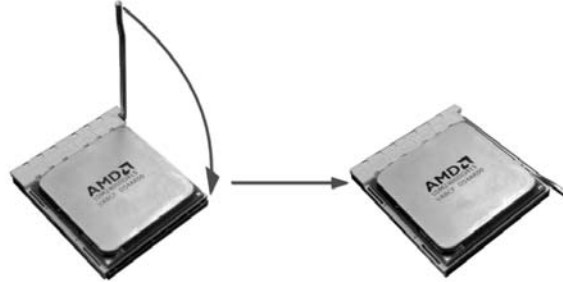


**Step 3:** Look for the white triangle on socket, and the gold triangle on CPU should point towards this white triangle. The CPU will fit only in the correct orientation.





**Step 4:** Hold the CPU down firmly, and then close the lever toward direct B to complete the installation.



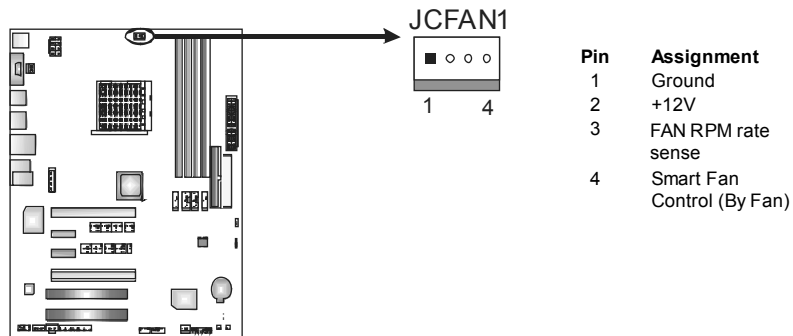
**Step 5:** Put the CPU Fan on the CPU and buckle it. Connect the CPU FAN power cable to the JCFAN1. This completes the installation.

**Note:** Please update the BIOS to the latest version while using AM2+ CPUs. Due to the latest CPU transition, you may encounter the situation that the new system failed to boot while using new AM2+ CPUs. In this case, please install one standard AM2 CPU to boot your system, and update the latest BIOS from our website for AM2+ CPUs support.

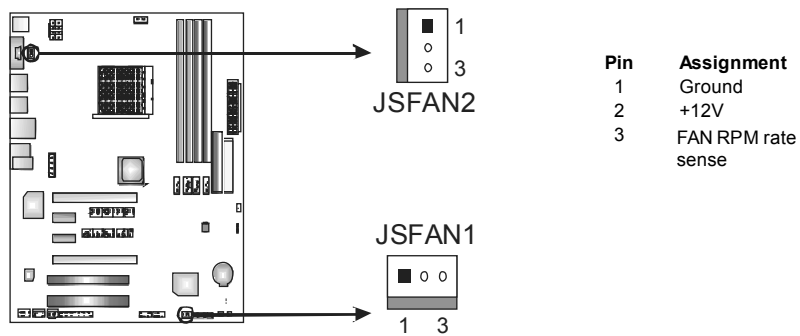
## 2.2 FAN HEADERS

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.

### JCFAN1: CPU Fan Header



### JSFAN1/JSFAN2: System Fan Headers

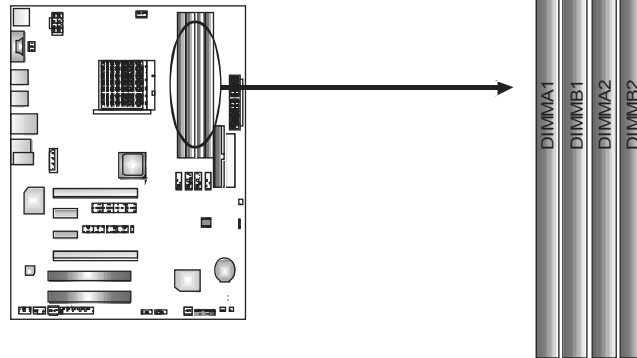


**Note:**

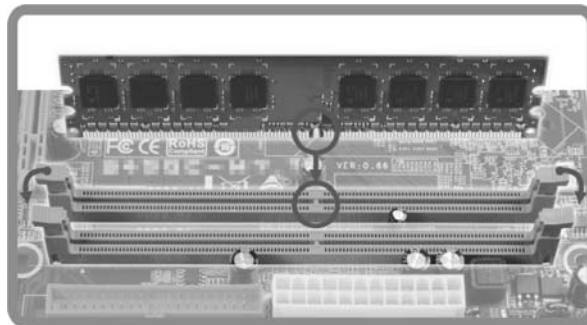
The JCFAN1, JSFAN1/JSFAN2 support 4-pin and 3-pin head connector. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

## 2.3 INSTALLING SYSTEM MEMORY

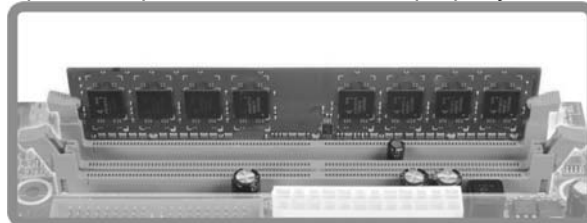
### A. Memory Modules



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	DDR2 Module	Total Memory Size
DIMMA1	256MB/512MB/1024MB/2048MB	Max is 8GB.
DIMMB1	256MB/512MB/1024MB/2048MB	
DIMMA2	256MB/512MB/1024MB/2048MB	
DIMMB2	256MB/512MB/1024MB/2048MB	

**C. Dual Channel Memory installation**

To trigger the Dual Channel function of the motherboard, the memory module must meet the following requirements:

Install memory module of the same density in pairs, shown in the following table.

Dual Channel Status	DIMMA1	DIMMB1	DIMMA2	DIMMB2
Enabled	O	O	X	X
Enabled	X	X	O	O
Enabled	O	O	O	O

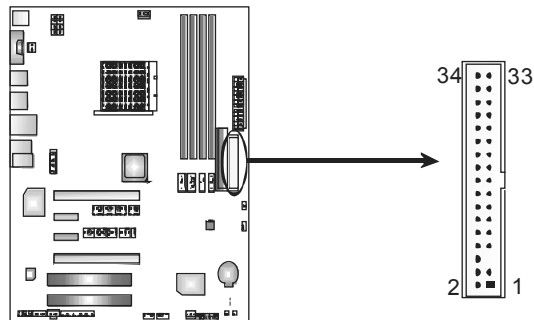
(O means memory installed, X means memory not installed.)

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

## 2.4 CONNECTORS AND SLOTS

### FDD1: Floppy Disk Connector

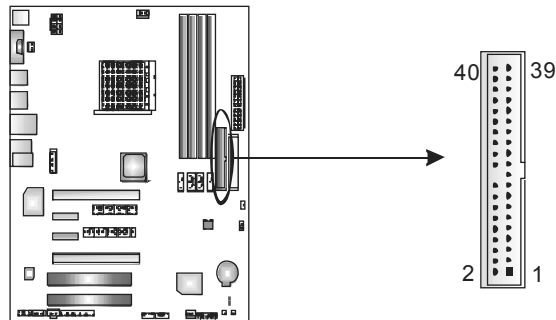
The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.



### IDE1: Hard Disk Connector

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

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



**PEX16-1: PCI-Express x16(x16/SLI x8 Speed) Slot**

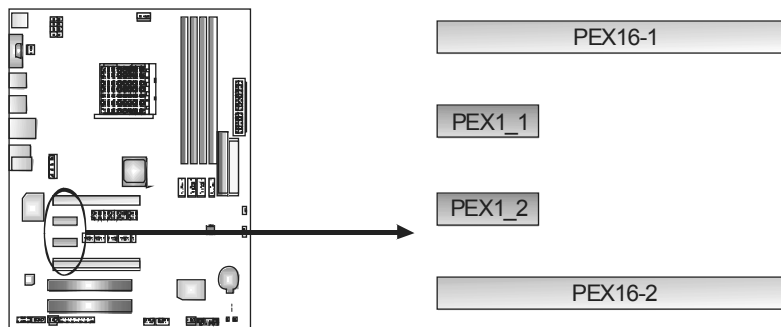
- PCI-Express 1.0a compliant.
- Maximum theoretical realized bandwidth of 4GB/s(2GB/s SLI) simultaneously per direction, for an aggregate of 8GB/s(4GB/s SLI) totally.
- PEX16-1 slot is reserved for graphics or video cards. The design of this motherboard supports dual PCI-Express graphics cards using NVIDIA's SLI technology with multiple displays. When using SLI, this slot is master and runs with x8 speed.
- To configure for SLI, please refer to the instructions of configuring JPE1~JPE9.

**PEX16-2: PCI-Express x16(NC/SLI x8 Speed) Slot**

- PCI-Express 1.0a compliant.
- Maximum theoretical realized bandwidth of 2GB/s simultaneously per direction, for an aggregate of 4GB/s totally.
- PEX16-2 slot is reserved for graphics or video cards. The design of this motherboard supports dual PCI-Express graphics cards using NVIDIA's SLI technology with multiple displays. This slot is slave when using SLI. If PEX16-1 is set to x16 speed, then PEX16-2 would not be functional.

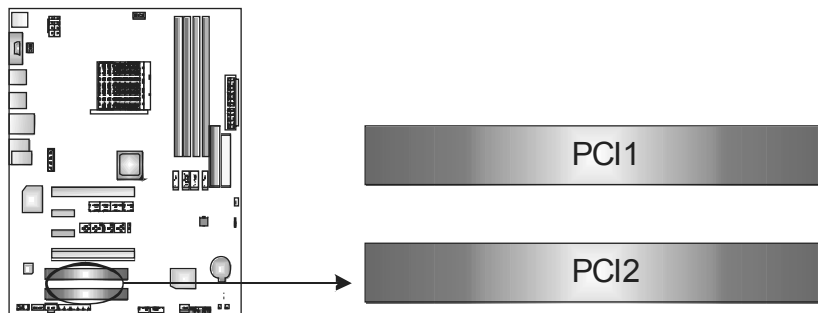
**PEX1\_1/PEX1\_2: PCI-Express x1 Slots**

- PCI-Express 1.0a 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.
- 2X bandwidth over the traditional PCI architecture.



**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.



## CHAPTER 3: HEADERS & JUMPERS SETUP

### 3.1 HOW TO SETUP JUMPERS

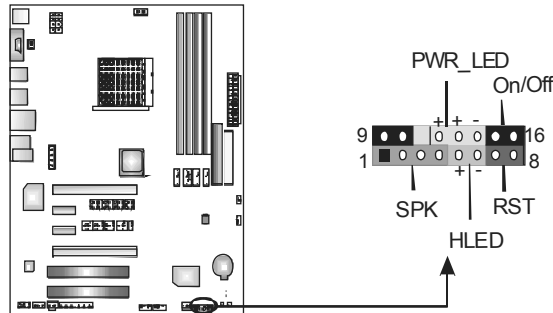
The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is “close”, if not, that means the jumper is “open”.



### 3.2 DETAIL SETTINGS

#### JPANEL1: Front Panel Header

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

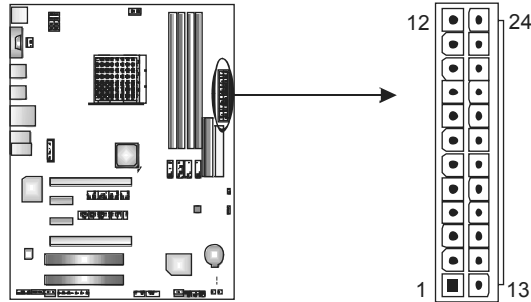


Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	9	N/A	N/A
2	N/A		10	N/A	
3	N/A		11	N/A	
4	Speaker	Hard drive LED	12	Power LED (+)	Power LED
5	HDD LED (+)		13	Power LED (+)	
6	HDD LED (-)		14	Power LED (-)	
7	Ground	Reset button	15	Power button	Power-on button
8	Reset control	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



**JATXPWR1: ATX Power Source Connector**

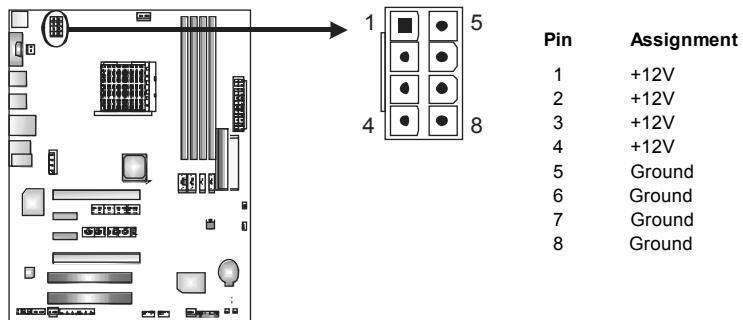
This connector allows user to connect 24-pin power connector on the ATX power supply.



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

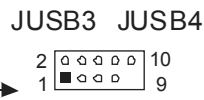
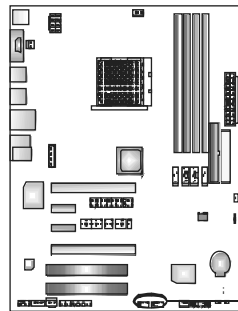
**JATXPWR2: ATX Power Source Connector**

By connecting this connector, it will provide +12V to CPU power circuit.



### JUSB3/JUSB4: Headers for USB 2.0 Ports at Front Panel

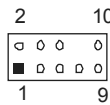
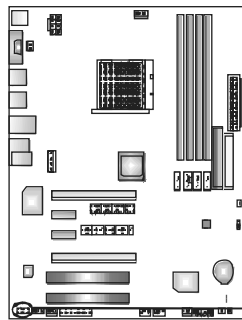
This header allows user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



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

### JAUDIOF1: Front Panel Audio Header

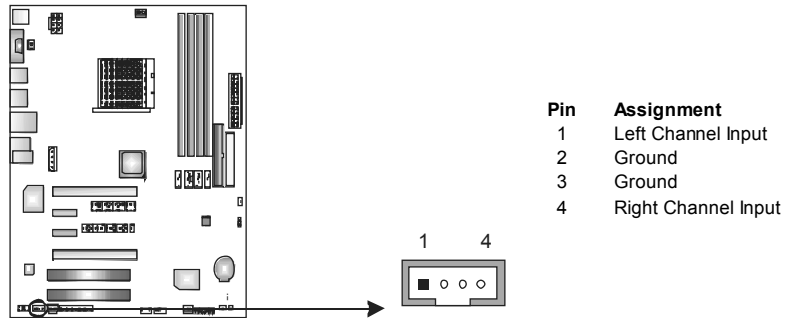
This header allows user to connect the front audio output cable with the PC front panel. This header allows only HD audio front panel connector; AC'97 connector is not acceptable.



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

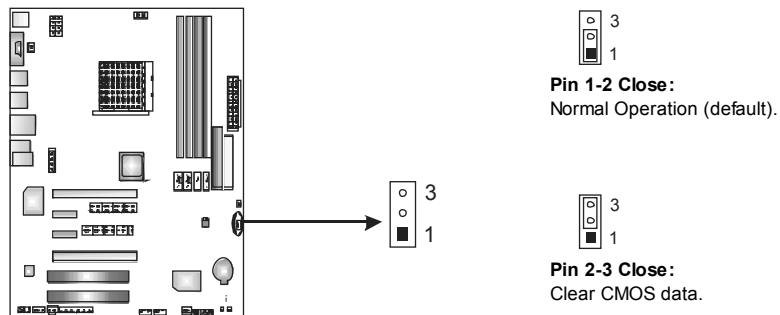
### JCDIN1: CD-ROM Audio-in Connector

This connector allows user to connect the audio source from the variety devices, like CD-ROM, DVD-ROM, PCI sound card, PCI TV turner card etc.



### JCMOS1: Clear CMOS Header

By placing the jumper on pin2-3, it allows user to restore the BIOS safe setting and the CMOS data, please carefully follow the procedures to avoid damaging the motherboard.

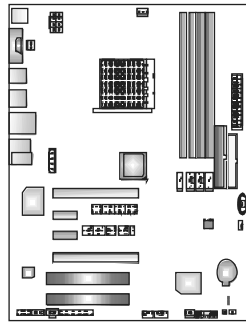


#### ※ Clear CMOS Procedures:

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.

### JCI1: Chassis Open Header (Optional)

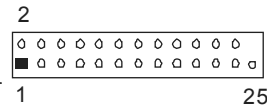
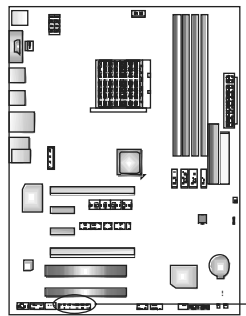
This connector allows system to monitor PC case open status. If the signal has been triggered, it will record to the CMOS and show the message on next boot-up.



Pin	Assignment
1	Case open signal
2	Ground

### JPRNT1: Printer Port Connector

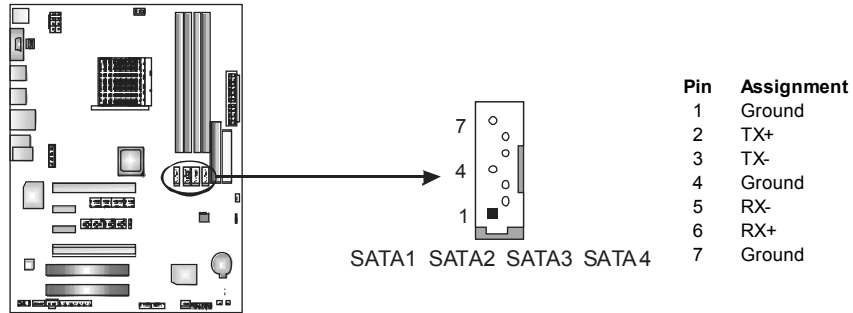
This header allows you to connector printer on the PC.



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	-Sctlin	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

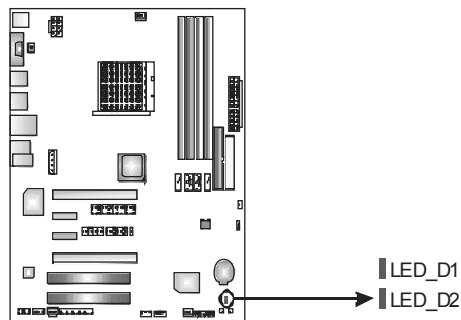
### SATA1~SATA4: Serial ATA Connectors

The motherboard has a PCI to SATA Controller with 4 channels SATA interface, it satisfies the SATA 2.0 spec and with transfer rate of 3.0Gb/s.



### On-Board LED Indicators

There are 2 LED indicators on the motherboard to show system status.



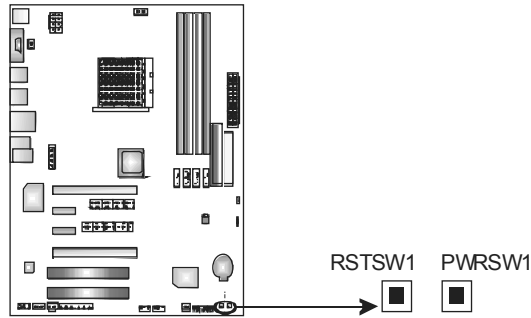
#### LED\_D1 and LED\_D2:

These 2 LED indicate system power on diagnostics.  
Please refer to the table below for different messages:

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

### On-Board Buttons

There are 2 on-board buttons.



**PWRSW1:**

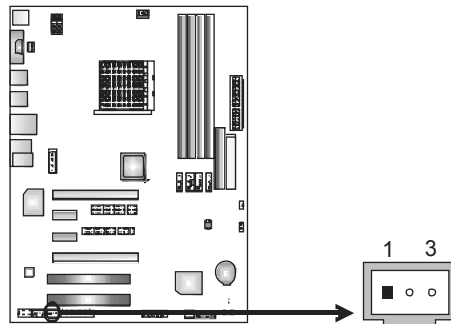
This is an on-board Power Switch button.

**RSTW1:**

This is an on-board Reset button.

### JSPDIF\_OUT1: Digital Audio-out Connector

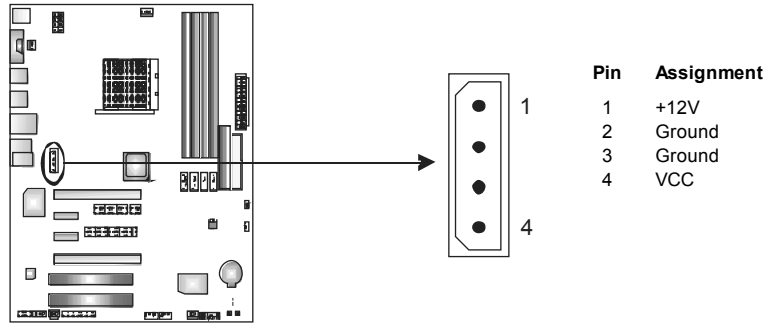
This connector allows user to connect the PCI bracket SPDIF output header.



Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

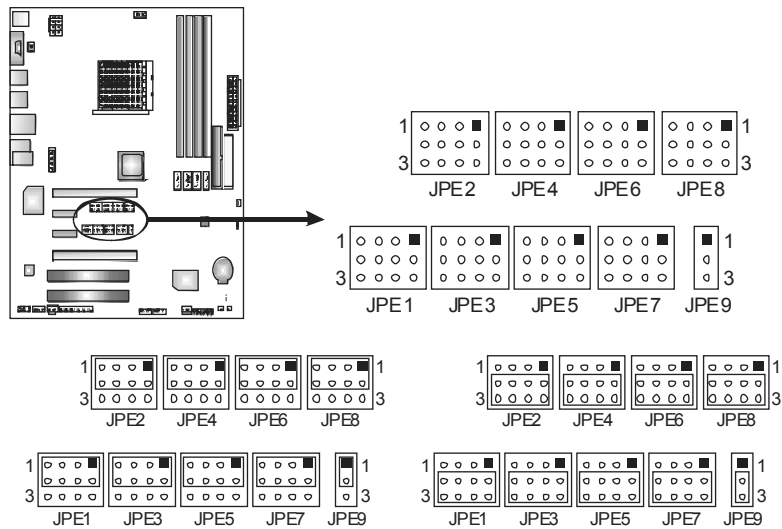
### PCIEX12V\_CON: Auxiliary Power for Graphics

This connector is an auxiliary power connection for graphics cards. Exclusive power for the graphics card provides better graphics performance.



### JPE1~JPE9: SLI Switch Jumpers

The setting of these jumpers determines the operation mode of PEX16-1 and PEX16-2. If you want to use the SLI function, these jumpers should be set to Pin 2-3 close; and PEX16-1 and PEX16-2 will both run with x8 speed. If these jumpers are set to Pin 1-2 close, PEX16-1 will run with x16 speed and PEX16-2 will not be functional.



**Pin 1-2 Close**

Normal Operation  
 PEX16-1: x16 Speed  
 PEX16-2: Not Functional

**Pin 2-3 Close:**

SLI Operation  
 PEX16-1: x8 Speed  
 PEX16-2: x8 Speed

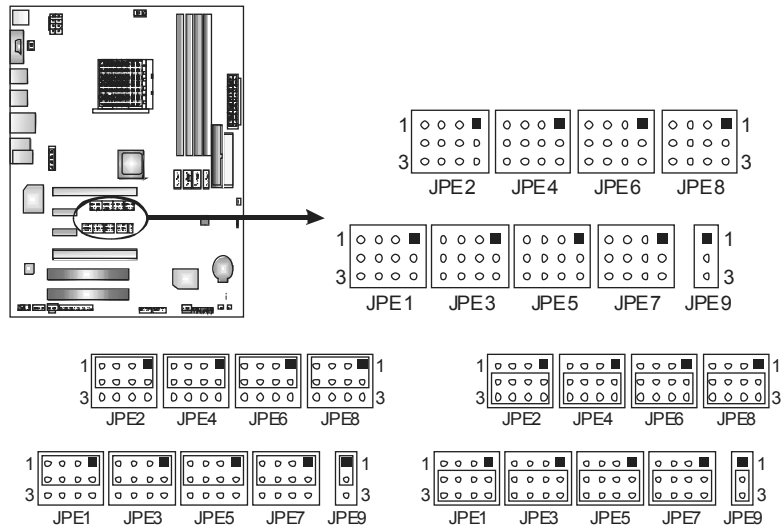
## CHAPTER 4: NVIDIA SLI FUNCTION

### 4.1 REQUIREMENTS

- Only Windows XP/Vista supports SLI (Dual Video) function.
- Two identical SLI-ready graphics cards that are NVIDIA certified.
- The graphics card driver should support NVIDIA SLI technology.
- The power supply unit must provide at least the minimum power required by the system, or the system will be unstable.

### 4.2 INSTALLING SLI-READY GRAPHICS CARDS

Step 1: Power off the computer and set JPE1~JPE9 to Pin2-3 close.



#### Pin 1-2 Close

Normal Operation  
 PEX16-1: x16 Speed  
 PEX16-2: Not Functional

#### Pin 2-3 Close:

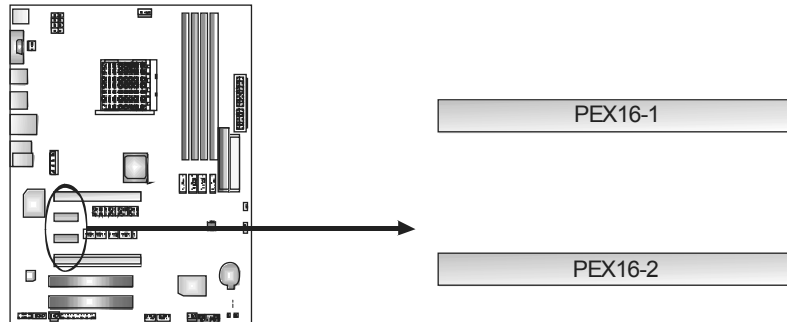
SLI Operation  
 PEX16-1: x8 Speed  
 PEX16-2: x8 Speed

Step 2: Prepare two graphics cards with PCI-E x16 interface.

Step 3: Insert the first one graphics card into PEX16-1(Master).

Step 4: Insert the second graphics card into PEX16-2(Slave).





**Notice:** Make sure both the graphics cards are seated into slots completely.

Step 5: Connect a 4-pin ATX power cable to PEX power connector (PCIEX12V\_CON), this will ensure the stabilization of your system.

**Notice:**

When under SLI mode, please make sure the power supply is at least 500W or above.



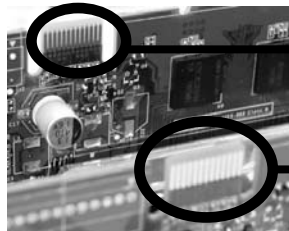
Step 6: Insert the SLI Bridge connector on the gold-fingers on each graphics card.



Front view



Side view



Gold-fingers on two graphic cards

Step 7: To securely fix the connector between two graphics cards, a retention bracket must be installed.

Step 7-1: Remove any of the bracket cover between the two graphics cards.

Step 7-2: Align and insert the retention bracket into the slot and then fix it with a screw.

**Notice:**

1. Make sure the retention bracket supports the SLI Bridge firmly.
2. Retention bracket is optional

### 4.3 ENABLING MULTI-GPU FEATURE IN WINDOWS

After the graphics cards are installed, enable the Multi-GPU feature in NVIDIA nView properties.

**Step 1:**  
Click NVIDIA Settings icon on the Windows taskbar.



**Step 2:**  
Select nView Properties in nView Desktop Manager pop-up menu



**Step 3:**  
Click Properties icon in Desktop Management tab to display Display Properties dialog box

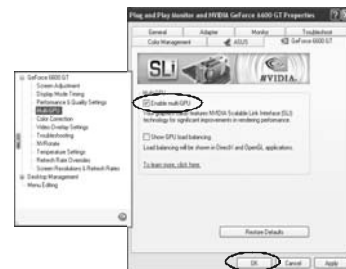


**Step 4:**  
Click Advanced icon in Settings tab.



**Step 5:**  
Select NVIDIA GeForce tab, and then click on Multi-GPU item on the left dialog box.

**Step 6:**  
Check before Enable SLI multi-GPU item, and click on OK to complete the setting.



## CHAPTER 5: NVIDIA RAID FUNCTIONS

### 5.1 OPERATION SYSTEM

Supports Windows XP, Windows 2000 Professional, and Windows VISTA.

### 5.2 RAID ARRAYS

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

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

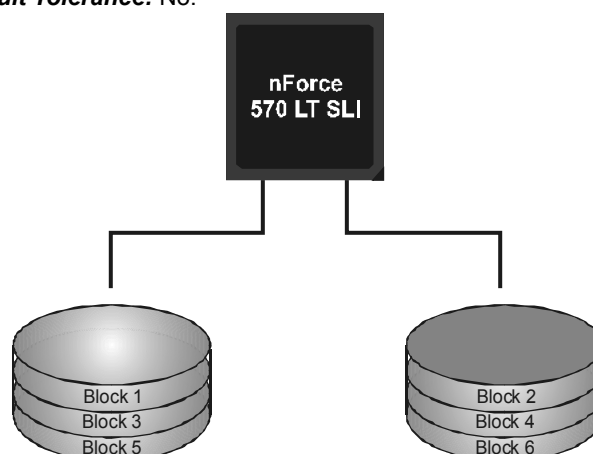
### 5.3 How RAID WORKS

#### **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 1, 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.

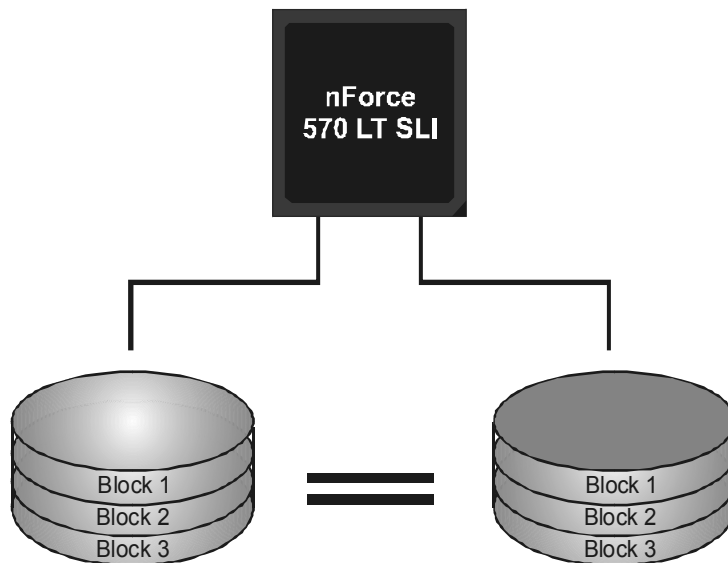


**RAID 1:**

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.

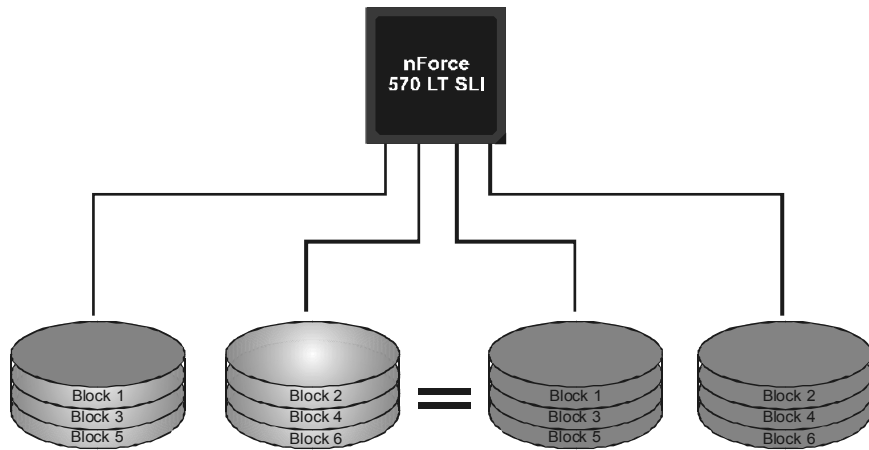


**RAID 0+1:**

RAID 0 drives can be mirrored using RAID 1 techniques. Resulting in a RAID 0+1 solution for improved performance plus resiliency.

**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.



※ For more detailed setup information, please refer to the Driver CD, or go to [http://www.nvidia.com/object/IO\\_28159.html](http://www.nvidia.com/object/IO_28159.html) to download the NVIDIA RAID User's Guide.

---

---

## **CHAPTER 6: OVERCLOCK QUICK GUIDE**

### **6.1 T-POWER INTRODUCTION**

*Biostar T-Power* is a whole new utility that is designed for overclock users. Based on many precise tests, *Biostar Engineering Team* (BET) has developed this ultimate overclock engine to raise system performance. No matter whether under BIOS or Windows interface, *T-Power* is able to present the best system state according to users' overclock setting.

#### **T-Power BIOS Features:**

- Overclocking Navigator Engine (O.N.E.)
- CMOS Reloading Program (C.R.P.)
- Memory Integration Test (M.I.T., under Overclock Navigator Engine)
- Integrated Flash Program (I.F.P.)
- Self Recovery System (S.R.S)
- Smart Fan Function (under PC Health Status)

#### **T-Power Windows Feature:**

- Hardware Monitor
- Overclock Engine
- System Information

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

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

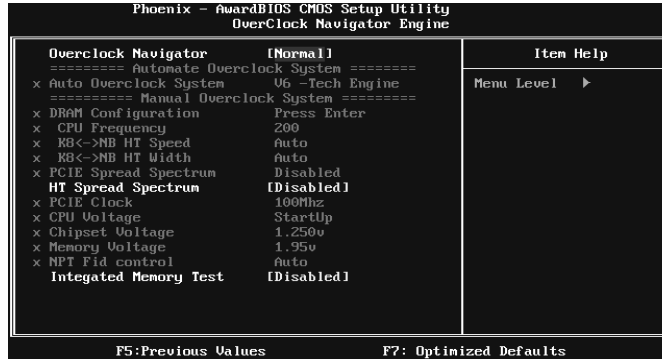
#### **NOTE**

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.

## 6.2 T-POWER BIOS FEATURE

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

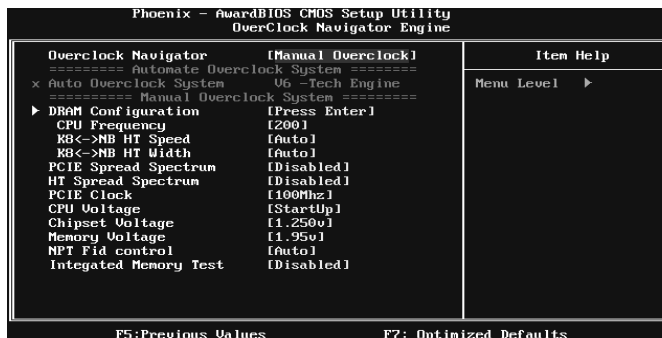
ONE provides two powerful overclocking engines: MOS and AOS for both Elite and Casual overclockers.



### Manual Overclock System (M.O.S.)

MOS is designed for experienced overclock users.

It allows users to customize personal overclock settings.





**DRAM Configuration:**

Enter this function for more advanced DRAM settings.

**CPU Frequency:**

CPU Frequency is directly in proportion to system performance. To maintain the system stability, CPU voltage needs to be increased also when raising CPU frequency.

**K8<->NB HT Speed:**

This option controls the HyperTransport speed of CPU to northbridge chipset.

**K8<->NB HT Width:**

This option controls the HyperTransport width of CPU to northbridge chipset.

**PCIE Spread Spectrum:**

This BIOS feature allows you to reduce the EMI of the PCI Express bus by modulating the signals it generates so that the spikes are reduced to flatter curves. Please disable this option when proceeding overclocking.

**HT Spread Spectrum:**

Please disable this option when proceeding overclocking.

**PCIE Clock:**

It helps to increase VGA card performance.

**CPU Voltage:**

This function will increase CPU stability when overclocking. However, the CPU temperature will increase when CPU voltage is increased.

**Chipset Voltage:**

This function will increase chipset stability when overclocking.

**Memory Voltage:**

This function will increase memory stability when overclocking.

**NPT Fid Control:**

This function allows you to adjust the frequency ratio of CPU.

### Automatic Overclock System (A.O.S.)

For beginners in overlock field, BET had developed an easy, fast, and powerful feature to increase the system performance, named A.O.S. Based on many tests and experiments, A.O.S. provides 3 ideal overclock configurations that are able to raise the system performance in a single step.



### V6 Tech Engine:

This engine will make a good over-clock performance.



### V8 Tech Engine:

This engine will make a better over-clock performance.



**V12 Tech Engine:**

This engine will make a best over-clock performance.

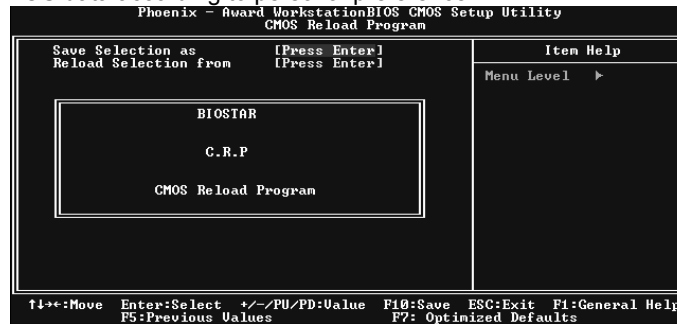


**Notices:**

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

**B. CMOS Reloading Program (C.R.P.):**

It allows users to save different CMOS settings into BIOS-ROM. Users are able to reload any saved CMOS setting for customizing system configurations. Moreover, users are able to save an ideal overclock setting during overclock operation. There are 50 sets of record addresses in total, and users are able to name the CMOS data according to personal preference.



**C. Memory Integration Test (M.I.T.):**

This function is under “Overclocking Navigator Engine” item. MIT allows users to test memory compatibilities, and no extra devices or software are needed.

**Step 1:**

The default setting under this item is “Disabled”; the condition parameter should be changed to “Enable” to proceed this test.



**Step 2:**

Save and Exit from CMOS setup and reboot the system to activate this test. Run this test for 5 minutes (minimum) to ensure the memory stability.

**Step 3:**

When the process is done, change the setting back from “Enable” to “Disable” to complete the test.

**D. Self Recovery System (S.R.S.):**

This function can't be seen under T-Power 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 BIOS setting, and all overclock settings will be re-configured.

**E. Integrated Flash Program (I.F.P.):**

IFP is a safe and quick way to upgrade BIOS.

**Step 1:**

Go to Biostar website (<http://www.biostar.com.tw>) to download the latest BIOS file. Then, save the file into a floppy disk.

**Step 2:**

Insert the floppy disk and reboot the system to get into CMOS screen.

**Step 3:**

Select the item "Integrated Flash Program" to get the following frame and choose the BIOS file downloaded in step 1.

**Step 4:**

Press "Enter" key to start BIOS file loading, and BIOS updating will process automatically.

**Step 5:**

When the BIOS update is completed, press YES to the message "Flash done, Reset system", and the system will reboot automatically to finish the process.

**Advise:**

You can update the system BIOS by simply pressing "Enter" key for three times.

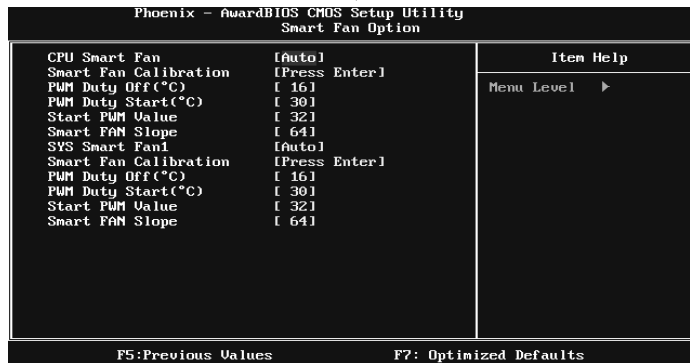
### F. Smart Fan Function:

Smart Fan Function is under “Smart Fan Option” in “PC Health Status”.

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.



#### Smart Fan Calibration

Choose this item and then the BIOS will automatically test and detect the CPU/System fan functions and show CPU/System fan speed.

#### PWM Duty Off <°C>:

If the CPU/System temperature is lower than the set value, the CPU/System fan will turn off. The range is from 0~127, with an interval of 1.

**PWM Duty Start <°C >**

The CPU/System fan starts to work when CPU/System temperature arrives to this set value. The range is from 0~127, with an interval of 1.

**Start PWM Value**

When CPU/System temperature arrives to the set value, the CPU/System fan will work under Smart Fan Function mode. The range is from 0~127, with an interval of 1.

**Smart Fan Slope**

Increasing the value of slope PWM will raise the speed of CPU/System fan. The range is from 1~127, with an interval of 1.

## 6.3 T-POWER WINDOWS FEATURE

### 1. Desktop Icon

After the T-Utility has been installed, a T-Utility icon will appear on the desktop, just like the icon shown below.



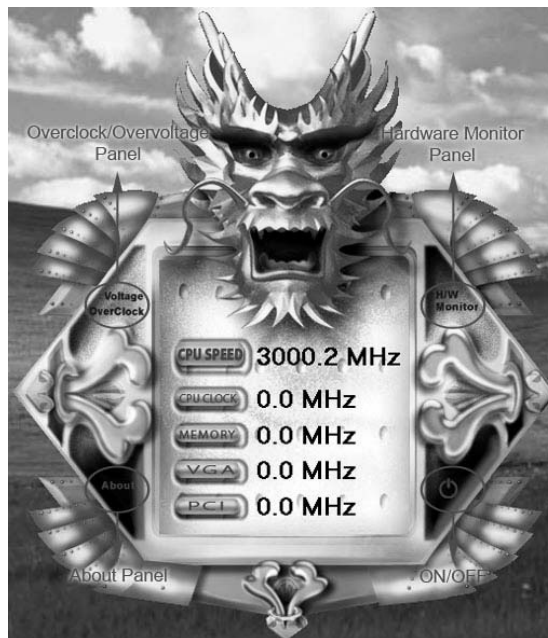
Now you can launch the T-Utility simply by double-clicking the desktop icon.

### 2. Main Panel

If you double-click the desktop icon, T-Utility will be launched. Please refer to the following figure; the utility's first window you will see is Main Panel.

**Main Panel contains features as follows:**

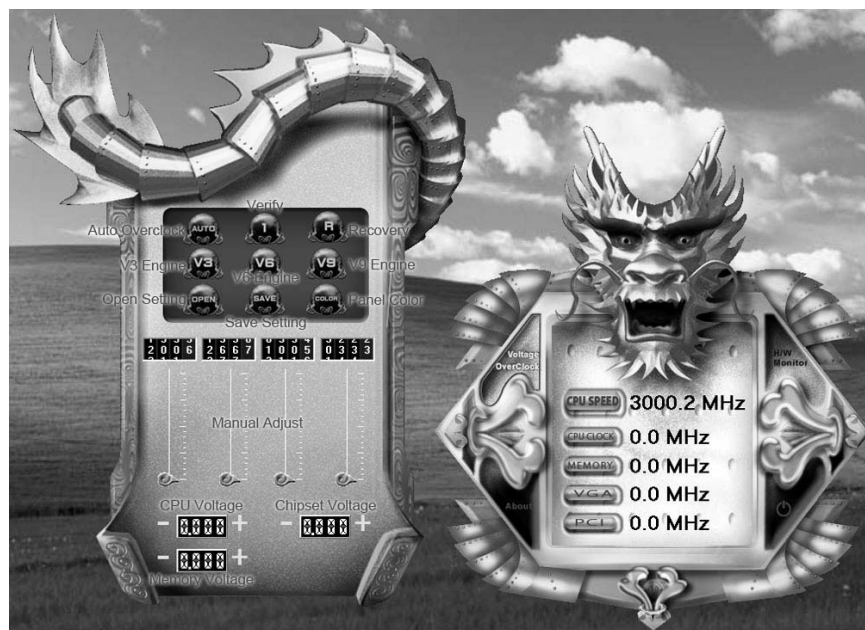
- a. Display the CPU Speed, CPU external clock, Memory clock, VGA clock, and PCI clock information.
- b. Contains About, Overclock/Overtoltage, and Hardware Monitor Buttons for invoking respective panels. The On/Off button is for closing the program.





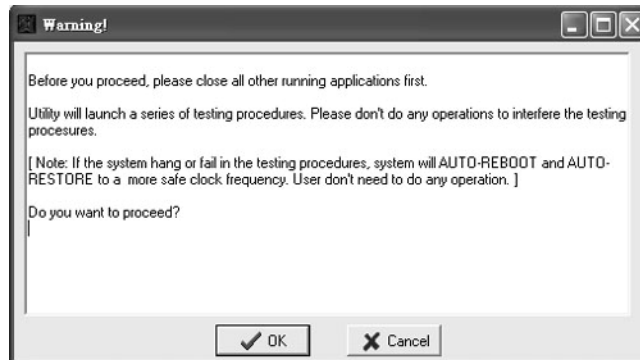
### 3. Overclock/Overvoltage Panel

Click the Overclock/Overvoltage button in the Main Panel, the button will be highlighted and the Overclock/Overvoltage Panel will show up as the following figure. As you can see, the Overclock Panel is on the upper side, and the Overvoltage Panel is on the lower side.



**Overclock Panel contains these features:**

- a. "Auto-Overclock":  
User can click this button and T-Utility will set the best and stable performance and frequency automatically. A warning dialog as below will show up to notify you that the system may become unstable, click on "OK" to continue.



Then T-Utility will execute a series of testing until system fail. Then system will do fail-safe reboot by using Watchdog function. After reboot, launch the T-Utility again and the utility will load the previously verified best and stable frequency.

- b. "Verify":  
If you use the "Manual Adjust" bar to adjust the CPU frequency, then you can click this button and T-Utility will proceed a testing for current frequency. If the testing is ok, then the current frequency will be saved into system registry. If the testing fails, system will do a fail-safe rebooting. After reboot, the T-Utility will restore to the hardware default setting.

**Warning:**

Manually overclock is potentially dangerous, especially when the overclocking percentage is over 110 %. We strongly recommend you verify every speed you overclock by click the Verify button. Or, you can just click Auto overclock button and let T-Utility automatically gets the best result for you.

- c. "V3 Engine"/"V6 Engine"/"V9 Engine":  
Provide user the ability to do real-time overclock adjustment.
- d. "Recovery":  
Click this button and the T-Utility will restore all values to the hardware default setting.

- e. "Save / Open Setting":  
Click Save button to save current setting to a file, and click Open button to load a previously saved setting.
- f. "Panel Color":  
Click this button to change the color of the panel.

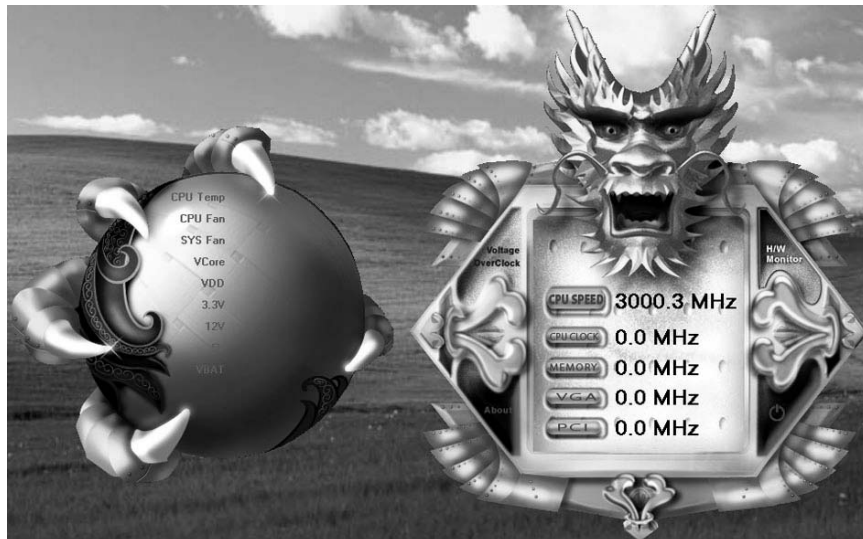
**Overvoltage Panel contains these features:**

- a. "CPU Voltage":  
This function allows user to adjust CPU voltage. Click on "+" to increase or "-" to decrease the CPU voltage.
- b. "Memory Voltage":  
This function allows user to adjust Memory voltage. Click on "+" to increase or "-" to decrease the Memory voltage.
- c. "Chipset Voltage":  
This function allows user to adjust Chipset voltage. Click on "+" to increase or "-" to decrease the Chipset voltage.

**4. Hardware Monitor Panel**

Click the Hardware Monitor button in Main Panel, the button will be highlighted and the Hardware Monitor panel will show up as the following figure.

In this panel, you can get the real-time status information of your system. The information will be refreshed every 1 second.



## 5. About Panel

Click the “about” button in Main Panel, the button will be highlighted and the About Panel will show up as the following figure.

In this panel, you can get model name and detail information in hints of all the chipset that are related to overclocking. You can also get the the version number of T-Utility.



### Note:

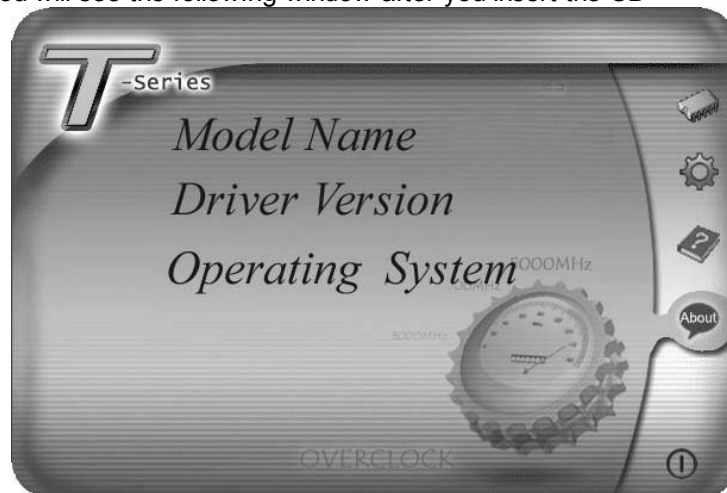
Because the overclock, overvoltage, and hardware monitor features are controlled by several separate chipset, T-Utility divides these features to separate panels. If one chipset is not on board, the correlative button in Main panel will be disabled, but it will not interfere with other panels' functions. This property can make T-Utility more robust.

## CHAPTER 7: USEFUL HELP

### 7.1 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>

## 7.2 AWARD BIOS BEEP CODE

Beep Sound	Meaning
One long beep followed by two short beeps	Video card not found or video card memory bad
High-low siren sound	CPU overheated System will shut down automatically
One Short beep when system boot-up	No error found during POST
Long beeps every other second	No DRAM detected or install

## 7.3 EXTRA INFORMATION

### ***CPU Overheated***

If the system shutdown automatically after power on system for seconds, that means the CPU protection function has been activated.

When the CPU is over heated, the motherboard will shutdown automatically to avoid a damage of the CPU, and the system may not power on again.

In this case, please double check:

1. The CPU cooler surface is placed evenly with the CPU surface.
2. CPU fan is rotated normally.
3. CPU fan speed is fulfilling with the CPU speed.

After confirmed, please follow steps below to relief the CPU protection function.

1. Remove the power cord from power supply for seconds.
2. Wait for seconds.
3. Plug in the power cord and boot up the system.

Or you can:

1. Clear the CMOS data.  
(See "Close CMOS Header: JCMOS1" section)
2. Wait for seconds.
3. Power on the system again.

## 7.4 TROUBLESHOOTING

Probable	Solution
1. No power to the system at all Power light don't illuminate, fan inside power supply does not turn on. 2. Indicator light on keyboard does not turn on.	1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
System inoperative. Keyboard lights are on, power indicator lights are lit, and hard drive is spinning.	Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.
System does not boot from hard disk drive, 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 optical drive. Hard disk can be read and applications can be used but booting from hard disk is impossible.	1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
Screen message says "Invalid Configuration" or "CMOS Failure."	Review system's equipment. Make sure correct information is in setup.
Cannot boot system after installing 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.

## APPENDENCIES: SPEC IN OTHER LANGUAGE

### GERMAN

	Ver 5.x	Ver 6.x
CPU	<p>Socket AM2</p> <p>AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ Prozessoren</p> <p>Die AMD 64-Architektur unterstützt eine 32-Bit- und 64-Bit-Datenverarbeitung</p> <p>Unterstützt Hyper Transport und Cool'n'Quiet</p>	<p>Socket AM2</p> <p>AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ Prozessoren</p> <p>Die AMD 64-Architektur unterstützt eine 32-Bit- und 64-Bit-Datenverarbeitung</p> <p>Unterstützt Hyper Transport und Cool'n'Quiet</p>
FSB	Unterstützt HyperTransport mit einer Bandbreite von bis zu 1 GHz	Unterstützt HyperTransport mit einer Bandbreite von bis zu 1 GHz
Chipsatz	nForce 570 LT SLI	nForce 570 LT SLI
Super E/A	<p>ITE 8718F</p> <p>Bietet die häufig verwendeten alten Super E/A-Funktionen.</p> <p>Low Pin Count-Schnittstelle</p> <p>Umgebungskontrolle, Hardware-Überwachung</p> <p>Lüfterdrehzahl-Controller</p> <p>"Smart Guardian"-Funktion von ITE</p>	<p>ITE 8718F</p> <p>Bietet die häufig verwendeten alten Super E/A-Funktionen.</p> <p>Low Pin Count-Schnittstelle</p> <p>Umgebungskontrolle, Hardware-Überwachung</p> <p>Lüfterdrehzahl-Controller</p> <p>"Smart Guardian"-Funktion von ITE</p>
Arbeitsspeicher	<p>DDR2 DIMM-Steckplätze x 4</p> <p>Jeder DIMM unterstützt 256/512/1024/2048MB DDR2.</p> <p>Max. 8GB Arbeitsspeicher</p> <p>Dual-Kanal DDR2 Speichermodul</p> <p>Unterstützt DDR2 533 / 667 / 800</p> <p>Unterstützt DDR2 1066 (by AM2+ CPU) registrierte DIMMs. ECC DIMMs werden nicht unterstützt.</p>	<p>DDR2 DIMM-Steckplätze x 4</p> <p>Jeder DIMM unterstützt 256/512/1024/2048MB DDR2.</p> <p>Max. 8GB Arbeitsspeicher</p> <p>Dual-Kanal DDR2 Speichermodul</p> <p>Unterstützt DDR2 533 / 667 / 800</p> <p>Unterstützt DDR2 1066 (by AM2+ CPU) registrierte DIMMs. ECC DIMMs werden nicht unterstützt.</p>
IDE	<p>Integrierter IDE-Controller</p> <p>Ultra DMA 33 / 66 / 100 / 133 Bus</p> <p>Master-Modus</p> <p>Unterstützt PIO-Modus 0~4,</p>	<p>Integrierter IDE-Controller</p> <p>Ultra DMA 33 / 66 / 100 / 133 Bus</p> <p>Master-Modus</p> <p>Unterstützt PIO-Modus 0~4,</p>
SATA II	<p>Integrierter Serial ATA-Controller</p> <p>Datentransfertrate bis zu 3Gb/s</p> <p>Konform mit der SATA-Spezifikation Version 2.0.</p>	<p>Integrierter Serial ATA-Controller</p> <p>Datentransfertrate bis zu 3Gb/s</p> <p>Konform mit der SATA-Spezifikation Version 2.0.</p>
LAN	<p>Realtek 8110SC</p> <p>10 / 100 Mb/s und 1Gb/s</p> <p>Auto-Negotiation</p>	<p>Realtek 8110SC</p> <p>10 / 100 Mb/s und 1Gb/s</p> <p>Auto-Negotiation</p>



**TF570 SLI A2+**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
Audio-Codec	ALC888 7.1-Kanal-Audioausgabe Unterstützt High-Definition Audio	ALC662 5.1-Kanal-Audioausgabe Unterstützt High-Definition Audio
Steckplätze	PCI-Steckplatz x2 PCI Express x16 Steckplatz (x16/x8) x1 PCI Express x16 Steckplatz (x8) x1 PCI Express x 1-Steckplatz x2	PCI-Steckplatz x2 PCI Express x16 Steckplatz (x16/x8) x1 PCI Express x16 Steckplatz (x8) x1 PCI Express x 1-Steckplatz x2
Onboard-Anschluss	Diskettenlaufwerkanschluss x1 Druckeranschluss Anschluss x1 IDE-Anschluss x1 SATA-Anschluss x4 Fronttafelanschluss x1 Front-Audioanschluss x1 CD-IN-Anschluss x1 S/PDIF- Ausgangsanschluss x1 CPU-Lüfter-Sockel x1 System-Lüfter-Sockel x2 "Gehäuse offen"-Sockel(optional) x1 "CMOS löschen"-Sockel x1 USB-Anschluss x2 Stromanschluss (24-polig) x1 Stromanschluss (8-polig) x1 Stromanschluss (4-polig) x1	Diskettenlaufwerkanschluss x1 Druckeranschluss Anschluss x1 IDE-Anschluss x1 SATA-Anschluss x4 Fronttafelanschluss x1 Front-Audioanschluss x1 CD-IN-Anschluss x1 S/PDIF- Ausgangsanschluss x1 CPU-Lüfter-Sockel x1 System-Lüfter-Sockel x2 "Gehäuse offen"-Sockel(optional) x1 "CMOS löschen"-Sockel x1 USB-Anschluss x2 Stromanschluss (24-polig) x1 Stromanschluss (8-polig) x1 Stromanschluss (4-polig) x1
Rückseiten-E/A	PS/2-Tastatur x1 PS/2-Maus x1 Serieller Anschluss x1 LAN-Anschluss x1 USB-Anschluss x6 Audioanschluss x6	PS/2-Tastatur x1 PS/2-Maus x1 Serieller Anschluss x1 LAN-Anschluss x1 USB-Anschluss x6 Audioanschluss x3
Platinengröße	244 mm (B) X 305 mm (L)	244 mm (B) X 305 mm (L)
Sonderfunktionen	NVIDIA nTunes Unterstützt RAID 0 / 1 / 0+1 / 5	NVIDIA nTunes Unterstützt RAID 0 / 1 / 0+1 / 5
OS-Unterstützung	Windows 2000 / XP / VISTA Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.	Windows 2000 / XP / VISTA Biostar behält sich das Recht vor, ohne Ankündigung die Unterstützung für ein Betriebssystem hinzuzufügen oder zu entfernen.

**FRANCE**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
UC	Socket AM2 Processeurs AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ L'architecture AMD 64 permet le calcul 32 et 64 bits Prend en charge Hyper Transport et Cool'n'Quiet	Socket AM2 Processeurs AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ L'architecture AMD 64 permet le calcul 32 et 64 bits Prend en charge Hyper Transport et Cool'n'Quiet
Bus frontal	Prend en charge Hyper Transport jusqu'à une bande passante de 1 GHz	Prend en charge Hyper Transport jusqu'à une bande passante de 1 GHz
Chipset	nForce 570 LT SLI	nForce 570 LT SLI
Super E/S	ITE 8718F 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 de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE	ITE 8718F 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 de vitesse de ventilateur Fonction "Gardien intelligent" de l'ITE
Mémoire principale	Fentes DDR2 DIMM x 4 Chaque DIMM prend en charge des DDR2 de 256/512/1024/2048 Mo Capacité mémoire maximale de 8 Go Module de mémoire DDR2 à mode à double voie Prend en charge la DDR2 533 / 667 / 800 Prend en charge la DDR2 1066 (by AM2+ CPU) Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge	Fentes DDR2 DIMM x 4 Chaque DIMM prend en charge des DDR2 de 256/512/1024/2048 Mo Capacité mémoire maximale de 8 Go Module de mémoire DDR2 à mode à double voie Prend en charge la DDR2 533 / 667 / 800 Prend en charge la DDR2 1066 (by AM2+ CPU) Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge
IDE	Contrôleur IDE intégré Mode principale de Bus Ultra DMA 33 / 66 / 100 / 133 Prend en charge le mode PIO 0~4,	Contrôleur IDE integer Mode principale de Bus Ultra DMA 33 / 66 / 100 / 133 Prend en charge le mode PIO 0~4,
SATA II	Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 3 Go/s. Conforme à la spécification SATA Version 2.0	Contrôleur Serial ATA intégré : Taux de transfert jusqu'à 3 Go/s. Conforme à la spécification SATA Version 2.0
LAN	Realtek 8110SC 10 / 100 Mb/s et 1 Gb/s négociation automatique	Realtek 8110SC 10 / 100 Mb/s et 1 Gb/s négociation automatique
Codec audio	ALC888 Sortie audio à 7.1 voies Prise en charge de l'audio haute définition	ALC662 Sortie audio à 5.1 voies Prise en charge de l'audio haute définition

**TF570 SLI A2+**

		<b>Ver 5.x</b>	<b>Ver 6.x</b>
Fentes	Fente PCI	x2	Fente PCI x2
	Slot PCI Express x16 (x16/x8)	x1	Slot PCI Express x16 (x16/x8) x1
	Slot PCI Express x16 (x8)	x1	Slot PCI Express x16 (x8) x1
	Slot PCI Express x 1	x2	Slot PCI Express x 1 x2
Connecteur embarqué	Connecteur de disquette	x1	Connecteur de disquette x1
	Connecteur de Port d'imprimante	x1	Connecteur de Port d'imprimante x1
	Connecteur IDE	x1	Connecteur IDE x1
	Connecteur SATA	x4	Connecteur SATA x4
	Connecteur du panneau avant	x1	Connecteur du panneau avant x1
	Connecteur Audio du panneau avant	x1	Connecteur Audio du panneau avant x1
	Connecteur d'entrée CD	x1	Connecteur d'entrée CD 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'ouverture de châssis (en option)	x1	Embase d'ouverture de châssis (en option) x1
	Embase d'effacement CMOS	x1	Embase d'effacement CMOS x1
	Connecteur USB	x2	Connecteur USB x2
	Connecteur d'alimentation (24 broches)	x1	Connecteur d'alimentation (24 broches) x1
	Connecteur d'alimentation (8 broches)	x1	Connecteur d'alimentation (8 broches) x1
Connecteur d'alimentation (4 broches)	x1	Connecteur d'alimentation (4 broches) x1	
E/S du panneau arrière	Clavier PS/2	x1	Clavier PS/2 x1
	Souris PS/2	x1	Souris PS/2 x1
	Port série	x1	Port série x1
	Port LAN	x1	Port LAN x1
	Port USB	x6	Port USB x6
	Fiche audio	x6	Fiche audio x3
Dimensions de la carte	244 mm (l) X 305 mm (H)		244 mm (l) X 305 mm (H)
Fonctionnalités spéciales	NVIDIA nTunes Prise en charge RAID 0 / 1 / 0+1 / 5		NVIDIA nTunes Prise en charge RAID 0 / 1 / 0+1 / 5
Support SE	Windows 2000 / XP / VISTA Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.		Windows 2000 / XP / VISTA Biostar se réserve le droit d'ajouter ou de supprimer le support de SE avec ou sans préavis.

**ITALIAN**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
CPU	Socket AM2 Processori AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ L'architettura AMD 64 abilita la computazione 32 e 64 bit Supporto di Hyper Transport e Cool'n'Quiet	Socket AM2 Processori AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ L'architettura AMD 64 abilita la computazione 32 e 64 bit Supporto di Hyper Transport e Cool'n'Quiet
FSB	Supporto di HyperTransport fino a 1 GHz di larghezza di banda	Supporto di HyperTransport fino a 1 GHz di larghezza di banda
Chipset	nForce 570 LT SLI	nForce 570 LT SLI
Super I/O	ITE 8718F Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller velocità ventolina Funzione "Smart Guardian" di ITE	ITE 8718F Fornisce le funzionalità legacy Super I/O usate più comunemente. Interfaccia LPC (Low Pin Count) Funzioni di controllo dell'ambiente: Monitoraggio hardware Controller velocità ventolina Funzione "Smart Guardian" di ITE
Memoria principale	Alloggi DIMM DDR2 x 4 Ciascun DIMM supporta DDR2 256/512/1024/2048MB Capacità massima della memoria 8GB Modulo di memoria DDR2 a canale doppio Supporto di DDR2 533 / 667 / 800 Supporto di DDR2 1066 (by AM2+ CPU) DIMM registrati e DIMM ECC non sono supportati	Alloggi DIMM DDR2 x 4 Ciascun DIMM supporta DDR2 256/512/1024/2048MB Capacità massima della memoria 8GB Modulo di memoria DDR2 a canale doppio Supporto di DDR2 533 / 667 / 800 Supporto di DDR2 1066 (by AM2+ CPU) DIMM registrati e DIMM ECC non sono supportati
IDE	Controller IDE integrato Modalità Bus Master Ultra DMA 33 / 66 / 100 / 133 Supporto modalità PIO Mode 0-4	Controller IDE integrato Modalità Bus Master Ultra DMA 33 / 66 / 100 / 133 Supporto modalità PIO Mode 0-4
SATA II	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3 Gb/s. Compatibile specifiche SATA Versione 2.0.	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 3 Gb/s. Compatibile specifiche SATA Versione 2.0.
LAN	Realtek 8110SC Negoziazione automatica 10 / 100 Mb/s e 1Gb/s	Realtek 8110SC Negoziazione automatica 10 / 100 Mb/s e 1Gb/s
Codec audio	ALC888 Uscita audio 7.1 canali Supporto audio High-Definition (HD)	ALC662 Uscita audio 5.1 canali Supporto audio High-Definition (HD)

**TF570 SLI A2+**

		<b>Ver 5.x</b>	<b>Ver 6.x</b>
Alloggi	Alloggio PCI	x2	Alloggio PCI x2
	Alloggio PCI Express x16 (x16/x8)	x1	Alloggio PCI Express x16 (x16/x8) x1
	Alloggio PCI Express x16 (x8)	x1	Alloggio PCI Express x16 (x8) x1
	Alloggio PCI Express x1	x2	Alloggio PCI Express x1 x2
Connettori su scheda	Connettore floppy	x1	Connettore floppy x1
	Connettore Porta stampante	x1	Connettore Porta stampante x1
	Connettore IDE	x1	Connettore IDE x1
	Connettore SATA	x4	Connettore SATA x4
	Connettore pannello frontale	x1	Connettore pannello frontale x1
	Connettore audio frontale	x1	Connettore audio frontale x1
	Connettore CD-in	x1	Connettore CD-in 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 apertura telaio (optional)	x1	Collettore apertura telaio (optional) x1
	Collettore cancellazione CMOS	x1	Collettore cancellazione CMOS x1
	Connettore USB	x2	Connettore USB x2
	Connettore alimentazione (24 pin)	x1	Connettore alimentazione (24 pin) x1
Connettore alimentazione (8 pin)	x1	Connettore alimentazione (8 pin) x1	
Connettore alimentazione (4 pin)	x1	Connettore alimentazione (4 pin) x1	
I/O pannello posteriore	Tastiera PS/2	x1	Tastiera PS/2 x1
	Mouse PS/2	x1	Mouse PS/2 x1
	Porta seriale	x1	Porta seriale x1
	Porta LAN	x1	Porta LAN x1
	Porta USB	x6	Porta USB x6
	Connettore audio	x6	Connettore audio x3
Dimensioni scheda	244 mm (larghezza) x 305 mm (altezza)	244 mm (larghezza) x 305 mm (altezza)	
Caratteristiche speciali	nTunes NVIDIA Supporto RAID 0 / 1 / 0+1 / 5	nTunes NVIDIA Supporto RAID 0 / 1 / 0+1 / 5	
Sistemi operativi supportati	Windows 2000 / XP / VISTA Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.	Windows 2000 / XP / VISTA Biostar si riserva il diritto di aggiungere o rimuovere il supporto di qualsiasi sistema operativo senza preavviso.	

**SPANISH**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
CPU	<p>Conector AM2</p> <p>Procesadores AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+</p> <p>La arquitectura AMD 64 permite el procesamiento de 32 y 64 bits</p> <p>Soporta las tecnologías Hyper Transport y Cool'n'Quiet</p>	<p>Conector AM2</p> <p>Procesadores AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+</p> <p>La arquitectura AMD 64 permite el procesamiento de 32 y 64 bits</p> <p>Soporta las tecnologías Hyper Transport y Cool'n'Quiet</p>
FSB	Admite HyperTransport con un ancho de banda de hasta 1 GHz	Admite HyperTransport con un ancho de banda de hasta 1 GHz
Conjunto de chips	nForce 570 LT SLI	nForce 570 LT SLI
Súper E/S	<p>ITE 8718F</p> <p>Le ofrece las funcionalidades heredadas de uso más común Súper E/S.</p> <p>Interfaz de cuenta Low Pin</p> <p>Iniciativas de control de entorno, Monitor hardware</p> <p>Controlador de velocidad de ventilador</p> <p>Función "Guardia inteligente" de ITE</p>	<p>ITE 8718F</p> <p>Le ofrece las funcionalidades heredadas de uso más común Súper E/S.</p> <p>Interfaz de cuenta Low Pin</p> <p>Iniciativas de control de entorno, Monitor hardware</p> <p>Controlador de velocidad de ventilador</p> <p>Función "Guardia inteligente" de ITE</p>
Memoria principal	<p>Ranuras DIMM DDR2 x 4</p> <p>Cada DIMM admite DDR de 256/512/1024/2048MB</p> <p>Capacidad máxima de memoria de 8GB</p> <p>Módulo de memoria DDR2 de canal Doble</p> <p>Admite DDR2 de 533 / 667 / 800</p> <p>Admite DDR2 de 1066 (by AM2+ CPU)</p> <p>No admite DIMM registrados o DIMM compatibles con ECC</p>	<p>Ranuras DIMM DDR2 x 4</p> <p>Cada DIMM admite DDR de 256/512/1024/2048MB</p> <p>Capacidad máxima de memoria de 8GB</p> <p>Módulo de memoria DDR2 de canal Doble</p> <p>Admite DDR2 de 533 / 667 / 800</p> <p>Admite DDR2 de 1066 (by AM2+ CPU)</p> <p>No admite DIMM registrados o DIMM compatibles con ECC</p>
IDE	<p>Controlador IDE integrado</p> <p>Modo bus maestro Ultra DMA 33 / 66 / 100 / 133</p> <p>Soporte los Modos PIO 0~4,</p>	<p>Controlador IDE integrado</p> <p>Modo bus maestro Ultra DMA 33 / 66 / 100 / 133</p> <p>Soporte los Modos PIO 0~4,</p>
SATA II	<p>Controlador ATA Serie Integrado</p> <p>Tasas de transferencia de hasta 3 Gb/s.</p> <p>Compatible con la versión SATA 2.0.</p>	<p>Controlador ATA Serie Integrado</p> <p>Tasas de transferencia de hasta 3 Gb/s.</p> <p>Compatible con la versión SATA 2.0.</p>
Red Local	<p>Realtek 8110SC</p> <p>Negociación de 10 / 100 Mb/s y 1 Gb/s</p>	<p>Realtek 8110SC</p> <p>Negociación de 10 / 100 Mb/s y 1 Gb/s</p>
Códecs de sonido	<p>ALC888</p> <p>Salida de sonido de 7.1 canales</p> <p>Soporte de sonido de Alta Definición</p>	<p>ALC662</p> <p>Salida de sonido de 5.1 canales</p> <p>Soporte de sonido de Alta Definición</p>

		Ver 5.x	Ver 6.x
Ranuras	Ranura PCI	X2	Ranura PCI X2
	Ranura PCI Express x16 (x16/x8)	X1	Ranura PCI Express x16 (x16/x8) X1
	Ranura PCI Express x16 (x8)	X1	Ranura PCI Express x16 (x8) X1
	Ranura PCI express x 1	X2	Ranura PCI express x 1 X2
Conectores en placa	Conector disco flexible	X1	Conector disco flexible X1
	Conector Puerto de impresora	X1	Conector Puerto de impresora X1
	Conector IDE	X1	Conector IDE 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 entrada de CD	X1	Conector de entrada de CD 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 chasis abierto(opcional)	X1	Cabecera de chasis abierto(opcional)X1
	Cabecera de borrado de CMOS	X1	Cabecera de borrado de CMOS X1
	Conector USB	X2	Conector USB X2
	Conector de alimentación (24 patillas)	X1	Conector de alimentación (24 patillas) X1
	Conector de alimentación (8 patillas)	X1	Conector de alimentación (8 patillas) X1
Conector de alimentación (4 patillas)	X1	Conector de alimentación (4 patillas) X1	
Panel trasero de E/S	Teclado PS/2	X1	Teclado PS/2 X1
	Ratón PS/2	X1	Ratón PS/2 X1
	Puerto serie	X1	Puerto serie X1
	Puerto de red local	X1	Puerto de red local X1
	Puerto USB	X6	Puerto USB X6
	Conector de sonido	X6	Conector de sonido X3
Tamaño de la placa	244 mm (A) X 305 mm (H)		244 mm (A) X 305 mm (H)
Funciones especiales	NVIDIA nTunes Admite RAID 0 / 1 / 0+1 / 5		NVIDIA nTunes Admite RAID 0 / 1 / 0+1 / 5
Soporte de sistema operativo	Windows 2000 / XP / VISTA Biostar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.		Windows 2000 / XP / VISTA Biostar se reserva el derecho de añadir o retirar el soporte de cualquier SO con o sin aviso previo.

**PORTUGUESE**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
CPU	Socket AM2 Processadores AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ A arquitectura AMD 64 permite uma computação de 32 e 64 bits Suporta as tecnologias Hyper Transport e Cool'n'Quiet	Socket AM2 Processadores AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ A arquitectura AMD 64 permite uma computação de 32 e 64 bits Suporta as tecnologias Hyper Transport e Cool'n'Quiet
FSB	Suporta a tecnologia HyperTransport com uma largura de banda até1 GHz	Suporta a tecnologia HyperTransport com uma largura de banda até1 GHz
Chipset	nForce 570 LT SLI	nForce 570 LT SLI
Especificação do Super I/O	ITE 8718F 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 da velocidade da ventoinha Função "Smart Guardian" da ITE	ITE 8718F 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 da velocidade da ventoinha Função "Smart Guardian" da ITE
Memória principal	Ranuras DIMM DDR2 x 4 Cada módulo DIMM suporta uma memória DDR2 de 256/512/1024/2048 MB Capacidade máxima de memória: 8GB Módulo de memória DDR2 de canal duplo Suporta módulos DDR2 533 / 667 / 800 Suporta módulos DDR2 1066 (by AM2+ CPU) Os módulos DIMM registados e os DIMM ECC não são suportados	Ranuras DIMM DDR2 x 4 Cada módulo DIMM suporta uma memória DDR2 de 256/512/1024/2048 MB Capacidade máxima de memória: 8GB Módulo de memória DDR2 de canal duplo Suporta módulos DDR2 533 / 667 / 800 Suporta módulos DDR2 1066 (by AM2+ CPU) Os módulos DIMM registados e os DIMM ECC não são suportados
IDE	Controlador IDE integrado Modo Bus master Ultra DMA 33 / 66 / 100 / 133 Suporta o modo PIO 0~4,	Controlador IDE integrado Modo Bus master Ultra DMA 33 / 66 / 100 / 133 Suporta o modo PIO 0~4,
SATA II	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3 Gb/s. Compatibilidade com a especificação SATA versão 2.0.	Controlador Serial ATA integrado Velocidades de transmissão de dados até 3 Gb/s. Compatibilidade com a especificação SATA versão 2.0.
LAN	Realtek 8110SC Auto negociação de 10 / 100 Mb/s e 1Gb/s	Realtek 8110SC Auto negociação de 10 / 100 Mb/s e 1Gb/s
Codec de som	ALC888 Saída de áudio de 7.1 canais Suporta a especificação High-Definition Audio	ALC662 Saída de áudio de 5.1 canais Suporta a especificação High-Definition Audio



**TF570 SLI A2+**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
Ranhuras	Ranhura PCI x2	Ranhura PCI x2
	Ranhura PCI Express x16 (x16/x8) x1	Ranhura PCI Express x16 (x16/x8) x1
	Ranhura PCI Express x16 (x8) x1	Ranhura PCI Express x16 (x8) x1
	Ranhura PCI Express x 1 x2	Ranhura PCI Express x 1 x2
Conectores na placa	Conector da unidade de disquetes x1	Conector da unidade de disquetes x1
	Conector da para impressora x1	Conector da para impressora x1
	Conector IDE x1	Conector IDE 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 para entrada de CDs x1	Conector para entrada de CDs 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 detecção da abertura do chassis (opcional) x1	Conector para detecção da abertura do chassis (opcional) x1
	Conector para limpeza do CMOS x1	Conector para limpeza do CMOS x1
	Conector USB x2	Conector USB x2
	Conector de alimentação (24 pinos) x1	Conector de alimentação (24 pinos) x1
Conector de alimentação (8 pinos) x1	Conector de alimentação (8 pinos) x1	
Conector de alimentação (4 pinos) x1	Conector de alimentação (4 pinos) x1	
Entradas/Saídas no painel traseiro	Teclado PS/2 x1	Teclado PS/2 x1
	Rato PS/2 x1	Rato PS/2 x1
	Porta série x1	Porta série x1
	Porta LAN x1	Porta LAN x1
	Porta USB x6	Porta USB x6
	Tomada de áudio x6	Tomada de áudio x3
Tamanho da placa	244 mm (L) X 305 mm (A)	244 mm (L) X 305 mm (A)
Características especiais	nTunes da NVIDIA Suporta as funções RAID 0 / 1 / 0+1 / 5	nTunes da NVIDIA Suporta as funções RAID 0 / 1 / 0+1 / 5
Sistemas operativos suportados	Windows 2000 / XP / VISTA A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.	Windows 2000 / XP / VISTA A Biostar reserva-se o direito de adicionar ou remover suporte para qualquer sistema operativo com ou sem aviso prévio.

**POLISH**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
Procesor	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ Procesory Architektura AMD 64 umożliwia przetwarzanie 32 i 64 bitowe Obsługa Hyper Transport oraz Cool'n'Quiet	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ Procesory Architektura AMD 64 umożliwia przetwarzanie 32 i 64 bitowe Obsługa Hyper Transport oraz Cool'n'Quiet
FSB	Obsługa HyperTransport o szerokości pasma do 1 GHz	Obsługa HyperTransport o szerokości pasma do 1 GHz
Chipset	nForce 570 LT SLI	nForce 570 LT SLI
Pamięć główna	Gniazda DDR2 DIMM x 4 Każde gniazdo DIMM obsługuje moduły 256/512/1024/2048MB DDR2 Maks. wielkość pamięci 8GB Moduł pamięci DDR2 z trybem podwójnego kanału Obsługa DDR2 533 / 667 / 800 Obsługa DDR2 1066 (by AM2+ CPU) Brak obsługi Registered DIMM oraz ECC DIMM	Gniazda DDR2 DIMM x 4 Każde gniazdo DIMM obsługuje moduły 256/512/1024/2048MB DDR2 Maks. wielkość pamięci 8GB Moduł pamięci DDR2 z trybem podwójnego kanału Obsługa DDR2 533 / 667 / 800 Obsługa DDR2 1066 (by AM2+ CPU) Brak obsługi Registered DIMM oraz ECC DIMM
Super I/O	ITE 8718F Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count Funkcje kontroli warunków pracy, Monitor H/W Kontroler prędkości wentylatora Funkcja ITE "Smart Guardian"	ITE 8718F Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count Funkcje kontroli warunków pracy, Monitor H/W Kontroler prędkości wentylatora Funkcja ITE "Smart Guardian"
IDE	Zintegrowany kontroler IDE Ultra DMA 33 / 66 / 100 / 133 Tryb Bus Master obsługa PIO tryb 0~4,	Zintegrowany kontroler IDE Ultra DMA 33 / 66 / 100 / 133 Tryb Bus Master obsługa PIO tryb 0~4,
SATA II	Zintegrowany kontroler Serial ATA Transfer danych do 3 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.	Zintegrowany kontroler Serial ATA Transfer danych do 3 Gb/s. Zgodność ze specyfikacją SATA w wersji 2.0.
LAN	Realtek 8110SC 10 / 100 Mb/s oraz 1Gb/s z automatyczną negocjacją szybkości	Realtek 8110SC 10 / 100 Mb/s oraz 1Gb/s z automatyczną negocjacją szybkości
Kodek dźwiękowy	ALC888 7.1 kanałowe wyjście audio Obsługa High-Definition Audio	ALC662 5.1 kanałowe wyjście audio Obsługa High-Definition Audio

**TF570 SLI A2+**

		<b>Ver 5.x</b>	<b>Ver 6.x</b>
Gniazda	Gniazdo PCI	x2	Gniazdo PCI x2
	Gniazdo PCI Express x16 (x16/x8)	x1	Gniazdo PCI Express x16 (x16/x8) x1
	Gniazdo PCI Express x16 (x8)	x1	Gniazdo PCI Express x16 (x8) x1
	Gniazdo PCI Express x 1	x2	Gniazdo PCI Express x 1 x2
Złącza wbudowane	Złącze napędu dyskietek	x1	Złącze napędu dyskietek x1
	Złącze Port drukarki	x1	Złącze Port drukarki x1
	Złącze IDE	x1	Złącze IDE x1
	Złącze SATA	x4	Złącze SATA x4
	Złącze panela przedniego	x1	Złącze panela przedniego x1
	Przednie złącze audio	x1	Przednie złącze audio x1
	Złącze wejścia CD	x1	Złącze wejścia CD 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 otwarcia obudowy (opcja)	x1	Złącze główkowe otwarcia obudowy (opcja) x1
	Złącze główkowe kasowania CMOS	x1	Złącze główkowe kasowania CMOS x1
	Złącze USB	x2	Złącze USB x2
	Złącze zasilania (24 pinowe)	x1	Złącze zasilania (24 pinowe) x1
	Złącze zasilania (8 pinowe)	x1	Złącze zasilania (8 pinowe) x1
Złącze zasilania (4 pinowe)	x1	Złącze zasilania (4 pinowe) x1	
Back Panel I/O	Klawiatura PS/2	x1	Klawiatura PS/2 x1
	Mysz PS/2	x1	Mysz PS/2 x1
	Port szeregowy	x1	Port szeregowy x1
	Port LAN	x1	Port LAN x1
	Port USB	x6	Port USB x6
	Gniazdo audio	x6	Gniazdo audio x3
Wymiary płyty	244 mm (S) X 305 mm (W)		244 mm (S) X 305 mm (W)
Funkcje specjalne	NVIDIA nTunes. Obsługa RAID 0 / 1 / 0+1 / 5		NVIDIA nTunes. Obsługa RAID 0 / 1 / 0+1 / 5
Obsługa systemu operacyjnego	Windows 2000 / XP / VISTA Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.		Windows 2000 / XP / VISTA Biostar zastrzega sobie prawo dodawania lub odwoływania obsługi dowolnego systemu operacyjnego bez powiadomienia.

**RUSSIAN**

	<b>Ver 5.x</b>	<b>Ver 6.x</b>
CPU (центральный процессор)	Гнездо AM2 Процессоры AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ Архитектура AMD 64 разрешать обработка данных на 32 и 64 бит Поддержка Hyper Transport и Cool'n'Quiet	Гнездо AM2 Процессоры AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ Архитектура AMD 64 разрешать обработка данных на 32 и 64 бит Поддержка Hyper Transport и Cool'n'Quiet
FSB	Поддержка HyperTransport с пропускной способностью до 1ГГц	Поддержка HyperTransport с пропускной способностью до 1ГГц
Набор микросхем	nForce 570 LT SLI	nForce 570 LT SLI
Основная память	Слоты DDR2 DIMM x 4 Каждый модуль DIMM поддерживает 256/512/1024/2048МБ DDR2 Максимальная ёмкость памяти 8ГБ Модуль памяти с двухканальным режимом DDR2 Поддержка DDR2 533 / 667 / 800 Поддержка DDR2 1066 (by AM2+ CPU) Не поддерживает зарегистрированные модули DIMM and ECC DIMM	Слоты DDR2 DIMM x 4 Каждый модуль DIMM поддерживает 256/512/1024/2048МБ DDR2 Максимальная ёмкость памяти 8ГБ Модуль памяти с двухканальным режимом DDR2 Поддержка DDR2 533 / 667 / 800 Поддержка DDR2 1066 (by AM2+ CPU) Не поддерживает зарегистрированные модули DIMM and ECC DIMM
Super I/O	ITE 8718F Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости Функция ITE "Smart Guardian" (Интеллектуальная защита)	ITE 8718F Обеспечивает наиболее используемые действующие функциональные возможности Super I/O. Интерфейс с низким количеством выводов Инициативы по охране окружающей среды, Аппаратный монитор Регулятор скорости Функция ITE "Smart Guardian" (Интеллектуальная защита)
IDE	Встроенное устройство управления встроенными интерфейсами устройств Режим "хозяина" шины Ultra DMA 33 / 66 / 100 / 133 Поддержка режима PIO 0~4,	Встроенное устройство управления встроенными интерфейсами устройств Режим "хозяина" шины Ultra DMA 33 / 66 / 100 / 133 Поддержка режима PIO 0~4,
SATA II	Встроенное последовательное устройство управления ATA скорость передачи данных до 3 гигабит/с. Соответствие спецификации SATA версия 2.0.	Встроенное последовательное устройство управления ATA скорость передачи данных до 3 гигабит/с. Соответствие спецификации SATA версия 2.0.
Локальная сеть	Realtek 8110SC Автоматическое согласование 10 / 100 Мб/с и 1Гб/с	Realtek 8110SC Автоматическое согласование 10 / 100 Мб/с и 1Гб/с
Звуковой кодек	ALC 888 Звуковая поддержка High-Definition 7.1канальный звуковой выход	ALC662 Звуковая поддержка High-Definition 5.1канальный звуковой выход

		<b>Ver 5.x</b>		<b>Ver 6.x</b>	
Слоты	Слот PCI	x2	Слот PCI	x2	
	Слот PCI Express x16 (x16/x8)	x1	Слот PCI Express x16 (x16/x8)	x1	
	Слот PCI Express x16 (x8)	x1	Слот PCI Express x16 (x8)	x1	
	Слот PCI Express x 1	x2	Слот PCI Express x 1	x2	
Встроенны й разъём	Разъём НГМД	x1	Разъём НГМД	x1	
	Разъём Порт подключения принтера	x1	Разъём Порт подключения принтера	x1	
	Разъём IDE	x1	Разъём IDE	x1	
	Разъём SATA	x4	Разъём SATA	x4	
	Разъём на лицевой панели	x1	Разъём на лицевой панели	x1	
	Входной звуковой разъём	x1	Входной звуковой разъём	x1	
	Разъём ввода для CD	x1	Разъём ввода для CD	x1	
	Разъём вывода для S/PDIF	x1	Разъём вывода для S/PDIF	x1	
	Контактирующее приспособление вентилятора центрального процессора	x1	Контактирующее приспособление вентилятора центрального процессора	x1	
	Контактирующее приспособление вентилятора системы	x2	Контактирующее приспособление вентилятора системы	x2	
	Шасси открытого контактирующего приспособления (дополнительно)	x1	Шасси открытого контактирующего приспособления (дополнительно)	x1	
	Открытое контактирующее приспособление CMOS	x1	Открытое контактирующее приспособление CMOS	x1	
	USB-разъём	x2	USB-разъём	x2	
	Разъём питания (24 вывод)	x1	Разъём питания (24 вывод)	x1	
	Разъём питания (8 вывод)	x1	Разъём питания (8 вывод)	x1	
	Разъём питания (4 вывод)	x1	Разъём питания (4 вывод)	x1	
Задняя панель средств ввода-вывода	Клавиатура PS/2	x1	Клавиатура PS/2	x1	
	Мышь PS/2	x1	Мышь PS/2	x1	
	Последовательный порт	x1	Последовательный порт	x1	
	Порт LAN	x1	Порт LAN	x1	
	USB-порт	x6	USB-порт	x6	
Размер панели	Гнездо для подключения наушников	x6	Гнездо для подключения наушников	x3	
	244 мм (Ш) X 305 мм (В)		244 мм (Ш) X 305 мм (В)		
Специальные технические характеристики	NVIDIA nTunes		NVIDIA nTunes		
	Поддержка RAID 0 / 1 / 0+1 / 5		Поддержка RAID 0 / 1 / 0+1 / 5		
Поддержка OS	Windows 2000 / XP / VISTA		Windows 2000 / XP / VISTA		
	Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.		Biostar сохраняет за собой право добавлять или удалять средства обеспечения для OS с или без предварительного уведомления.		

## ARABIC

Ver 6.x	Ver 5.x	
AM2مقيس AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ إجراء العمليات الحاسوبية بسرعة 32 و 64 بت AMD يمكن تقنية Cool'n'Quiet و Hyper Transport تدعم تقنية	AM2مقيس AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ إجراء العمليات الحاسوبية بسرعة 32 و 64 بت AMD يمكن تقنية Cool'n'Quiet و Hyper Transport تدعم تقنية	وحدة المعالجة المركزية
تردد 1000 يتردد يصل إلى HyperTransport تدعم تقنية	تردد 1000 يتردد يصل إلى HyperTransport تدعم تقنية	النقل الأمامي الجانبي
nForce 570 LT SLI	nForce 570 LT SLI	مجموعة التبريد
عدد4 قحة DDR2 DIMM سعة DDR2 تدعم ذاكرة من نوع DIMM 256/512/1024/2048 ميغا بايت و 1 جيجا بايت سعة ذاكرة قصوى 8 جيجا بايت مزوجة للقناة DDR2 وحدة ذاكرة ميغا بايت 800/667/533 ساعات DDR2 تدعم الذاكرة من نوع 1066 (By AM2 + CPU) ساعات DDR2 تدعم الذاكرة من نوع ميغا بايت ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	عدد4 قحة DDR2 DIMM سعة DDR2 تدعم ذاكرة من نوع DIMM 256/512/1024/2048 ميغا بايت و 1 جيجا بايت سعة ذاكرة قصوى 8 جيجا بايت مزوجة للقناة DDR2 وحدة ذاكرة ميغا بايت 800/667/533 ساعات DDR2 تدعم الذاكرة من نوع 1066 (By AM2 + CPU) ساعات DDR2 تدعم الذاكرة من نوع ميغا بايت ECC وتلك التي لا تتوافق مع DIMM لا تدعم رقائق الذاكرة	الذاكرة الرئيسية
ITE 8718F الأكثر استخداماً، Super I/O ووفر وظيفة Low Pin Count Interface تدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة من ITE "Smart Guardian" ووظيفة	ITE 8718F الأكثر استخداماً، Super I/O ووفر وظيفة Low Pin Count Interface تدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة مراقب في سرعة المروحة من ITE "Smart Guardian" ووظيفة	Super I/O
متكامل IDE متحكم Ultra DMA 33 / 66 / 100 / 133 نقل بتقنية وضع رئيسي PIO Mode 0~4 دعم وضع	متكامل IDE متحكم Ultra DMA 33 / 66 / 100 / 133 نقل بتقنية وضع رئيسي PIO Mode 0~4 دعم وضع	منفذ IDE
متكامل Serial ATA متحكم نقل البيانات بسرعة تصل إلى 3 جيجابت/ثانية. 2.0 الإصدار SATA مطابقة لمواصفات	متكامل Serial ATA متحكم نقل البيانات بسرعة تصل إلى 3 جيجابت/ثانية. 2.0 الإصدار SATA مطابقة لمواصفات	SATA II
Realtek 8110SC تفاوض تلقائي 100/10 ميغا بايت / ثانية و 1 جيجا بايت/ثانية	Realtek 8110SC تفاوض تلقائي 100/10 ميغا بايت / ثانية و 1 جيجا بايت/ثانية	شبكة داخلية
ALC662 تدعم تقنية الصوت عالي التعريف من 5.1 قنوات لخرج الصوت	ALC888 تدعم تقنية الصوت عالي التعريف من 7.1 قنوات لخرج الصوت	كوديك الصوت

TF570 SLI A2+

Ver 6.x		Ver 5.x		
عدد 2	قحة PCI	عدد 2	قحة PCI	التحات
عدد 1	قحة PCI Express x16 (x16/x8)	عدد 1	قحة PCI Express x16 (x16/x8)	
عدد 1	قحة PCI Express x16 (x8)	عدد 1	قحة PCI Express x16 (x8)	
عدد 2	قحة PCI Express x1	عدد 2	قحة PCI Express x1	
عدد 1	منفذ محرك أقراص مرنة	عدد 1	منفذ محرك أقراص مرنة	المنفذ على سطح اللوحة
عدد 1	منفذ طابعة	عدد 1	منفذ طابعة	
عدد 1	منفذ IDE	عدد 1	منفذ IDE	
عدد 4	منفذ SATA	عدد 4	منفذ SATA	
عدد 1	منفذ اللوحة الأممية	عدد 1	منفذ اللوحة الأممية	
عدد 1	منفذ الصوت الأممي	عدد 1	منفذ الصوت الأممي	
عدد 1	منفذ CD-IN	عدد 1	منفذ CD-IN	
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 فتح البيكل (اختياري)	عدد 1	وصلة فتح البيكل (اختياري)	
عدد 1	وصلة مسح CMOS	عدد 1	وصلة مسح CMOS	
عدد 2	منفذ USB	عدد 2	منفذ USB	
عدد 1	منفذ توصيل الطاقة (24 دبوس)	عدد 1	منفذ توصيل الطاقة (24 دبوس)	
عدد 1	منفذ توصيل الطاقة (8 دبوس)	عدد 1	منفذ توصيل الطاقة (8 دبوس)	
عدد 1	منفذ توصيل الطاقة (4 دبوس)	عدد 1	منفذ توصيل الطاقة (4 دبوس)	
عدد 1	لوحة مفاتيح PS/2	عدد 1	لوحة مفاتيح PS/2	
عدد 1	مؤس PS/2	عدد 1	مؤس PS/2	
عدد 1	منفذ تسلسلي	عدد 1	منفذ تسلسلي	
عدد 1	منفذ شبكة اتصال محلية	عدد 1	منفذ شبكة اتصال محلية	
عدد 6	منافذ USB	عدد 6	منافذ USB	
عدد 3	مقيس صوت	عدد 6	مقيس صوت	
NVIDIA nTunes		NVIDIA nTunes		مزيا خاصة
RAID 0 / 1 / 0+1 / 5 دعم تقنية		RAID 0 / 1 / 0+1 / 5 دعم تقنية		
244 مم (عرض) X 305 مم (ارتفاع)		244 مم (عرض) X 305 مم (ارتفاع)		حجم اللوحة
Windows 2000 / XP / VISTA		Windows 2000 / XP / VISTA		دعم أنظمة التشغيل
بحقها في اإضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو Biostar احتفظ بدون إخطار .		بحقها في اإضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو Biostar احتفظ بدون إخطار .		

**JAPANESE**

	Ver 5.x	Ver 6.x
CPU	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ プロセッサ AMD 64アーキテクチャでは、32ビットと64ビット計算が可能です ハイパートランスポートとクールアンドクワイアットをサポートします	Socket AM2 AMD Athlon 64 / Athlon 64 FX / Athlon 64 X2 / Sempron / AM2+ プロセッサ AMD 64アーキテクチャでは、32ビットと64ビット計算が可能です ハイパートランスポートとクールアンドクワイアットをサポートします
FSB	1GHzのバンド幅までハイパートランスポートをサポートします	1GHzのバンド幅までハイパートランスポートをサポートします
チップセット	nForce 570 LT SLI	nForce 570 LT SLI
メインメモリ	DDR2 DIMMスロット x 4 各DIMMは 256/512/1024/2048MB DDR2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DDR2メモリモジュール DDR2 533 / 667 / 800をサポート DDR2 1066をサポート (by AM2+ CPU) 登録済みDIMMとECC DIMMはサポートされません	DDR2 DIMMスロット x 4 各DIMMは 256/512/1024/2048MB DDR2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DDR2メモリモジュール DDR2 533 / 667 / 800をサポート DDR2 1066をサポート (by AM2+ CPU) 登録済みDIMMとECC DIMMはサポートされません
Super I/O	ITE 8718F 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 8718F 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
IDE	統合IDEコントローラ Ultra DMA 33 / 66 / 100 / 133バスマスタモード PIO Mode 0~4のサポート、	統合IDEコントローラ Ultra DMA 33 / 66 / 100 / 133バスマスタモード PIO Mode 0~4のサポート、
SATA II	統合シリアルATAコントローラ 最高3 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 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 8110SC 10 / 100 Mb/秒および1Gb/秒のオートネゴシエーション	Realtek 8110SC 10 / 100 Mb/秒および1Gb/秒のオートネゴシエーション



**TF570 SLI A2+**

		<b>Ver 5.x</b>	<b>Ver 6.x</b>
サウンド Codec	ALC 888 ハイデフィニションオーディオのサポート 7.1 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	
スロット	PCIスロット x2 PCI Express x16スロット(x16/x8) x1 PCI Express x16スロット(x8) x1 PCI Express x 1スロット x2	PCIスロット x2 PCI Express x16スロット(x16/x8) x1 PCI Express x16スロット(x8) x1 PCI Express x 1スロット x2	
オンボードコ ネクタ	フロッピーコネクタ x1 プリンタポートコネクタ x1 IDEコネクタ x1 SATAコネクタ x4 フロントパネルコネクタ x1 フロントオーディオコネクタ x1 CDインコネクタ x1 S/PDIFアウトコネクタ x1 CPUファンヘッダ x1 システムファンヘッダ x2 シャーシオープンヘッダ(オプション) x1 CMOSクリアヘッダ x1 USBコネクタ x2 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	フロッピーコネクタ x1 プリンタポートコネクタ x1 IDEコネクタ x1 SATAコネクタ x4 フロントパネルコネクタ x1 フロントオーディオコネクタ x1 CDインコネクタ x1 S/PDIFアウトコネクタ x1 CPUファンヘッダ x1 システムファンヘッダ x2 シャーシオープンヘッダ(オプション) x1 CMOSクリアヘッダ x1 USBコネクタ x2 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 x1 PS/2マウス x1 シリアルポート x1 LANポート x1 USBポート x6 オーディオジャック x6	PS/2キーボード x1 PS/2マウス x1 シリアルポート x1 LANポート x1 USBポート x6 オーディオジャック x3	
ボードサイズ	244 mm (幅) X 305 mm (高さ)	244 mm (幅) X 305 mm (高さ)	
特殊機能	NVIDIA nTunes RAID 0 / 1 / 0+1 / 5 のサポート	NVIDIA nTunes RAID 0 / 1 / 0+1 / 5 のサポート	
OSサポート	Windows 2000 / XP / VISTA 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 2000 / XP / VISTA 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。	

2008/01/21