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CE

Dichiarazione di conformità sintetica

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

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

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

quando ad esso applicabili

Short Declaration of conformity

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

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

whenever these laws may be applied

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 BEFORE YOU START

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

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

1.2 PACKAGE CHECKLIST

- Serial ATA Cable X 3
- 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
- USB 2.0 Cable X1 (optional)
- S/PDIF out Cable X 1 (optional)

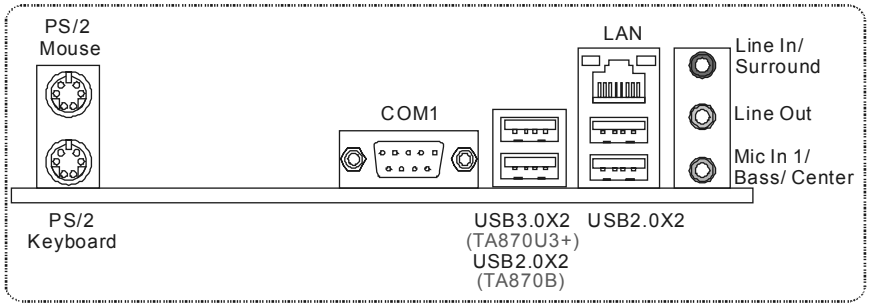
Note: The package contents may be different due to area or your motherboard version.

1.3 MOTHERBOARD FEATURES

	TA870U3+	TA870B
CPU	Socket AM3 AMD Phenom II/Athlon II/Sempron processors AMD 64 Architecture enables 32 and 64 bit computing Supports Hyper Transport 3.0 and Cool=n=Quiet (Maximum Watt: 140W)	Socket AM3 AMD Phenom II/Athlon II/Sempron processors AMD 64 Architecture enables 32 and 64 bit computing Supports Hyper Transport 3.0 and Cool=n=Quiet (Maximum Watt: 140W)
FSB	Support HyperTransport 3.0 Supports up to 5.2 GT/s Bandwidth	Support HyperTransport 3.0 Supports up to 5.2 GT/s Bandwidth
Chipset	AMD 870 AMD SB850	AMD 870 AMD SB850
Super I/O	ITE 8728 Provides the most commonly used legacy Super I/O functionality Low Pin Count Interface Environment Control initiatives H/W Monitor ITE's "Smart Guardian" function	ITE 8728 Provides the most commonly used legacy Super I/O functionality Low Pin Count Interface Environment Control initiatives H/W Monitor ITE's "Smart Guardian" function
Main Memory	DDR3 DIMM Slots x 4 Max Memory Capacity 16GB Each DIMM supports 512MB/1GB/2GB/ 4GB DDR3 Dual Channel Mode DDR3 memory module Supports DDR3 800 / 1066 / 1333 Supports DDR3 1600 (OC) Registered DIMM and ECC DIMM is not supported	DDR3 DIMM Slots x 4 Max Memory Capacity 16GB Each DIMM supports 512MB/1GB/2GB/ 4GB DDR3 Dual Channel Mode DDR3 memory module Supports DDR3 800 / 1066 / 1333 Supports DDR3 1600 (OC) Registered DIMM and ECC DIMM is not supported
SATA 3	Integrated Serial ATA Controller Data transfer rates up to 6 Gb/s SATA Version 3.0 specification compliant	Integrated Serial ATA Controller Data transfer rates up to 6 Gb/s SATA Version 3.0 specification compliant
LAN	Realtek RTL 8111E 10 / 100 / 1000 Mb/s auto negotiation Half / Full duplex capability	Realtek RTL 8111E 10 / 100 / 1000 Mb/s auto negotiation Half / Full duplex capability
Sound	ALC662 5.1 channels audio out High Definition Audio	ALC662 5.1 channels audio out High Definition Audio
Slots	PCI Express Gen2 x16 slot x2 PCI Express Gen2 x 1 slot x2 PCI slot x2	PCI Express Gen2 x16 slot x2 PCI Express Gen2 x 1 slot x2 PCI slot x2

	TA870U3+		TA870B	
On Board Connector	SATA Connector	x6	SATA Connector	x6
	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
	CMOS clear Header	x1	CMOS clear Header	x1
	USB 2.0 Connector	x3	USB 2.0 Connector	x3
	Power Connector (24pin)	x1	Power Connector (24pin)	x1
	Power Connector (4pin)	x1	Power Connector (4pin)	x1
	Consumer IR Connector	x1	Consumer IR Connector	x1
	Printer Port Connector	x1	Printer Port Connector	x1
Back Panel I/O	PS/2 Keyboard	x1	PS/2 Keyboard	x1
	PS/2 Mouse	x1	PS/2 Mouse	x1
	Serial Port	x1	Serial Port	x1
	LAN Port	x1	LAN Port	x1
	USB 2.0 Port (by SB850)	x2	USB 2.0 Port	x4
	USB 3.0 Port (by ASM1042)	x2	Audio Jack	x3
	Audio Jack	x3		
Board Size	220 mm(W) x 305 mm(L)		220 mm(W) x 305 mm(L)	
Special Features	RAID 0 / 1 / 10 / 5 support		RAID 0 / 1 / 10 / 5 support	
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.	

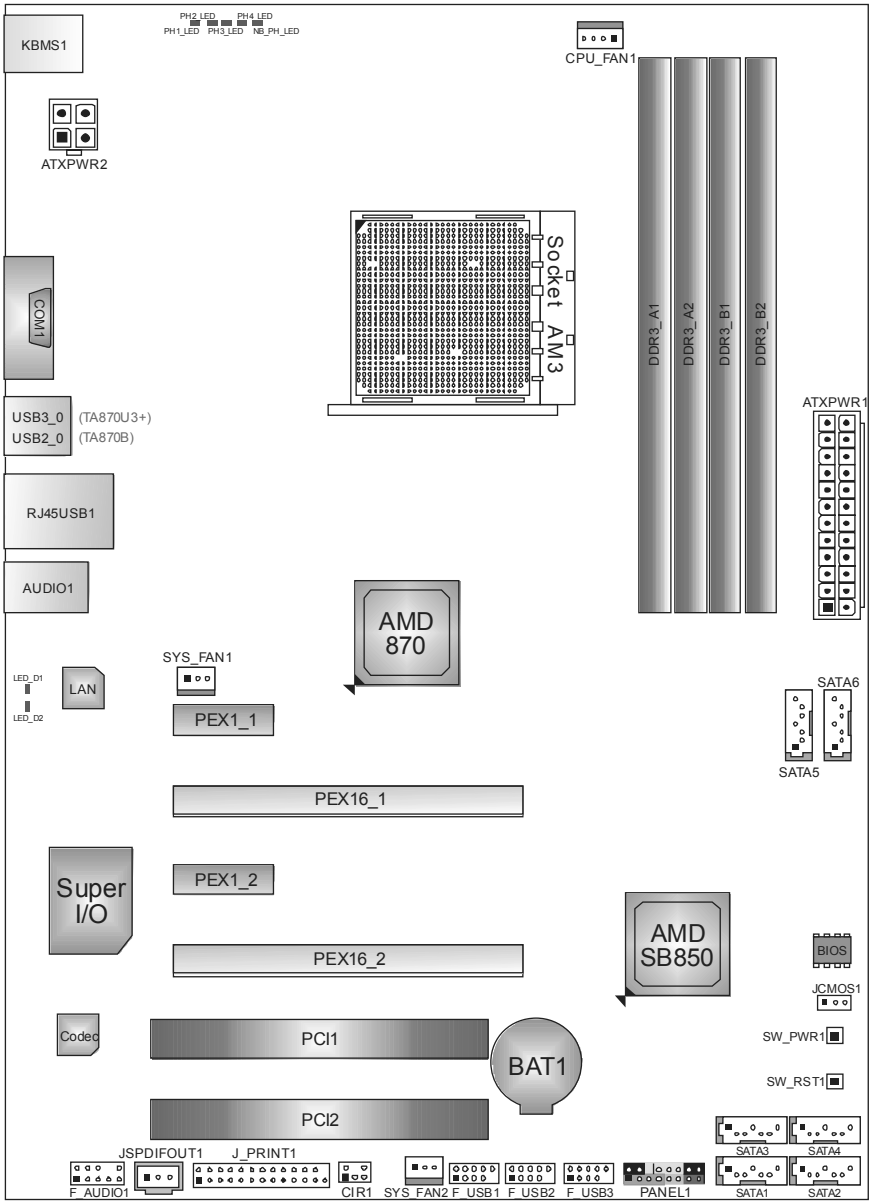
1.4 REAR PANEL CONNECTORS



NOTE: Since the audio chip supports High Definition Audio Specification, the function of each audio jack can be defined by software. The input / output function of each audio jack listed above represents the default setting. However, when connecting external microphone to the audio port, please use the Line In (blue) and Mic In (Pink) audio jack.

NOTE: USB3.0 ports are backward compatible with USB2.0/USB1.X devices. USB3.0 is controlled by Asmedia ASM1042, but, USB2.0/USB1.X is controlled by SB850.

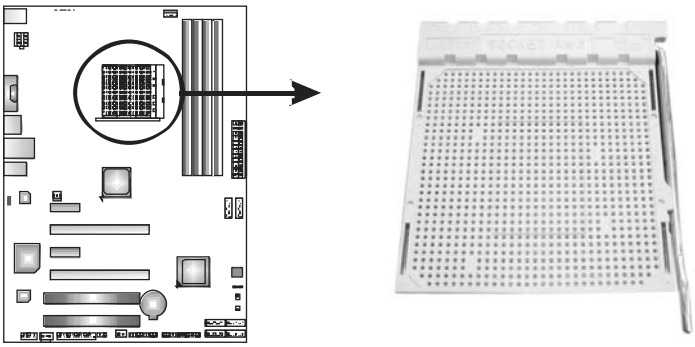
1.5 MOTHERBOARD LAYOUT



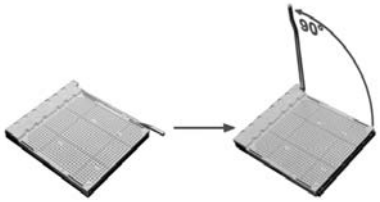
Note: ■ represents the 1st pin.

CHAPTER 2: HARDWARE INSTALLATION

2.1 INSTALLING CENTRAL PROCESSING UNIT (CPU)

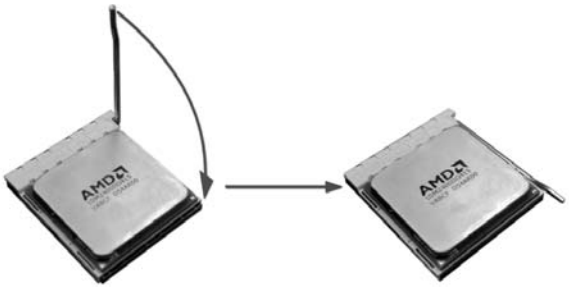


Step 1: Pull the lever toward direction A from the socket and then raise the lever up to a 90-degree angle.



Step 2: 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 3: Hold the CPU down firmly, and then close the lever toward direct B to complete the installation.

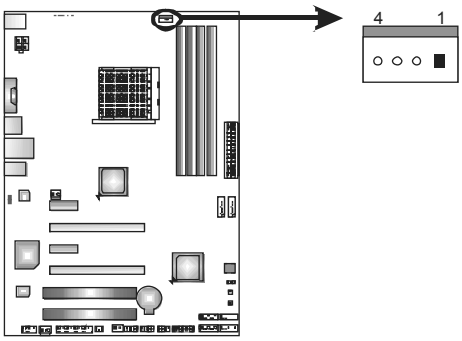


Step 4: Put the CPU Fan on the CPU and buckle it. Connect the CPU FAN power cable to the CPU_FAN1. This completes the installation.

2.2 FAN HEADERS

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

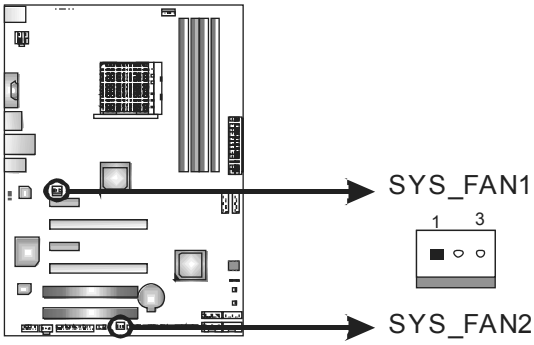
CPU_FAN1: CPU Fan Header



Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense
4	Smart Fan Control (By Fan)

SYS_FAN1: System Fan Header

SYS_FAN2: NorthBridge Fan Header



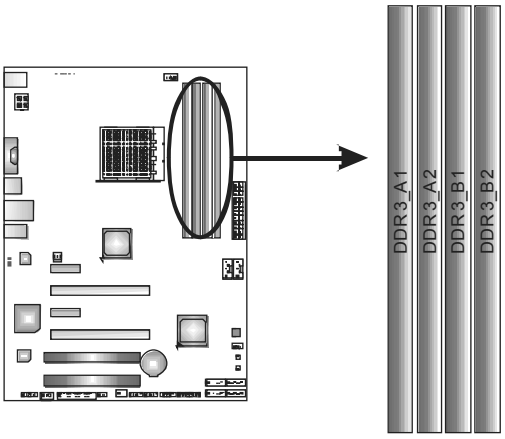
Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense

Note:

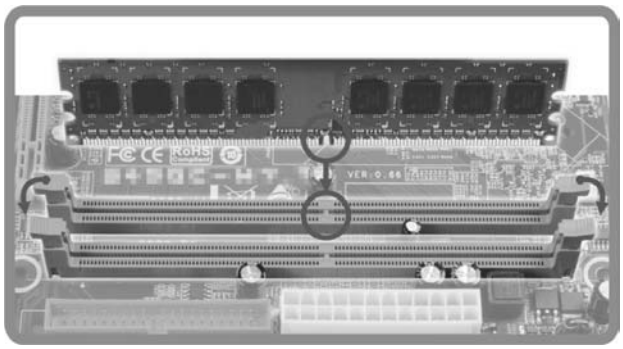
CPU_FAN1, SYS_FAN1/2 support 4-pin and 3-pin head connectors. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.3 Installing System Memory

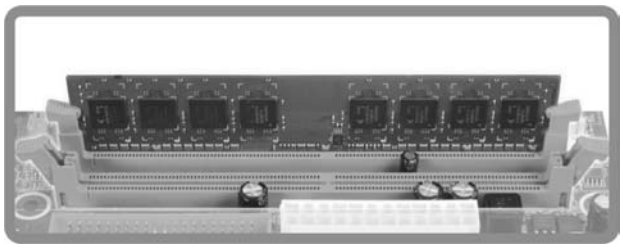
A. DDR3 Modules



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	O	X	O	X
Enabled	X	O	X	O
Enabled	O	O	O	O

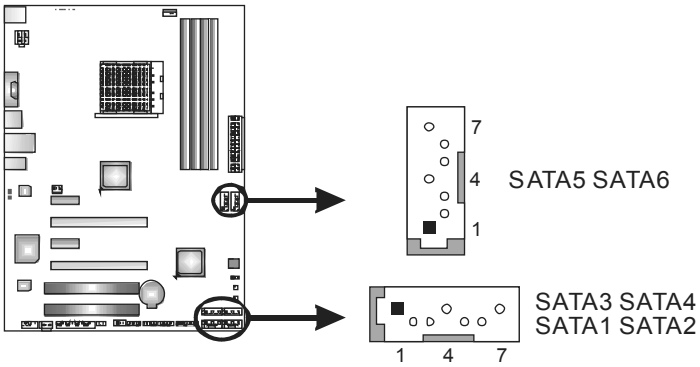
(O: memory installed; X: memory not installed)

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

2.4 Connectors and Slots

SATA1~SATA6: Serial ATA Connectors

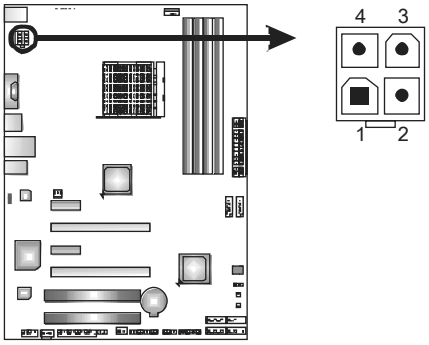
The motherboard has a PCI to SATA Controller with 6 channels SATA interface, it satisfies the SATA 3.0 spec and with transfer rate of 6.0Gb/s.



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

ATXPWR2: ATX Power Source Connector

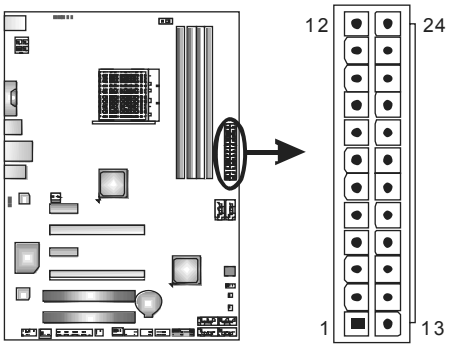
This connector provides +12V to CPU power circuit.



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

ATXPWR1: ATX Power Source Connector

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



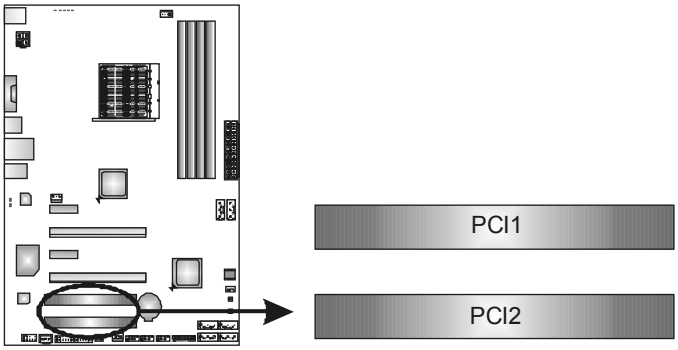
Pin	Assignment	Pin	Assignment
13	+3.3V	1	+3.3V
14	-12V	2	+3.3V
15	Ground	3	Ground
16	PS_ON	4	+5V
17	Ground	5	Ground
18	Ground	6	+5V
19	Ground	7	Ground
20	NC	8	PW_OK
21	+5V	9	Standby Voltage+5V
22	+5V	10	+12V
23	+5V	11	+12V
24	Ground	12	+3.3V

Note:

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

PCI1/PCI2: Peripheral Component Interconnect Slots

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



PEX16_1: PCI-Express Gen2 x16 Slot

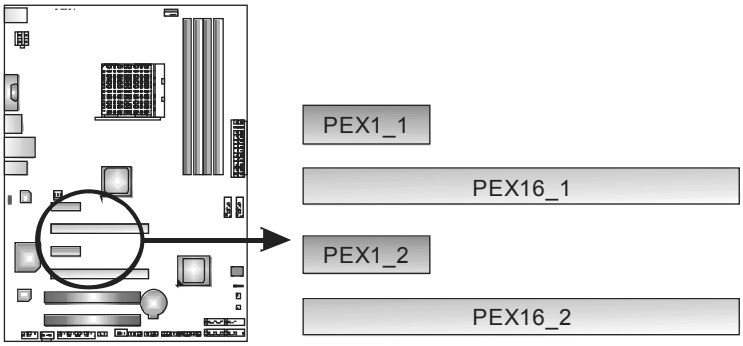
- PCI-Express 2.0 compliant.
- Maximum theoretical realized bandwidth of 8GB/s simultaneously per direction, for an aggregate of 16GB/s totally.
- PCI-Express Gen2 supports a raw bit-rate of 5.0Gb/s on the data pins.

PEX16_2: PCI-Express Gen2 x4 Slot

- PCI-Express 2.0 compliant.
- Data transfer bandwidth up to 2GB/s per direction;4GB/s in total.
- PCI-Express Gen2 supports a raw bit-rate of 2.5Gb/s on the data pins.

PEX1_1/PEX1_2: PCI-Express Gen2 x1 Slot

- PCI-Express 2.0 compliant.
- Data transfer bandwidth up to 250MB/s per direction; 500MB/s in total.



CHAPTER 3: HEADERS & JUMPERS SETUP

3.1 How to Setup Jumpers

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

Pin opened

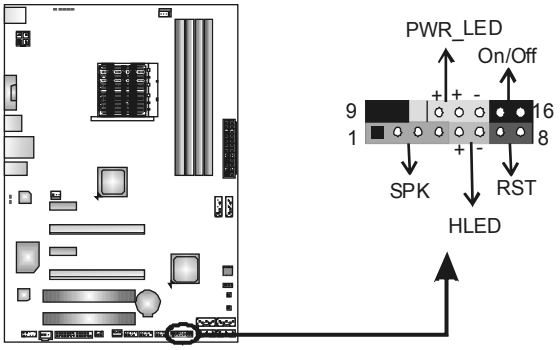
Pin closed

Pin1-2 closed

3.2 Detail Settings

PANEL1: Front Panel Header

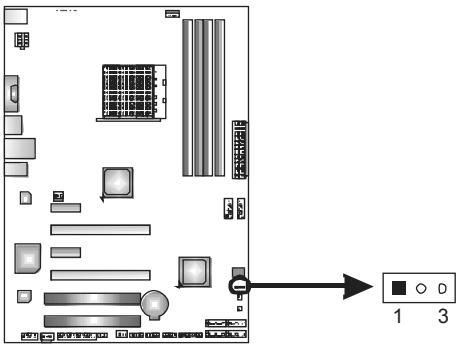
This 16-pin connector includes Power-on, Reset, HDD LED, Power LED, and speaker connection. It allows user to connect the PC case’s front panel switch functions.



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

JCMOS1: Clear CMOS Header

Placing the jumper on pin2-3 allows user to restore the BIOS safe setting and the CMOS data. Please carefully follow the procedures to avoid damaging the motherboard.



Pin 1-2 Close:
Normal Operation (default).

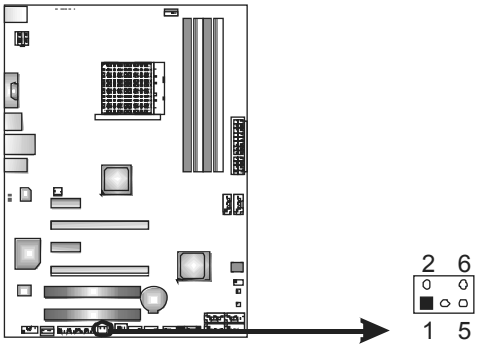
Pin 2-3 Close:
Clear CMOS data.

※ Clear CMOS Procedures:

1. Remove AC power line.
2. Set the jumper to “Pin 2-3 close”.
3. Wait for five seconds.
4. Set the jumper to “Pin 1-2 close”.
5. Power on the AC.
6. Reset your desired password or clear the CMOS data.

CIR1: Consumer IR Connector

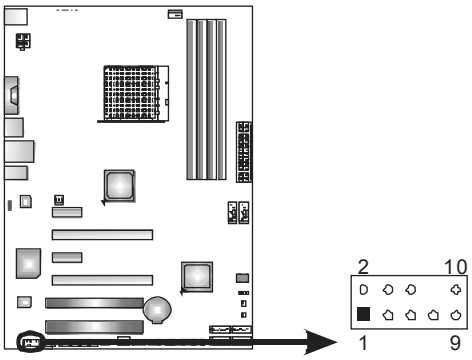
This header is for infrared remote control and communication.



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

F_AUDIO1: Front Panel Audio Header

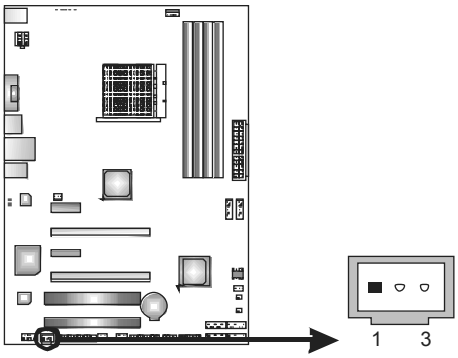
This header allows user to connect the front audio output cable with the PC front panel. This header allows only HD audio front panel connector; AC'97 connector is not acceptable.



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

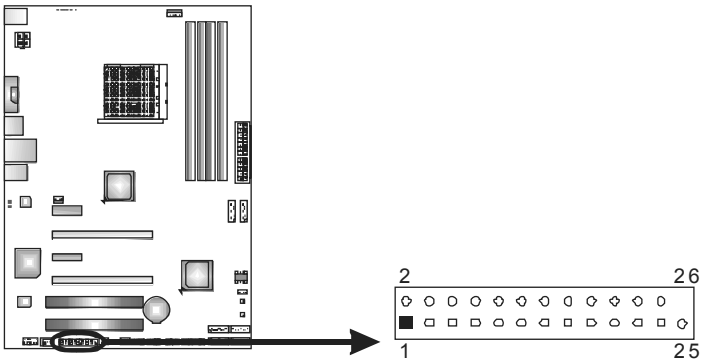
This connector allows user to connect the PCI bracket SPDIF output header.



Pin	Assignment
1	+5V
2	SPDIF_OUT
3	Ground

J_PRINT1: Printer Port Connector

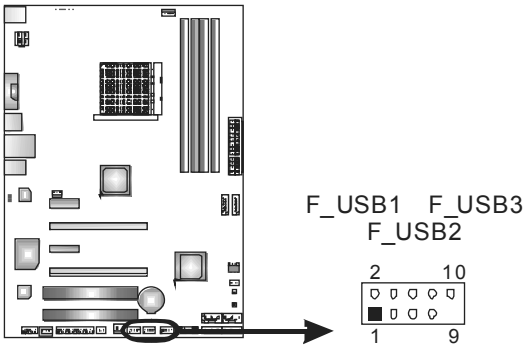
This header allows you to connector printer on the PC.



Pin	Assignment	Pin	Assignment
1	-Strobe	14	Ground
2	-ALF	15	Data 6
3	Data 0	16	Ground
4	-Error	17	Data 7
5	Data 1	18	Ground
6	-Init	19	-ACK
7	Data 2	20	Ground
8	-Scltin	21	Busy
9	Data 3	22	Ground
10	Ground	23	PE
11	Data 4	24	Ground
12	Ground	25	SCLT
13	Data 5	26	Key

F_USB1~F_USB3: Headers for USB 2.0 Ports at Front Panel

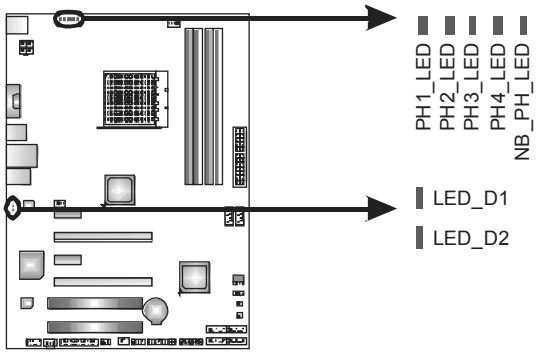
These headers allow user to connect additional USB cable on the PC front panel, and also can be connected with internal USB devices, like USB card reader.



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

On-Board LED Indicators

There are 6 LED indicators showing system status.



LED_D1 & LED_D2: Debug Indicators

PH1_LED ~ PH4_LED/NB_PH_LED: Power Status Indicators

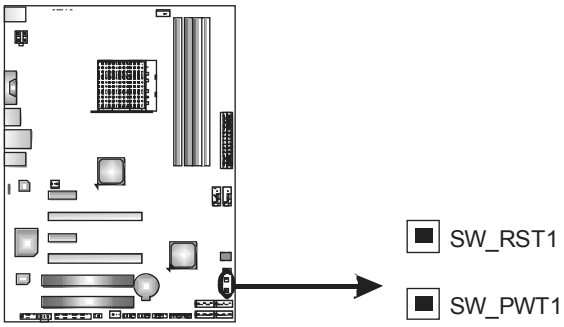
Please refer to the tables below for specific messages:

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

PH1_LED~PH4_LED NB_PH_LED	Phase Indicator
ON	Phase Active
OFF	Phase Disable

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 XP, 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.

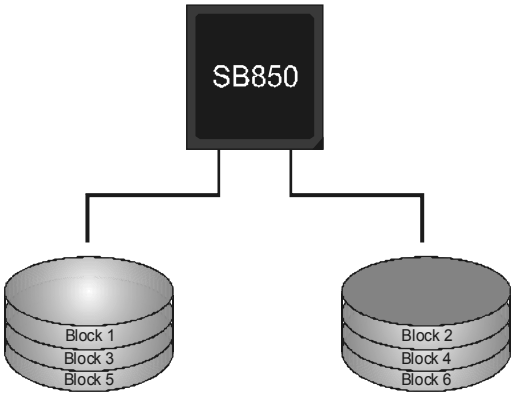
4.3 How RAID Works

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.



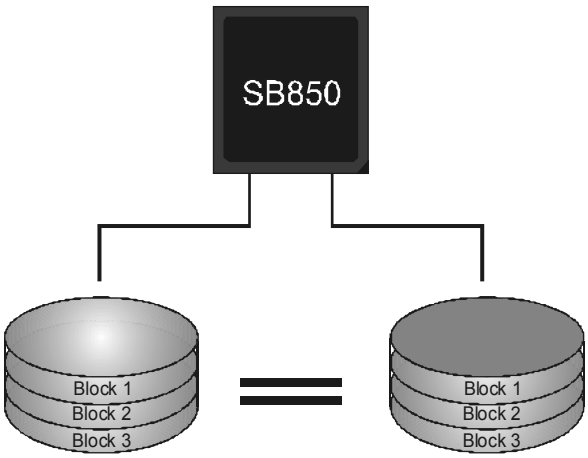
RAID 1:

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.

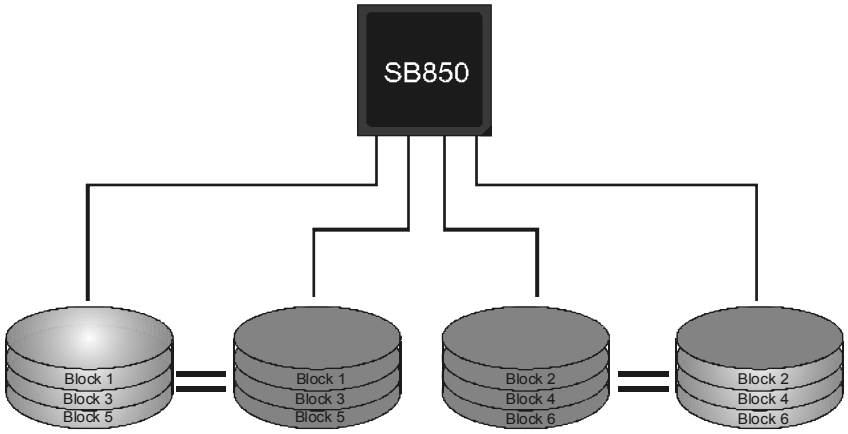


RAID 10:

RAID 1 drives can be stripped 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.

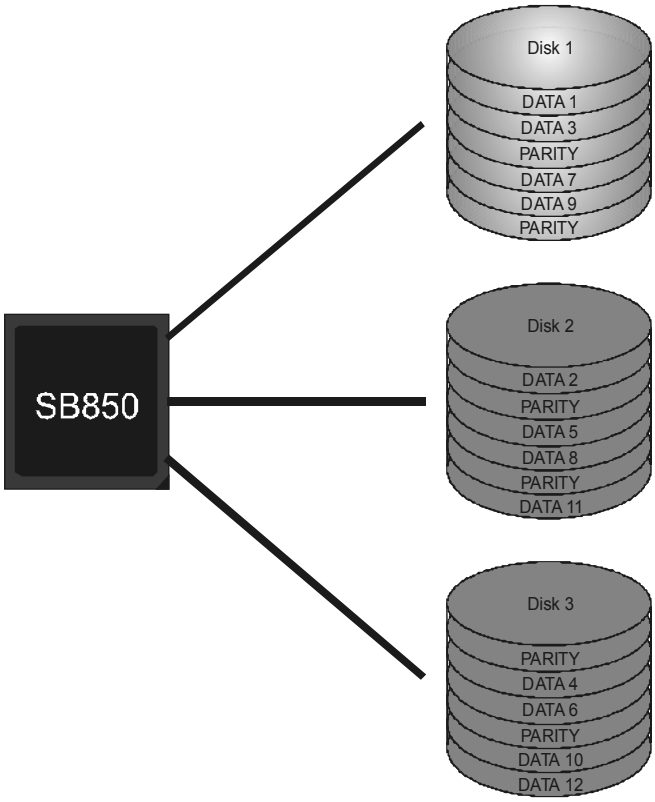


RAID 5:

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 BIOS

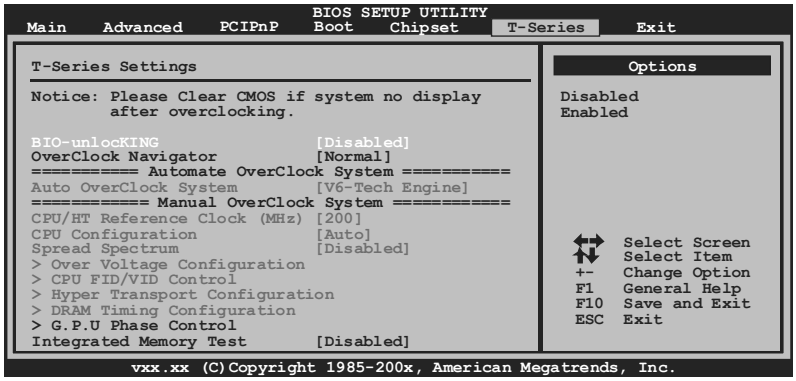
T-Series BIOS Features

- Overclocking Navigator Engine (O.N.E.)
- Memory Integration Test (M.I.T., under Overclock Navigator Engine)
- BIO-Flasher: Update BIOS file from USB Flash Drive or FDD
- Self Recovery System (S.R.S)
- Smart Fan Function
- CMOS Reloading Program

> ***!! 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.

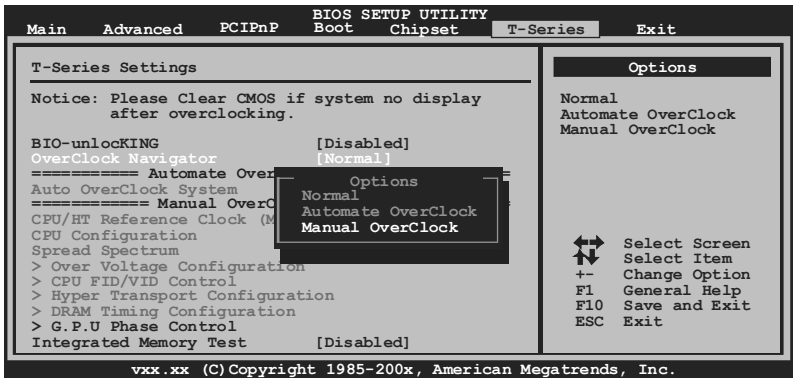
A. Overclocking Navigator Engine (O.N.E.)

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.



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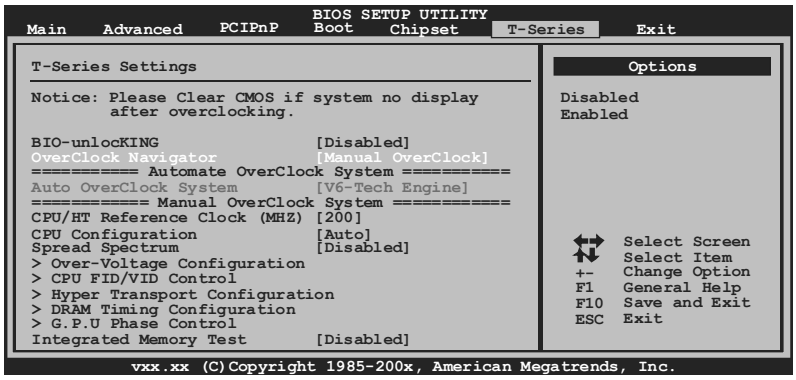


BIO-unlocKING

This item allows you to activate BIO-unlocKING function.

CPU/HT Reference Clock (MHz)

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.

CPU Configuration

This item provides several fixed modes of CPU configuration.

Spread Spectrum

This item allows you to control Spread Spectrum function.

Over-Voltage Configuration

Enter this function for more advanced voltage settings.

CPU FID/VID Control

Enter this function for more advanced CPU settings.

Hyper Transport Configuration

Enter this function for more advanced Hyper Transport settings.

DRAM Timing Configuration

Enter this function for more advanced DRAM clock settings.

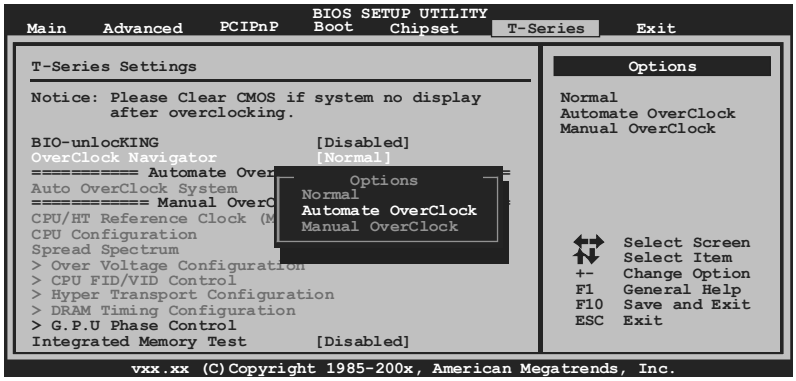
G.P.U Phase Control

Enter this function for more power saving settings.

> ***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.

Automatic Overclock System (A.O.S.)

For beginners in overclock 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.

```
                    BIOS SETUP UTILITY
Main   Advanced   PCIPnP   Boot   Chipset   T-Series   Exit

T-Series Settings                                  Options

Notice: Please Clear CMOS if system no display     V6-Tech Engine
        after overclocking.                        V8-Tech Engine
                                                   V12-Tech Engine
BIO-unlocKING                  [Disabled]
OverClock Navigator            [Automate OverClock]
========== Automate OverClock System ==========
Auto OverClock System          [V6-Tech Engine]
=========== Manual OverClock System ===========
CPU/HT Reference Clock (MHz)   [200]
CPU Configuration              [Auto]
Spread Spectrum                [Disabled]          Select Screen
> Over Voltage Configuration                       Select Item
> CPU FID/VID Control                              +-   Change Option
> Hyper Transport Configuration                    F1   General Help
> DRAM Timing Configuration                        F10  Save and Exit
> G.P.U Phase Control                              ESC  Exit
Integrated Memory Test         [Disabled]

        vxx.xx (C)Copyright 1985-200x, American Megatrends, Inc.
```

V8 Tech Engine

This engine will make a better over-clock performance.

```
                    BIOS SETUP UTILITY
Main   Advanced   PCIPnP   Boot   Chipset   T-Series   Exit

T-Series Settings                                  Options

Notice: Please Clear CMOS if system no display     V6-Tech Engine
        after overclocking.                        V8-Tech Engine
                                                   V12-Tech Engine
BIO-unlocKING                  [Disabled]
OverClock Navigator            [Automate OverClock]
========== Automate OverClock System ==========
Auto OverClock System          [V8-Tech Engine]
=========== Manual OverClock System ===========
CPU/HT Reference Clock (MHz)   [200]
CPU Configuration              [Auto]
Spread Spectrum                [Disabled]          Select Screen
> Over Voltage Configuration                       Select Item
> CPU FID/VID Control                              +-   Change Option
> Hyper Transport Configuration                    F1   General Help
> DRAM Timing Configuration                        F10  Save and Exit
> G.P.U Phase Control                              ESC  Exit
Integrated Memory Test         [Disabled]

        vxx.xx (C)Copyright 1985-200x, American Megatrends, Inc.
```

V12 Tech Engine

This engine will make a best over-clock performance.

```
                    BIOS SETUP UTILITY
Main   Advanced   PCIPnP   Boot   Chipset   T-Series   Exit

T-Series Settings                                  Options

Notice: Please Clear CMOS if system no display     V6-Tech Engine
        after overclocking.                        V8-Tech Engine
                                                   V12-Tech Engine
BIO-unlocKING                  [Disabled]
OverClock Navigator            [Automate OverClock]
========== Automate OverClock System ==========
Auto OverClock System          [V12-Tech Engine]
=========== Manual OverClock System ===========
CPU/HT Reference Clock (MHz)   [200]
CPU Configuration              [Auto]
Spread Spectrum                [Disabled]          Select Screen
> Over Voltage Configuration                       Select Item
> CPU FID/VID Control                              +-   Change Option
> Hyper Transport Configuration                    F1   General Help
> DRAM Timing Configuration                        F10  Save and Exit
> G.P.U Phase Control                              ESC  Exit
Integrated Memory Test         [Disabled]

        vxx.xx (C)Copyright 1985-200x, American Megatrends, Inc.
```

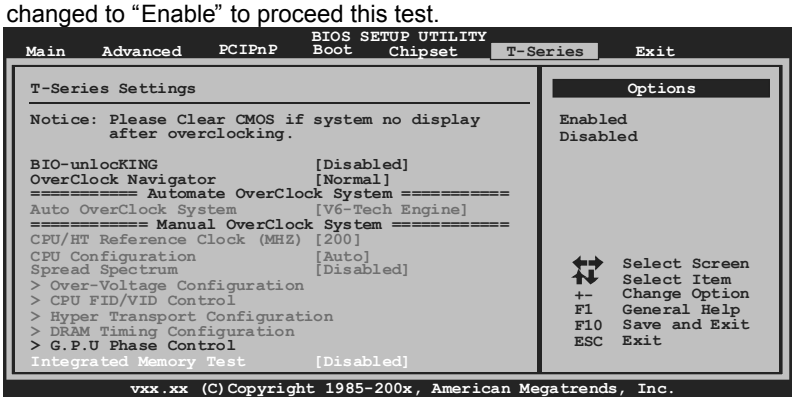
> ***Notices:***
> Not all types of AMD CPU perform above overclock setting ideally; the difference will be based on the selected CPU model.

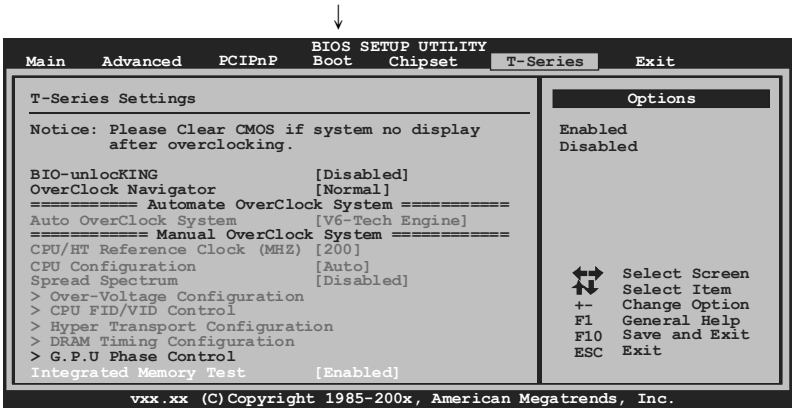
B. Memory Integration Test (M.I.T.)

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.

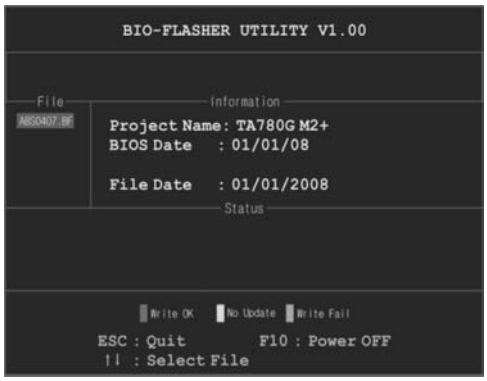
C. BIO-Flasher

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

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

Updating BIOS with BIO-Flasher

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



5. The utility will show the BIOS files and their respective information. Select the proper BIOS file and press **<Enter>** then **<Y>** to perform the BIOS update process.
6. After the update process, the utility will ask you to reboot the system. Press **<Y>** to proceed. BIOS update completes.

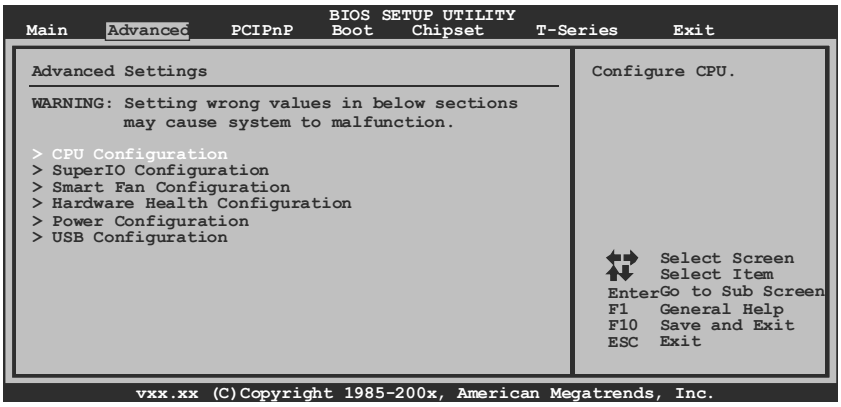
- This utility only allows storage device with FAT32/16 format and single partition.
- Shutting down or resetting the system while updating the BIOS will lead to system boot failure.

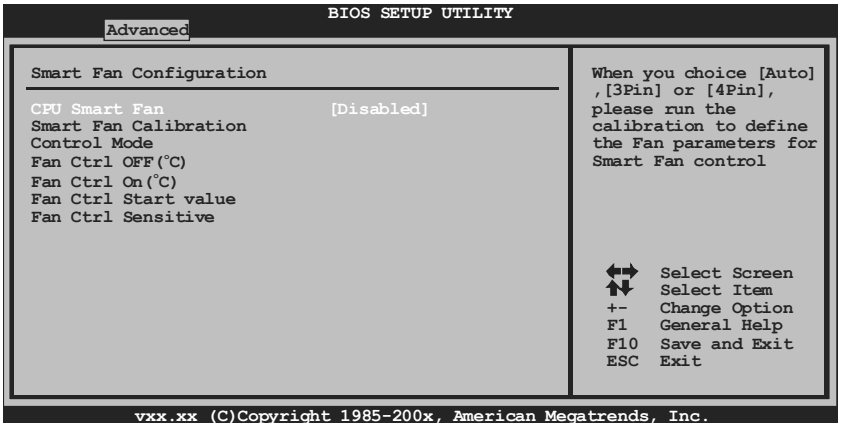
D. Self Recovery System (S.R.S.)

This function can't be seen under 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. Smart Fan Function

Smart Fan Function is under "Smart Fan Configuration" 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.





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.

Control Mode

This item provides several operation modes of the fan.

Fan Ctrl OFF(℃)

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.

Fan Ctrl On(℃)

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.

Fan Ctrl Start Value

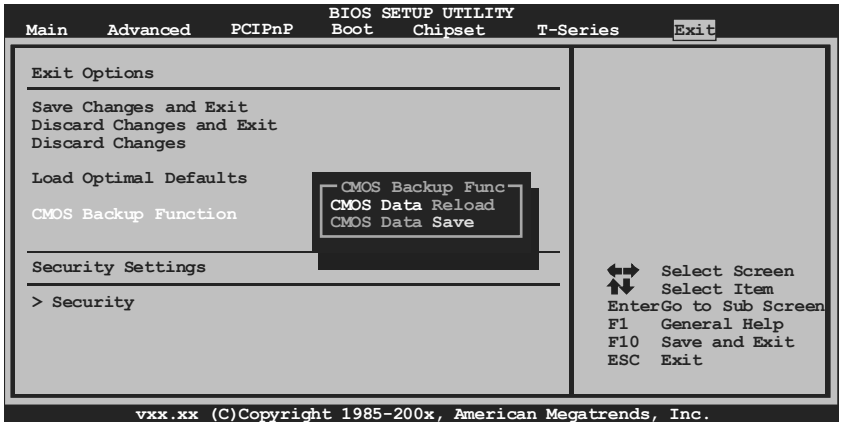
When CPU/System temperature arrives to the set value, the CPU/System fan will work under Smart Fan Function mode. The range is from 0~127, with an interval of 1.

Fan Ctrl Sensitive

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.

F. CMOS Reloading Program

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 10 sets of record addresses in total, and users are able to name the CMOS data according to personal preference.



5.2 T-Series Software

Installing T-Series Software

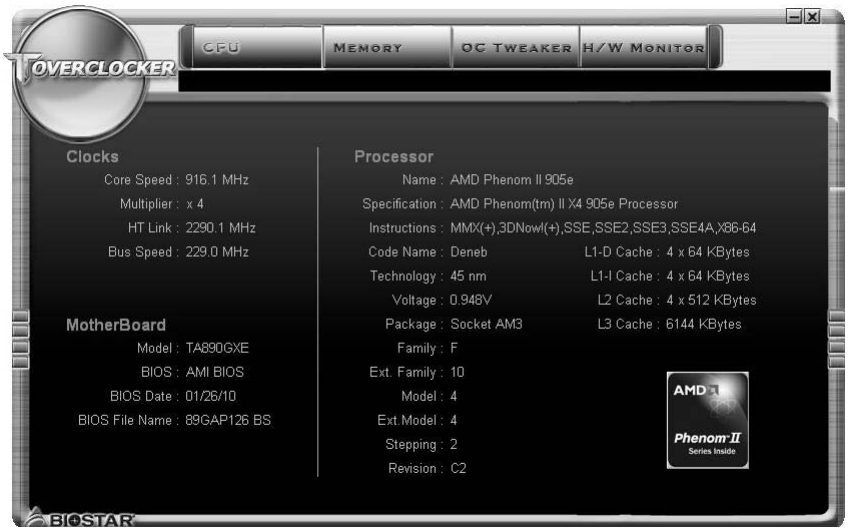
1. Insert the Setup CD to the optical drive. The drivers installation program would appear if the Auto-run function has been enabled.
2. Select **Software Installation**, and then click on the respective software title.
3. Follow the on-screen instructions to complete the installation.

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:

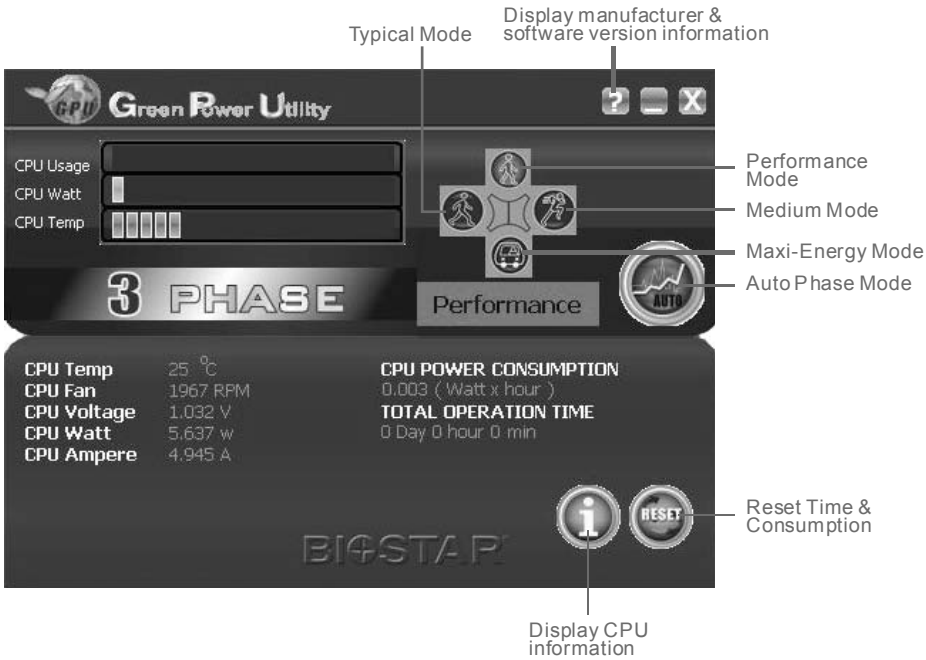
Six Pre-set Modes: V3, V6, V9, V12, V15, AUTO for different overclocking experience.

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 will display information about manufacturer and software version. You can update currnet 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 toal 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.

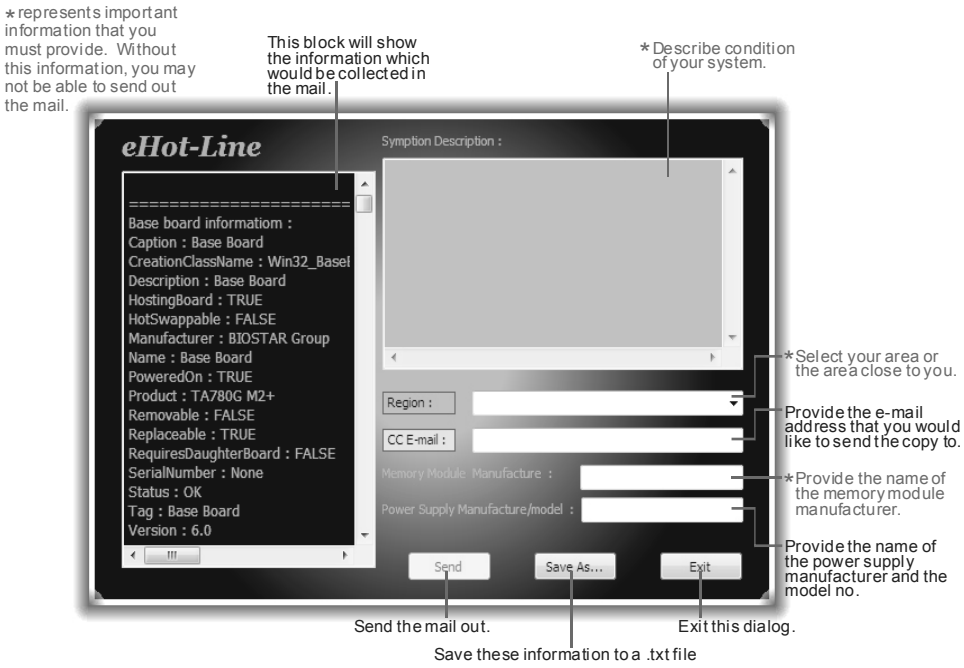
- **Medium Mode**
  This is the standard system power saving mode.

- **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.

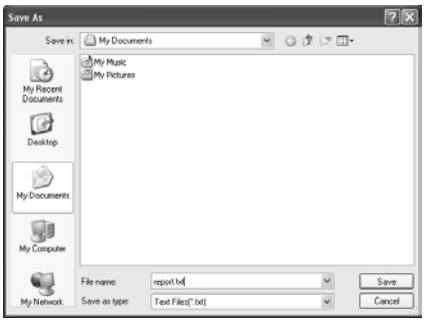
Before you use this utility, please set Outlook Express as your default e-mail client application program.



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

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

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



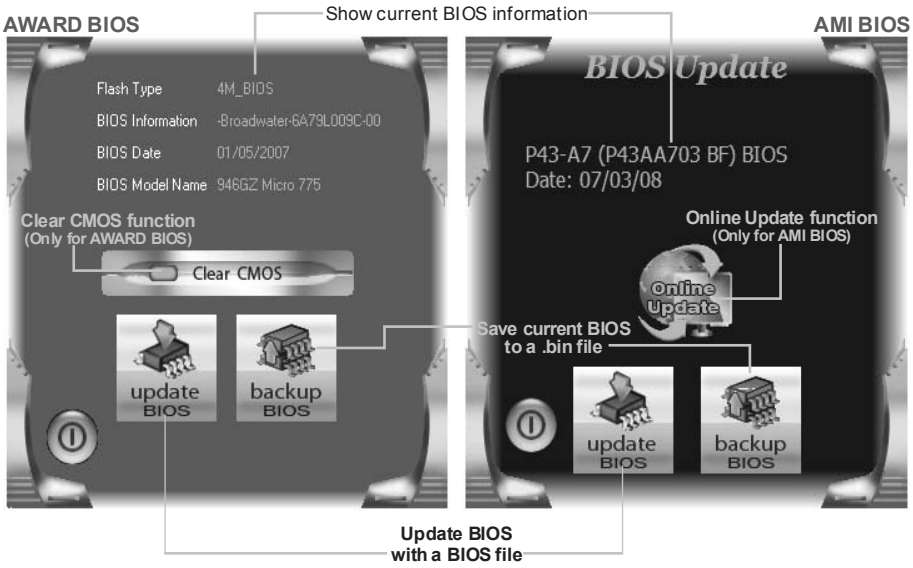
Open the saved .txt file, you will see your system information including motherboard/BIOS/CPU/video/ device/OS information. This information is also concluded in the sent mail.

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

If you are not using Outlook Express as your default e-mail client application, you may need to save the system information to a .txt file and send the file to our tech support with other e-mail application. Go to the following web http://www.biostar.com.tw/app/en-us/about/contact.php for getting our contact information.

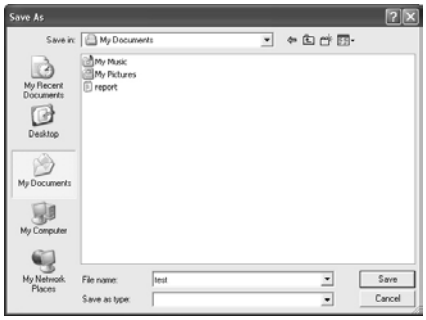
BIOS Update

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



<Backup BIOS>

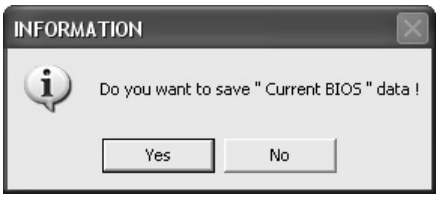
Once click on this button, the saving dialog will show. Choose the position to save file and enter file name. (We recommend that the file name should be English/number and no longer than 7 characters.) Then click **Save**.



<Update BIOS>

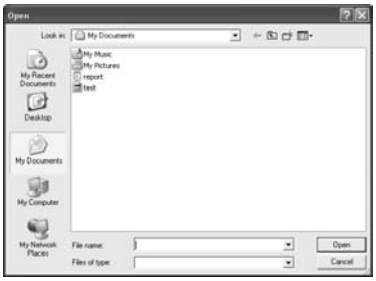
Before doing this, please download the proper BIOS file from the website.

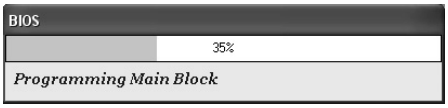
For AWARD BIOS, update BIOS procedure should be run with Clear CMOS function, so please check on Clear CMOS first.



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

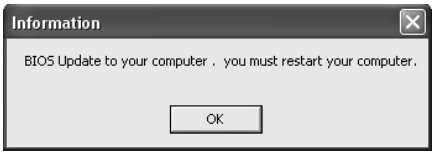
After the BIOS Backup procedure, the open dialog will show for requesting the BIOS file which is going to be updated. Please choose the proper BIOS file for updating, then click on **Open**.





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

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



While the system boots up and the full screen logo shows, press 

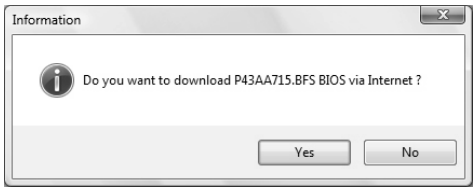
<Delete> key to enter BIOS setup.

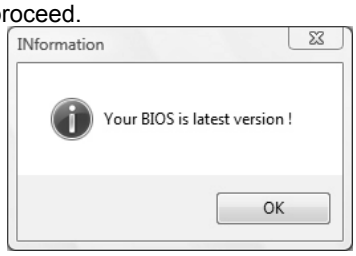
In the BIOS setup, use the **Load Optimized Defaults** function and then **Save and Exit Setup** to exit BIOS setup. BIOS Update is completed.

<Online Update> ***(for AMI BIOS only)***

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

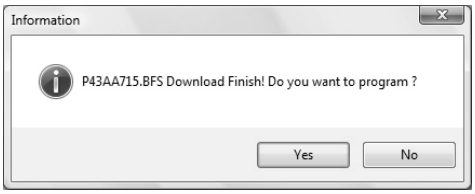
After clicking on the **Onlinr Update** button, the utility will search for the latest BIOS from internet. If there is a new BIOS version, the utility will ask you to download it. Click **Yes** to proceed.



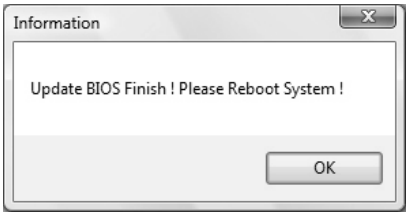


If there is no other newer BIOS version, the utility will also tell you that your BIOS has been the latest version.

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



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



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

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

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

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

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 AMI BIOS BEEP CODE

Boot Block Beep Codes

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

POST BIOS Beep Codes

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

Troubleshooting POST BIOS Beep Codes

Number of Beeps	Troubleshooting Action
1, 3	Reseat the memory, or replace with known good modules.
6, 7	Fatal error indicating a serious problem with the system. Consult your system manufacturer. Before declaring the motherboard beyond all hope, eliminate the possibility of interference by a malfunctioning add-in card. Remove all expansion cards except the video adapter. ● If beep codes are generated when all other expansion cards are absent, consult your system manufacturer's technical support. ● If beep codes are not generated when all other expansion cards are absent, one of the add-in cards is causing the malfunction. Insert the cards back into the system one at a time until the problem happens again. This will reveal the malfunctioning card.
8	If the system video adapter is an add-in card, replace or reseat the video adapter. If the video adapter is an integrated part of the system board, the board may be faulty.

6.4 AMI BIOS POST CODE

Checkpoint	Description
03	Disable NMI, Parity, video for EGA, and DMA controllers. Initialize BIOS, POST, Runtime data area. Also initialize BIOS modules on POST entry and GPNV area. Initialized CMOS as mentioned in the Kernel Variable "wCMOSFlags."
04	Check CMOS diagnostic byte to determine if battery power is OK and CMOS checksum is OK. Verify CMOS checksum manually by reading storage area. If the CMOS checksum is bad, update CMOS with power-on default values and clear passwords. Initialize status register A. Initializes data variables that are based on CMOS setup questions. Initializes both the 8259 compatible PICs in the system
05	Initializes the interrupt controlling hardware (generally PIC) and interrupt vector table.
06	Do R/W test to CH-2 count reg. Initialize CH-0 as system timer. Install the POSTINT1Ch handler. Enable IRQ-0 in PIC for system timer interrupt. Traps INT1Ch vector to "POSTINT1ChHandlerBlock."
07	Fixes CPU POST interface calling pointer.
08	Initializes the CPU. The BAT test is being done on KBC. Program the keyboard controller command byte is being done after Auto detection of KB/MS using AMI KB-5.
C0	Early CPU Init Start -- Disable Cache – Init Local APIC.
C1	Set up boot strap processor Information.
C2	Set up boot strap processor for POST.
C5	Enumerate and set up application processors.
C6	Re-enable cache for boot strap processor.
C7	Early CPU Init Exit.
0A	Initializes the 8042 compatible Key Board Controller.
0B	Detects the presence of PS/2 mouse.
0C	Detects the presence of Keyboard in KBC port.
0E	Testing and initialization of different Input Devices. Also, update the Kernel Variables. Traps the INT09h vector, so that the POST INT09h handler gets control for IRQ1. Uncompress all available language, BIOS logo, and Silent logo modules.
13	Early POST initialization of chipset registers.
20	Relocate System Management Interrupt vector for all CPU in the system.
24	Uncompress and initialize any platform specific BIOS modules. GPNV is initialized at this checkpoint.
2A	Initializes different devices through DIM. See DIM Code Checkpoints section of document for more information.
2C	Initializes different devices. Detects and initializes the video adapter installed in the system that have optional ROMs.
2E	Initializes all the output devices.
31	Allocate memory for ADM module and uncompress it. Give control to ADM module for initialization. Initialize language and font modules for ADM. Activate ADM module.
33	Initializes the silent boot module. Set the window for displaying text information.

Checkpoint	Description
37	Displaying sign-on message, CPU information, setup key message, and any OEM specific information.
38	Initializes different devices through DIM. See DIM Code Checkpoints section of document for more information. USB controllers are initialized at this point.
39	Initializes DMAC-1 & DMAC-2.
3A	Initialize RTC date/time.
3B	Test for total memory installed in the system. Also, Check for DEL or ESC keys to limit memory test. Display total memory in the system.
3C	Mid POST initialization of chipset registers.
40	Detect different devices (Parallel ports, serial ports, and coprocessor in CPU, etc.) successfully installed in the system and update the BDA, EBDA…etc.
52	Updates CMOS memory size from memory found in memory test. Allocates memory for Extended BIOS Data Area from base memory. Programming the memory hole or any kind of implementation that needs an adjustment in system RAM size if needed.
60	Initializes NUM-LOCK status and programs the KBD typematic rate.
75	Initialize Int-13 and prepare for IPL detection.
78	Initializes IPL devices controlled by BIOS and option ROMs.
7C	Generate and write contents of ESCD in NVRam.
84	Log errors encountered during POST.
85	Display errors to the user and gets the user response for error.
87	Execute BIOS setup if needed / requested. Check boot password if installed.
8C	Late POST initialization of chipset registers.
8D	Build ACPI tables (if ACPI is supported).
8E	Program the peripheral parameters. Enable/Disable NMI as selected.
90	Initialization of system management interrupt by invoking all handlers. Please note this checkpoint comes right after checkpoint 20h.
A1	Clean-up work needed before booting to OS.
A2	Takes care of runtime image preparation for different BIOS modules. Fill the free area in F000h segment with 0FFh. Initializes the Microsoft IRQ Routing Table. Prepares the runtime language module. Disables the system configuration display if needed.
A4	Initialize runtime language module. Display boot option popup menu.
A7	Displays the system configuration screen if enabled. Initialize the CPU's before boot, which includes the programming of the MTRR's.
A9	Wait for user input at config display if needed.
AA	Uninstall POST INT1Ch vector and INT09h vector.
AB	Prepare BBS for Int 19 boot. Init MP tables.
AC	End of POST initialization of chipset registers. De-initializes the ADM module.
B1	Save system context for ACPI. Prepare CPU for OS boot including final MTRR values.
00	Passes control to OS Loader (typically INT19h).

6.5 TROUBLESHOOTING

Probable	Solution
1. There is no power in the system. Power LED does not shine; the fan of the power supply does not work 2. Indicator light on keyboard does not shine.	1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
System is inoperative. Keyboard lights are on, power indicator lights are lit, and hard drives are running.	Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.
System does not boot from a hard disk drive, but can be booted from optical drive.	1. Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup. 2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.
System only boots from an optical drive. Hard disks can be read, applications can be used, but system fails to boot from a hard disk.	1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
Screen message shows “Invalid Configuration” or “CMOS Failure.”	Review system’s equipment. Make sure correct information is in setup.
System cannot boot after user installs a second hard drive.	1. Set master/slave jumpers correctly. 2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives.

APPENDIX: SPEC IN OTHER LANGUAGES

GERMAN

	TA870U3+	TA870B
CPU	Sockel AM3 AMD Phenom II/Athlon II/Sempron Prozessoren Die AMD 64-Architektur unterstützt eine 32-Bit- und 64-Bit-Datenverarbeitung Unterstützt Hyper Transport 3.0 und Cool'n'Quiet (Maximales Watt: 140W)	Sockel AM3 AMD Phenom II/Athlon II/Sempron Prozessoren Die AMD 64-Architektur unterstützt eine 32-Bit- und 64-Bit-Datenverarbeitung Unterstützt Hyper Transport 3.0 und Cool'n'Quiet (Maximales Watt: 140W)
FSB	Unterstützt HyperTransport 3.0 mit einer Bandbreite von bis zu 5.2 GT/s	Unterstützt HyperTransport 3.0 mit einer Bandbreite von bis zu 5.2 GT/s
Chipsatz	AMD 870 AMD SB850	AMD 870 AMD SB850
Super E/A	ITE 8728 Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle Umgebungskontrolle, Hardware-Überwachung "Smart Guardian"-Funktion von ITE	ITE 8728 Bietet die häufig verwendeten alten Super E/A-Funktionen. Low Pin Count-Schnittstelle Umgebungskontrolle, Hardware-Überwachung "Smart Guardian"-Funktion von ITE
Arbeitsspeicher	DDR3 DIMM-Steckplätze x 4 Max. 16GB Arbeitsspeicher Jeder DIMM unterstützt 512MB/ 1GB/2GB/ 4GB DDR3. Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 800 / 1066 / 1333 Unterstützt DDR3 1600 (OC) registrierte DIMMs. ECC DIMMs werden nicht unterstützt.	DDR3 DIMM-Steckplätze x 4 Max. 16GB Arbeitsspeicher Jeder DIMM unterstützt 512MB/ 1GB/2GB/ 4GB DDR3. Dual-Kanal DDR3 Speichermodul Unterstützt DDR3 800 / 1066 / 1333 Unterstützt DDR3 1600 (OC) registrierte DIMMs. ECC DIMMs werden nicht unterstützt.
SATA 3	Integrierter Serial ATA-Controller Datentransferrate bis zu 6 Gb/s Konform mit der SATA-Spezifikation Version 3.0.	Integrierter Serial ATA-Controller Datentransferrate bis zu 6 Gb/s Konform mit der SATA-Spezifikation Version 3.0.
LAN	Realtek RTL 8111E 10 / 100 / 1000 Mb/s Auto-Negotiation Halb-/ Vollduplex-Funktion	Realtek RTL 8111E 10 / 100 / 1000 Mb/s Auto-Negotiation Halb-/ Vollduplex-Funktion
HD Audio-Unterstützung	ALC662 5.1-Kanal-Audioausgabe Unterstützt High-Definition Audio	ALC662 5.1-Kanal-Audioausgabe Unterstützt High-Definition Audio
Steckplätze	PCI Express Gen2 x16 Steckplatz x2 PCI Express Gen2 x 1-Steckplatz x2 PCI-Steckplatz x2	PCI Express Gen2 x16 Steckplatz x2 PCI Express Gen2 x 1-Steckplatz x2 PCI-Steckplatz x2

	TA870U3+		TA870B	
Onboard-Anschluss	SATA-Anschluss	x6	SATA-Anschluss	x6
	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
	Stromanschluss (24-polig)	x1	Stromanschluss (24-polig)	x1
	Stromanschluss (4-polig)	x1	Stromanschluss (4-polig)	x1
	Verbraucher-IR Anschluss	x1	Verbraucher-IR Anschluss	x1
	Druckeranschluss Anschluss	x1	Druckeranschluss Anschluss	x1
Rückseiten-E/A	PS/2-Tastatur	x1		
	PS/2-Maus	x1	PS/2-Tastatur	x1
	Serieller Anschluss	x1	PS/2-Maus	x1
	LAN-Anschluss	x1	Serieller Anschluss	x1
	USB 2.0-Anschluss (durch SB850)	x2	LAN-Anschluss	x1
	USB 3.0-Anschlus		USB 2.0-Anschluss	x4
	(durch ASM1042)	x2	Audioanschluss	x3
	Audioanschluss	x3		
Platinengröße	220 mm (B) X 305 mm (L)		220 mm (B) X 305 mm (L)	
Sonderfunktionen	Unterstützt RAID 0 / 1 / 10 / 5		Unterstützt RAID 0 / 1 / 10 / 5	
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

	TA870U3+	TA870B
UC	Socket AM3 Processeurs AMD Phenom II/Athlon II/Sempron L'architecture AMD 64 permet le calcul 32 et 64 bits Prend en charge Hyper Transport 3.0 et Cool'n'Quiet (Watt maximum : 140W)	Socket AM3 Processeurs AMD Phenom II/Athlon II/Sempron L'architecture AMD 64 permet le calcul 32 et 64 bits Prend en charge Hyper Transport 3.0 et Cool'n'Quiet (Watt maximum : 140W)
Bus frontal	Prend en charge Hyper Transport 3.0 jusqu'à une bande passante de 5.2 GT/s	Prend en charge Hyper Transport 3.0 jusqu'à une bande passante de 5.2 GT/s
Chipset	AMD 870 AMD SB850	AMD 870 AMD SB850
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 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 Fonction "Gardien intelligent" de l'ITE
Mémoire principale	Fentes DDR3 DIMM x 4 Capacité mémoire maximale de 16 Go Chaque DIMM prend en charge des DDR3 de 512 Mo et 1Go/2Go/4Go Module de mémoire DDR3 à mode à double voie Prend en charge la DDR3 800 / 1066 / 1333 Prend en charge la DDR3 1600 (OC) Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge	Fentes DDR3 DIMM x 4 Capacité mémoire maximale de 16 Go Chaque DIMM prend en charge des DDR3 de 512 Mo et 1Go/2Go/4Go Module de mémoire DDR3 à mode à double voie Prend en charge la DDR3 800 / 1066 / 1333 Prend en charge la DDR3 1600 (OC) Les DIMM à registres et DIMM avec code correcteurs d'erreurs ne sont pas prises en charge
SATA 3	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 6 Go/s. Conforme à la spécification SATA Version 3.0	Contrôleur Serial ATA intégré Taux de transfert jusqu'à 6 Go/s. Conforme à la spécification SATA Version 3.0
LAN	Realtek RTL 8111E 10 / 100 / 1000 Mb/s négociation automatique Half / Full duplex capability	Realtek RTL 8111E 10 / 100 / 1000 Mb/s négociation automatique Half / Full duplex capability
Prise en charge audio HD	ALC662 Sortie audio à 5.1 voies Prise en charge de l'audio haute définition	ALC662 Sortie audio à 5.1 voies Prise en charge de l'audio haute définition
Fentes	Fente PCI Express Gen2 x16 x2 Fente PCI Express Gen2 x1 x2 Fente PCI x2	Fente PCI Express Gen2 x16 x2 Fente PCI Express Gen2 x1 x2 Fente PCI x2

	TA870U3+	TA870B
Connecteur embarqué	Connecteur SATA x6 Connecteur du panneau avant x1 Connecteur Audio du panneau avant x1 Connecteur de sortie S/PDIF x1 Embase de ventilateur UC x1 Embase de ventilateur système x2 Embase d'effacement CMOS x1 Connecteur USB 2.0 x3 Connecteur d'alimentation (24 broches) x1 Connecteur d'alimentation (4 broches) x1 Connecteur de IR du consommateur x1 Connecteur de Port d'imprimante x1	Connecteur SATA x6 Connecteur du panneau avant x1 Connecteur Audio du panneau avant x1 Connecteur de sortie S/PDIF x1 Embase de ventilateur UC x1 Embase de ventilateur système x2 Embase d'effacement CMOS x1 Connecteur USB 2.0 x3 Connecteur d'alimentation (24 broches) x1 Connecteur d'alimentation (4 broches) x1 Connecteur de IR du consommateur x1 Connecteur de Port d'imprimante x1
E/S du panneau arrière	Clavier PS/2 x1 Souris PS/2 x1 Port série x1 Port LAN x1 Port USB 2.0 (par SB850) x2 Port USB 3.0 (par ASM1042) x2 Fiche audio x3	Clavier PS/2 x1 Souris PS/2 x1 Port série x1 Port LAN x1 Port USB 2.0 x4 Fiche audio x3
Dimensions de la carte	220 mm (l) X 305 mm (H)	220 mm (l) X 305 mm (H)
Fonctionnalités spéciales	Prise en charge RAID 0 / 1 / 10 / 5	Prise en charge RAID 0 / 1 / 10 / 5
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

	TA870U3+	TA870B
CPU	Socket AM3 Processori AMD Phenom II/Athlon II/Sempron L'architettura AMD 64 abilita la computazione 32 e 64 bit Supporto di Hyper Transport 3.0 e Cool'n'Quiet (Watt massimo: 140W)	Socket AM3 Processori AMD Phenom II/Athlon II/Sempron L'architettura AMD 64 abilita la computazione 32 e 64 bit Supporto di Hyper Transport 3.0 e Cool'n'Quiet (Watt massimo: 140W)
FSB	Supporto di HyperTransport 3.0 fino a 5.2 GT/s di larghezza di banda	Supporto di HyperTransport 3.0 fino a 5.2 GT/s di larghezza di banda
Chipset	AMD 870 AMD SB850	AMD 870 AMD SB850
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 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 Funzione "Smart Guardian" di ITE
Memoria principale	Alloggi DIMM DDR3 x 4 Capacità massima della memoria 16GB Ciascun DIMM supporta DDR3 512MB e 1GB/2GB/4GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 800 / 1066 / 1333 Supporto di DDR3 1600 (OC) DIMM registrati e DIMM ECC non sono supportati	Alloggi DIMM DDR3 x 4 Capacità massima della memoria 16GB Ciascun DIMM supporta DDR3 512MB e 1GB/2GB/4GB Modulo di memoria DDR3 a canale doppio Supporto di DDR3 800 / 1066 / 1333 Supporto di DDR3 1600 (OC) DIMM registrati e DIMM ECC non sono supportati
SATA 3	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 6 Gb/s. Compatibile specifiche SATA Versione 3.0.	Controller Serial ATA integrato Velocità di trasferimento dei dati fino a 6 Gb/s. Compatibile specifiche SATA Versione 3.0.
LAN	Realtek RTL 8111E Negoziazione automatica 10 / 100 / 1000 Mb/s Capacità Half / Full Duplex	Realtek RTL 8111E Negoziazione automatica 10 / 100 / 1000 Mb/s Capacità Half / Full Duplex
Supporto audio HD	ALC662 Uscita audio 5.1 canali Supporto audio High-Definition (HD)	ALC662 Uscita audio 5.1 canali Supporto audio High-Definition (HD)
Alloggi	Alloggio PCI Express Gen2 x16 x2 Alloggio PCI Express Gen2 x1 x2 Alloggio PCI x2	Alloggio PCI Express Gen2 x16 x2 Alloggio PCI Express Gen2 x1 x2 Alloggio PCI x2

	TA870U3+		TA870B	
Connettori su scheda	Connettore SATA	x6	Connettore SATA	x6
	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 alimentazione (24 pin)	x1	Connettore alimentazione (24 pin)	x1
	Connettore alimentazione (4 pin)	x1	Connettore alimentazione (4 pin)	x1
	Connettore IR del consumatore	x1	Connettore IR del consumatore	x1
	Connettore Porta stampante	x1	Connettore Porta stampante	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 2.0 (da SB850)	x2	Porta USB 2.0	x4
	Porta USB 3.0 (da ASM1042)	x2	Connettore audio	x3
	Connettore audio	x3		
Dimensioni scheda	220 mm (larghezza) x 305 mm (altezza)		220 mm (larghezza) x 305 mm (altezza)	
Caratteristiche speciali	Supporto RAID 0 / 1 / 10 / 5		Supporto RAID 0 / 1 / 10 / 5	
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

	TA870U3+	TA870B
CPU	Conector AM3 Procesadores AMD Phenom II/Athlon II/Sempron La arquitectura AMD 64 permite el procesado de 32 y 64 bits Soporta las tecnologías Hyper Transport 3.0 y Cool'n'Quiet (Vatio máximo: 140W)	Conector AM3 Procesadores AMD Phenom II/Athlon II/Sempron La arquitectura AMD 64 permite el procesado de 32 y 64 bits Soporta las tecnologías Hyper Transport 3.0 y Cool'n'Quiet (Vatio máximo: 140W)
FSB	Admite HyperTransport 3.0 con un ancho de banda de hasta 5.2 GT/s	Admite HyperTransport 3.0 con un ancho de banda de hasta 5.2 GT/s
Conjunto de chips	AMD 870 AMD SB850	AMD 870 AMD SB850
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 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 Función "Guardia inteligente" de ITE
Memoria principal	Ranuras DIMM DDR3 x 4 Capacidad máxima de memoria de 16GB Cada DIMM admite DDR de 512MB y 1GB/2GB/4GB Módulo de memoria DDR3 de canal Doble Admite DDR3 de 800 / 1066 / 1333 Admite DDR3 de 1600 (OC) No admite DIMM registrados o DIMM compatibles con ECC	Ranuras DIMM DDR3 x 4 Capacidad máxima de memoria de 16GB Cada DIMM admite DDR de 512MB y 1GB/2GB/4GB Módulo de memoria DDR3 de canal Doble Admite DDR3 de 800 / 1066 / 1333 Admite DDR3 de 1600 (OC) No admite DIMM registrados o DIMM compatibles con ECC
SATA 3	Controlador ATA Serie Integrado Tasas de transferencia de hasta 6 Gb/s. Compatible con la versión SATA 3.0.	Controlador ATA Serie Integrado Tasas de transferencia de hasta 6 Gb/s. Compatible con la versión SATA 3.0.
Red Local	Realtek RTL 8111E Negociación de 10 / 100 / 1000 Mb/s Funciones Half / Full dúplex	Realtek RTL 8111E Negociación de 10 / 100 / 1000 Mb/s Funciones Half / Full dúplex
Soporte de sonido HD	ALC662 Salida de sonido de 5.1 canales Soporte de sonido Alta Definición	ALC662 Salida de sonido de 5.1 canales Soporte de sonido Alta Definición
Ranuras	Ranura PCI Express Gen2 x16 X2 Ranura PCI Express Gen2 x 1 X2	Ranura PCI Express Gen2 x16 X2 Ranura PCI Express Gen2 x 1 X2
	Ranura PCI X2	Ranura PCI X2

	TA870U3+		TA870B	
Conectores en placa	Conector SATA	X6	Conector SATA	X6
	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 alimentación (24 patillas)	X1	Conector de alimentación (24 patillas)	X1
	Conector de alimentación (4 patillas)	X1	Conector de alimentación (4 patillas)	X1
	Conector de IR del consumidor	X1	Conector de IR del consumidor	X1
	Conector Puerto de impresora	X1	Conector Puerto de impresora	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 2.0 (por SB850)	X2	Puerto USB 2.0	X4
	Puerto USB 3.0 (por ASM1042)	X2	Conector de sonido	X3
	Conector de sonido	X3		
Tamaño de la placa	220 mm. (A) X 305 Mm. (H)		220 mm. (A) X 305 Mm. (H)	
Funciones especiales	Admite RAID 0 / 1 / 10 / 5		Admite RAID 0 / 1 / 10 / 5	
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

	TA870U3+	TA870B
CPU	Socket AM3 Processadores AMD Phenom II/Athlon II/Sempron A arquitectura AMD 64 permite uma computação de 32 e 64 bits Suporta as tecnologias Hyper Transport 3.0 e Cool'n'Quiet (Watt máximo: 140W)	Socket AM3 Processadores AMD Phenom II/Athlon II/Sempron A arquitectura AMD 64 permite uma computação de 32 e 64 bits Suporta as tecnologias Hyper Transport 3.0 e Cool'n'Quiet (Watt máximo: 140W)
FSB	Suporta a tecnologia HyperTransport 3.0 com uma largura de banda até 5.2 GT/s	Suporta a tecnologia HyperTransport 3.0 com uma largura de banda até 5.2 GT/s
Chipset	AMD 870 AMD SB850	AMD 870 AMD SB850
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 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 Função "Smart Guardian" da ITE
Memória principal	Ranhuras DIMM DDR3 x 4 Capacidade máxima de memória: 16 GB Cada módulo DIMM suporta uma memória DDR3 de 512 MB & 1 GB/2 GB/4 GB Módulo de memória DDR3 de canal duplo Suporta módulos DDR3 800 / 1066 / 1333 Suporta módulos DDR3 1600 (OC) Os módulos DIMM registados e os DIMM ECC não são suportados	Ranhuras DIMM DDR3 x 4 Capacidade máxima de memória: 16 GB Cada módulo DIMM suporta uma memória DDR3 de 512 MB & 1 GB/2 GB/4 GB Módulo de memória DDR3 de canal duplo Suporta módulos DDR3 800 / 1066 / 1333 Suporta módulos DDR3 1600 (OC) Os módulos DIMM registados e os DIMM ECC não são suportados
SATA 3	Controlador Serial ATA integrado Velocidades de transmissão de dados até 6 Gb/s. Compatibilidade com a especificação SATA versão 3.0.	Controlador Serial ATA integrado Velocidades de transmissão de dados até 6 Gb/s. Compatibilidade com a especificação SATA versão 3.0.
LAN	Realtek RTL 8111E Auto negociação de 10 / 100 / 1000 Mb/s Capacidade semi/full-duplex	Realtek RTL 8111E Auto negociação de 10 / 100 / 1000 Mb/s Capacidade semi/full-duplex
Suporte para áudio de alta definição	ALC662 Saída de áudio de 5.1 canais Suporta a especificação High-Definition Audio	ALC662 Saída de áudio de 5.1 canais Suporta a especificação High-Definition Audio
Ranhuras	Ranhura PCI Express Gen2 x16 x2 Ranhura PCI Express Gen2 x 1 x2 Ranhura PCI x2	Ranhura PCI Express Gen2 x16 x2 Ranhura PCI Express Gen2 x 1 x2 Ranhura PCI x2

	TA870U3+		TA870B	
Conectores na placa	Conector SATA	x6	Conector SATA	x6
	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 alimentação (24 pinos)	x1	Conector de alimentação (24 pinos)	x1
	Conector de alimentação (4 pinos)	x1	Conector de alimentação (4 pinos)	x1
	Conector de IR do consumidor	x1	Conector de IR do consumidor	x1
	Conector da para impressora	x1	Conector da para impressora	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 2.0 (por SB850)	x2	Porta USB 2.0	x4
	Porta USB 3.0 (por ASM1042)	x2	Tomada de áudio	x3
	Tomada de áudio	x3		
Tamanho da placa	220 mm (L) X 305 mm (A)		220 mm (L) X 305 mm (A)	
Características especiais	Suporta as funções RAID 0 / 1 / 10 / 5		Suporta as funções RAID 0 / 1 / 10 / 5	
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

	TA870U3+	TA870B
Procesor	Socket AM3 AMD Phenom II/Athlon II/Sempron Procesory Architektura AMD 64 umożliwia przetwarzanie 32 i 64 bitowe Obsługa Hyper Transport 3.0 oraz Cool'n'Quiet (Maksymalny Watt: 140W)	Socket AM3 AMD Phenom II/Athlon II/Sempron Procesory Architektura AMD 64 umożliwia przetwarzanie 32 i 64 bitowe Obsługa Hyper Transport 3.0 oraz Cool'n'Quiet (Maksymalny Watt: 140W)
FSB	Obsługa HyperTransport 3.0 o szerokości pasma do 5.2 GT/s	Obsługa HyperTransport 3.0 o szerokości pasma do 5.2 GT/s
Chipset	AMD 870 AMD SB850	AMD 870 AMD SB850
Pamięć główna	Gniazda DDR3 DIMM x 4 Maks. wielkość pamięci 16GB Każde gniazdo DIMM obsługuje moduły 512MB oraz 1GB/2GB/4GB DDR3 Moduł pamięci DDR3 z trybem podwójnego kanału Obsługa DDR3 800 / 1066 / 1333 Obsługa DDR3 1600 (OC) Brak obsługi Registered DIMM oraz ECC DIMM	Gniazda DDR3 DIMM x 4 Maks. wielkość pamięci 16GB Każde gniazdo DIMM obsługuje moduły 512MB oraz 1GB/2GB/4GB DDR3 Moduł pamięci DDR3 z trybem podwójnego kanału Obsługa DDR3 800 / 1066 / 1333 Obsługa DDR3 1600 (OC) 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 Funkcja ITE "Smart Guardian"	ITE 8728 Zapewnia najbardziej powszechne funkcje Super I/O. Interfejs Low Pin Count Funkcje kontroli warunków pracy, Monitor H/W Funkcja ITE "Smart Guardian"
SATA 3	Zintegrowany kontroler Serial ATA Transfer danych do 6 Gb/s. Zgodność ze specyfikacją SATA w wersji 3.0.	Zintegrowany kontroler Serial ATA Transfer danych do 6 Gb/s. Zgodność ze specyfikacją SATA w wersji 3.0.
LAN	Realtek RTL 8111E 110 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości Działanie w trybie połowicznego / pełnego dupleksu	Realtek RTL 8111E 110 / 100 / 1000 Mb/s z automatyczną negocjacją szybkości Działanie w trybie połowicznego / pełnego dupleksu
Obsługa audio HD	ALC662 5.1 kanałowe wyjście audio Obsługa High-Definition Audio	ALC662 5.1 kanałowe wyjście audio Obsługa High-Definition Audio
Gniazda	Gniazdo PCI Express Gen2 x16 x2 Gniazdo PCI Express Gen2 x 1 x2 Gniazdo PCI x2	Gniazdo PCI Express Gen2 x16 x2 Gniazdo PCI Express Gen2 x 1 x2 Gniazdo PCI x2

	TA870U3+		TA870B	
Złącza wbudowane	Złącze SATA	x6	Złącze SATA	x6
	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 zasilania (24 pinowe)	x1	Złącze zasilania (24 pinowe)	x1
	Złącze zasilania (4 pinowe)	x1	Złącze zasilania (4 pinowe)	x1
	Złącze Konsument IR	x1	Złącze Konsument IR	x1
	Złącze Port drukarki	x1	Złącze Port drukarki	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 2.0 (przez SB850)	x2	Port USB 2.0	x4
	Port USB 3.0 (przez ASM1042)	x2	Gniazdo audio	x3
	Gniazdo audio	x3		
Wymiary płyty	220 mm (S) X 305 mm (W)		220 mm (S) X 305 mm (W)	
Funkcje specjalne	Obsługa RAID 0 / 1 / 10 / 5		Obsługa RAID 0 / 1 / 10 / 5	
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

	TA870U3+	TA870B
CPU (центральный процессор)	Гнездо AM3 Процессоры AMD Phenom II/Athlon II/Sempron Архитектура AMD 64 разрешать обработка данных на 32 и 64 бит Поддержка Hyper Transport 3.0 и Cool'n'Quiet (Максимальный ватт: 140W)	Гнездо AM3 Процессоры AMD Phenom II/Athlon II/Sempron Архитектура AMD 64 разрешать обработка данных на 32 и 64 бит Поддержка Hyper Transport 3.0 и Cool'n'Quiet (Максимальный ватт: 140W)
FSB	Поддержка HyperTransport 3.0 с пропускной способностью до 5.2 GT/s	Поддержка HyperTransport 3.0 с пропускной способностью до 5.2 GT/s
Набор микросхем	AMD 870 AMD SB850	AMD 870 AMD SB850
Основная память	Слоты DDR3 DIMM x 4 Максимальная ёмкость памяти 16 ГБ Каждый модуль DIMM поддерживает 512МБ & 1ГБ/2ГБ/4ГБ DDR3 Модуль памяти с двухканальным режимом DDR3 Поддержка DDR3 800 / 1066 / 1333 Поддержка DDR3 1600 (OC) Не поддерживает зарегистрированные модули DIMM and ECC DIMM	Слоты DDR3 DIMM x 4 Максимальная ёмкость памяти 16 ГБ Каждый модуль DIMM поддерживает 512МБ & 1ГБ/2ГБ/4ГБ DDR3 Модуль памяти с двухканальным режимом DDR3 Поддержка DDR3 800 / 1066 / 1333 Поддержка DDR3 1600 (OC) 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 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 Функция ITE "Smart Guardian" (Интеллектуальная защита)
SATA 3	Встроенное последовательное устройство управления ATA скорость передачи данных до 6 гигабит/с. Соответствие спецификации SATA версия 3.0.	Встроенное последовательное устройство управления ATA скорость передачи данных до 6 гигабит/с. Соответствие спецификации SATA версия 3.0.
Локальная сеть	Realtek RTL 8111E Автоматическое согласование 10 / 100 / 1000 Мб/с Частичная / полная дуплексная способность	Realtek RTL 8111E Автоматическое согласование 10 / 100 / 1000 Мб/с Частичная / полная дуплексная способность
Звуковая поддержка жесткого диска	ALC662 Звуковая поддержка High-Definition 5.1канальный звуковой выход	ALC662 Звуковая поддержка High-Definition 5.1канальный звуковой выход
Слоты	Слот PCI Express Gen2 x16 x2 Слот PCI Express Gen2 x 1 x2 Слот PCI x2	Слот PCI Express Gen2 x16 x2 Слот PCI Express Gen2 x 1 x2 Слот PCI x2

	TA870U3+		TA870B	
Встроенный разъём	Разъём SATA	x6	Разъём SATA	x6
	Разъём на лицевой панели	x1	Разъём на лицевой панели	x1
	Входной звуковой разъём	x1	Входной звуковой разъём	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
	Открытое контактирующее приспособление CMOS	x1	Открытое контактирующее приспособление CMOS	x1
	USB 2.0-разъём	x3	USB 2.0-разъём	x3
	Разъем питания (24 вывод)	x1	Разъем питания (24 вывод)	x1
	Разъем питания (4 вывод)	x1	Разъем питания (4 вывод)	x1
	Разъём едока ИКЫЙ	x1	Разъём едока ИКЫЙ	x1
	Разъём Порт подключения принтера	x1	Разъём Порт подключения принтера	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 2.0-порт (по SB850)	x2	USB 2.0-порт	x4
	USB 3.0-порт (по ASM1042)	x2	Гнездо для подключения наушников	x3
	Гнездо для подключения наушников	x3		
Размер панели	220 мм (Ш) X 305 мм (В)		220 мм (Ш) X 305 мм (В)	
Специальные технические характеристики	Поддержка RAID 0 / 1 / 10 / 5		Поддержка RAID 0 / 1 / 10 / 5	
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

	TA870U3+	TA870B
وحدة المعالجة المركزية	AM3مقبس AMD Phenom II/Athlon II/Sempronمعالجات إجراء العمليات الحسوبية بسرعة 32 و 64 بتAMD 64تمكن تقنية Cool'n'Quiet و Hyper Transport 3.0تدعم تقنية (و140 :قصـوى واط)	AM3 مقبس Aمقبس AMD Phenom II/Athlon II/Sempronمعالجات إجراء العمليات الحسوبية بسرعة 32 و 64 بتAMD 64تمكن تقنية Cool'n'Quiet و Hyper Transport 3.0تدعم تقنية (و140 :قصـوى واط)
الناقل الأمامي الجانبي	5.2 GT/s بتردد يصل إلىHyperTransport 3.0تدعم تقنية	5.2 GT/s بتردد يصل إلىHyperTransport 3.0تدعم تقنية
مجموعة الشرائح	AMD 870 AMD SB850	AMD 870 AMD SB850
Super I/O	ITE 8728 الأكثر استخداماً. Super I/Oتوفر وظيفة Low Pin Count Interfaceتدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة ITE من "Smart Guardian"وظيفة	ITE 8728 الأكثر استخداماً. Super I/Oتوفر وظيفة Low Pin Count Interfaceتدعم تقنية وسائل التحكم في البيئة: مراقب لمعرفة حالة الأجهزة ITE من "Smart Guardian"وظيفة
الذاكرة الرئيسية	قتحة DDR3 DIMM عدد4 سعة ذاكرة قصوى 16 جيجا بايت ميجا بايت 512سعة DDR3 تدعم ذاكرة من نوع DIMMتدعم كل فتحة و1/و2/و4 جيجا بايت مزدوجة القاةDDR3وحدة ذاكرة سعت 800 / 1066 / 1333 ميجا بايتDDR3تدعم الذاكرة من نوع سعت 1600 (OC) ميجا بايتDDR3تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMMلا تدعم رقائق الذاكرة	قتحة DDR3 DIMM عدد4 سعة ذاكرة قصوى 16 جيجا بايت ميجا بايت 512سعة DDR3 تدعم ذاكرة من نوع DIMMتدعم كل فتحة و1/و2/و4 جيجا بايت مزدوجة القاةDDR3وحدة ذاكرة سعت 800 / 1066 / 1333 ميجا بايتDDR3تدعم الذاكرة من نوع سعت 1600 (OC) ميجا بايتDDR3تدعم الذاكرة من نوع ECC وتلك التي لا تتوافق مع DIMMلا تدعم رقائق الذاكرة
SATA 3	متكاملSerial ATAمتحكم جيجابت/ثانية.6نقل البيانات بسرعات تصل إلى 3.0. الإصدار SATAمطابقة لمواصفات	متكاملSerial ATAمتحكم جيجابت/ثانية.6نقل البيانات بسرعات تصل إلى 3.0. الإصدار SATAمطابقة لمواصفات
شبكة داخلية	Realtek RTL 8111E تفاوض تلقائي 100/10 ميجا بايت / ثانية و1جيجا بت/ثانية إمكانية النقل المزدوج الكامل/النصفي	Realtek RTL 8111E تفاوض تلقائي 100/10 ميجا بايت / ثانية و1جيجا بت/ثانية إمكانية النقل المزدوج الكامل/النصفي
دعم الصوت عالي التعريف	ALC662 قنوات لخرج الصوت5.1 تدعم تقنية الصوت عالي التعريف من	ALC662 قنوات لخرج الصوت5.1 تدعم تقنية الصوت عالي التعريف من
الفتحات	قتحة PCI Express Gen2 x16 عدد 2 قتحة PCI Express Gen2 x 1 عدد 2 قتحة PCI عدد2	قتحة PCI Express Gen2 x16 عدد 2 قتحة PCI Express Gen2 x 1 عدد 2 قتحة PCI عدد2

	TA870U3+		TA870B	
المنافذ على سطح اللوحة	منفذ SATA	عدد6	منفذ SATA	عدد6
	منفذ اللوحة الأمامية	عدد 1	منفذ اللوحة الأمامية	عدد 1
	منفذ الصوت الأمامي	عدد 1	منفذ الصوت الأمامي	عدد 1
	منفذ خرج S/PDIF	عدد 1	منفذ خرج S/PDIF	عدد 1
	وصلة مروحة وحدة المعالجة المركزية	عدد 1	وصلة مروحة وحدة المعالجة المركزية	عدد 1
	وصلة مروحة النظام	عدد 2	وصلة مروحة النظام	عدد 2
	وصلة مسح CMOS	عدد 1	وصلة مسح CMOS	عدد 1
	منفذ USB 2.0	عدد 3	منفذ USB 2.0	عدد 3
	منفذ توصيل الطاقة (24دبوس)	عدد 1	منفذ توصيل الطاقة (24دبوس)	عدد 1
	منفذ توصيل الطاقة (4دبوس)	عدد 1	منفذ توصيل الطاقة (4دبوس)	عدد 1
	منفذ الأحمر تحت مستهلكة	عدد 1	منفذ الأحمر تحت مستهلكة	عدد 1
	منفذ طابعة	عدد 1	منفذ طابعة	عدد 1
منافذ دخل/خرج اللوحة الخلفية	لوحة مفاتيح PS/2	عدد 1	لوحة مفاتيح PS/2	عدد 1
	ماوس PS/2	عدد 1	ماوس PS/2	عدد 1
	منفذ تسلسلي	عدد 1	منفذ تسلسلي	عدد 1
	منفذ شبكة اتصال محلية	عدد 1	منفذ شبكة اتصال محلية	عدد 1
	منافذ USB2.0 (قبل من SB850)	عدد 2	منافذ 2.0USB	عدد 4
	منافذ USB3.0 (قبل من ASM1042)	عدد 2	مقبس صوت	عدد 3
	مقبس صوت	عدد 3		
حجم اللوحة	220 مم (عرض) X 305 مم (ارتفاع)		220 مم (عرض) X 305 مم (ارتفاع)	
مزايا خاصة	RAID 0 / 1 / 10 / 5 تدعم تقنية		RAID 0 / 1 / 10 / 5 تدعم تقنية	
دعم أنظمة التشغيل	Windows XP / Vista / 7 بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو Biostar تحتفظ بدون إخطار.		Windows XP / Vista / 7 بحقها في إضافة أو إزالة الدعم لأي نظام تشغيل بإخطار أو Biostar تحتفظ بدون إخطار.	

JAPANESE

	TA870U3+	TA870B
CPU	Socket AM3 AMD Phenom II/Athlon II/Sempron 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3.0とクールアンドクワイアットをサポートします (最高のワット: 140W)	Socket AM3 AMD Phenom II/Athlon II/Sempron 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3.0とクールアンドクワイアットをサポートします (最高のワット: 140W)
FSB	5.2 GT/sのバンド幅までハイパートランスポート3.0をサポートします	5.2 GT/sのバンド幅までハイパートランスポート3.0をサポートします
チップセット	AMD 870 AMD SB850	AMD 870 AMD SB850
メインメモリ	DDR3 DIMMスロット x 4 最大メモリ容量16GB 各DIMMは 512MB & 1GB/2GB/4GB DDR3をサポート デュアル チャンネルモードDDR3メモリモジュール DDR3 800 / 1066 / 1333 をサポート DDR3 1600 (OC) 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 最大メモリ容量16GB 各DIMMは 512MB & 1GB/2GB/4GB DDR3をサポート デュアル チャンネルモードDDR3メモリモジュール DDR3 800 / 1066 / 1333 をサポート DDR3 1600 (OC) をサポート 登録済みDIMMとECC DIMMはサポートされません
Super I/O	ITE 8728 もっとも一般に使用されるレガシーSuper I/O機能を採用しています。 低ピンカウントインターフェイス 環境コントロールイニシアチブ、 H/Wモニター ITEの「スマートガーディアン」機能	ITE 8728 もっとも一般に使用されるレガシーSuper I/O機能を採用しています。 低ピンカウントインターフェイス 環境コントロールイニシアチブ、 H/Wモニター ITEの「スマートガーディアン」機能
SATA 3	統合シリアルATAコントローラ 最高6Gb/秒のデータ転送速度 SATAバージョン3.0仕様に準拠。	統合シリアルATAコントローラ 最高6Gb/秒のデータ転送速度 SATAバージョン3.0仕様に準拠。
LAN	Realtek RTL 8111E 10 / 100 / 1000 Mb/秒のオートネゴシエーション 半/全二重機能	Realtek RTL 8111E 10 / 100 / 1000 Mb/秒のオートネゴシエーション 半/全二重機能
HDオーディオのサポート	ALC662 5.1チャンネルオーディオアウト ハイデフィニションオーディオのサポート	ALC662 5.1チャンネルオーディオアウト ハイデフィニションオーディオのサポート
スロット	PCI Express Gen2 x16スロット x2 PCI Express Gen2 x1スロット x2 PCIスロット x2	PCI Express Gen2 x16スロット x2 PCI Express Gen2 x1スロット x2 PCIスロット x2

	TA870U3+		TA870B	
オンボードコネクタ	SATAコネクタ	x6	SATAコネクタ	x6
	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
	電源コネクタ(24ピン)	x1	電源コネクタ(24ピン)	x1
	電源コネクタ(4ピン)	x1	電源コネクタ(4ピン)	x1
	消費者IRコネクタ	x1	消費者IRコネクタ	x1
	プリンタポートコネクタ	x1	プリンタポートコネクタ	x1
背面パネルI/O	PS/2キーボード	x1	PS/2キーボード	x1
	PS/2マウス	x1	PS/2マウス	x1
	シリアルポート	x1	シリアルポート	x1
	LANポート	x1	LANポート	x1
	USB 2.0ポート(で SB850)	x2	USB 2.0ポート	x4
	USB 3.0ポート (で ASM1042)	x2	オーディオジャック	x3
	オーディオジャック	x3		
ボードサイズ	220 mm (幅) X 305 mm (高さ)		220 mm (幅) X 305 mm (高さ)	
特殊機能	RAID 0 / 1 / 10 / 5 のサポート		RAID 0 / 1 / 10 / 5 のサポート	
OSサポート	Windows XP / Vista / 7 Biostarは事前のサポートなしにOSサポートを追加または削除する権利を留保します。		Windows XP / Vista / 7 Biostarは事前のサポートなしにOSサポートを追加または削除する権利を留保します。	

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