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275 del 30/10/2002

Si dichiara che questo prodotto è
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soddisfa i requisiti essenziali richiesti
dalle direttive

2004/108/CE, 2006/95/CE e
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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
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whenever these laws may be applied

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CHAPTER 1: INTRODUCTION

1.1 Before You Start

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

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

1.2 Package Checklist

- ☒ Serial ATA Cable x2
- ☒ Rear I/O Panel for ATX Case x1
- ☒ Installation Guide x1
- ☒ Fully Setup Driver DVD x1

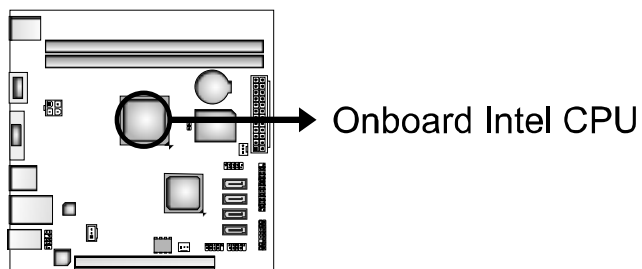
<p>Note: The package contents may be different due to the sales region or models in which it was sold. For more information about the standard package in your region, please contact your dealer or sales representative.</p>

1.3 Motherboard Specifications

Specifications	
CPU Support	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Chipset	INTEL NM70
Memory	Supports Dual Channel DDR3 1066/ 1333 (NM70I-847 & NM70I-807) Supports Dual Channel DDR3 1333/ 1600 (NM70I-1007U & NM70I-1037U) 2 x DDR3 DIMM Memory Slot, Max. Supports up to 16 GB Memory Each DIMM supports non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 module * Please refer to www.biostar.com.tw for Memory support list.
Storage	1x SATA 6Gb/s Connector, 3x SATA 3Gb/s Connector, Supports Native IDE, AHCI Mode
LAN	Realtek RTL 8111F, 10/ 100/ 1000 Mb/s auto negotiation, Half / Full duplex capability
Audio Codec	ALC662, 5.1 Channels, High Definition Audio
USB	8x USB 2.0 port (4 on rear I/Os and 4 via internal headers)
Expansion Slots	1x PCIe 2.0 x16 Slot (x8)
Rear I/Os	1x PS/2 Mouse 1x PS/2 Keyboard 1x HDMI Port 1x VGA Port 1x LAN port 4x USB 2.0 Port 3x Audio Jack
Internal I/Os	1x SATA 6.0Gb/s Connector 3x SATA 3.0Gb/s Connector 2x USB 2.0 Header (each header supports 2 USB 2.0 ports) 1x 4-Pin Power Connector 1x 24-Pin Power Connector 1x CPU Fan Connector 1x System Fan Connector 1x Front Panel Header 1x Front Audio Header 1x Clear CMOS Header 1x Printer Port Header 1x Serial Port Header 1x S/PDIF out Connector
Form Factor	mini-ITX Form Factor, 170 mm x 170 mm
OS Support	Windows XP / Vista / 7 / 8 Biostar reserves the right to add or remove support for any OS with or without notice.

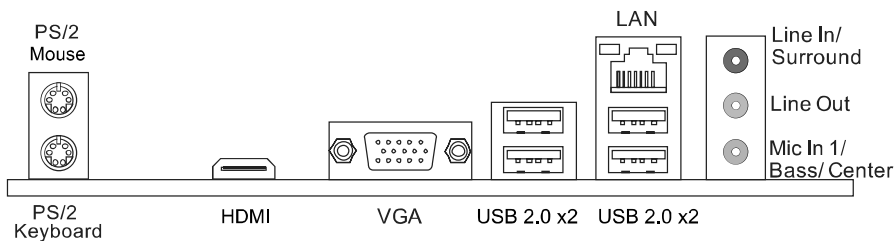
1.4 Central Processing Unit (CPU)

The motherboard is equipped with an onboard Intel processor and a CPU cooler.



Model:	Onboard Intel CPU:
NM70I-847	Intel® Celeron® Processor 847 (Dual Core 1.1GHz, Sandy Bridge)
NM70I-807	Intel® Celeron® Processor 807 (Single Core 1.5GHz, Sandy Bridge)
NM70I-1007U	Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz, Ivy Bridge)
NM70I-1037U	Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz, Ivy Bridge)

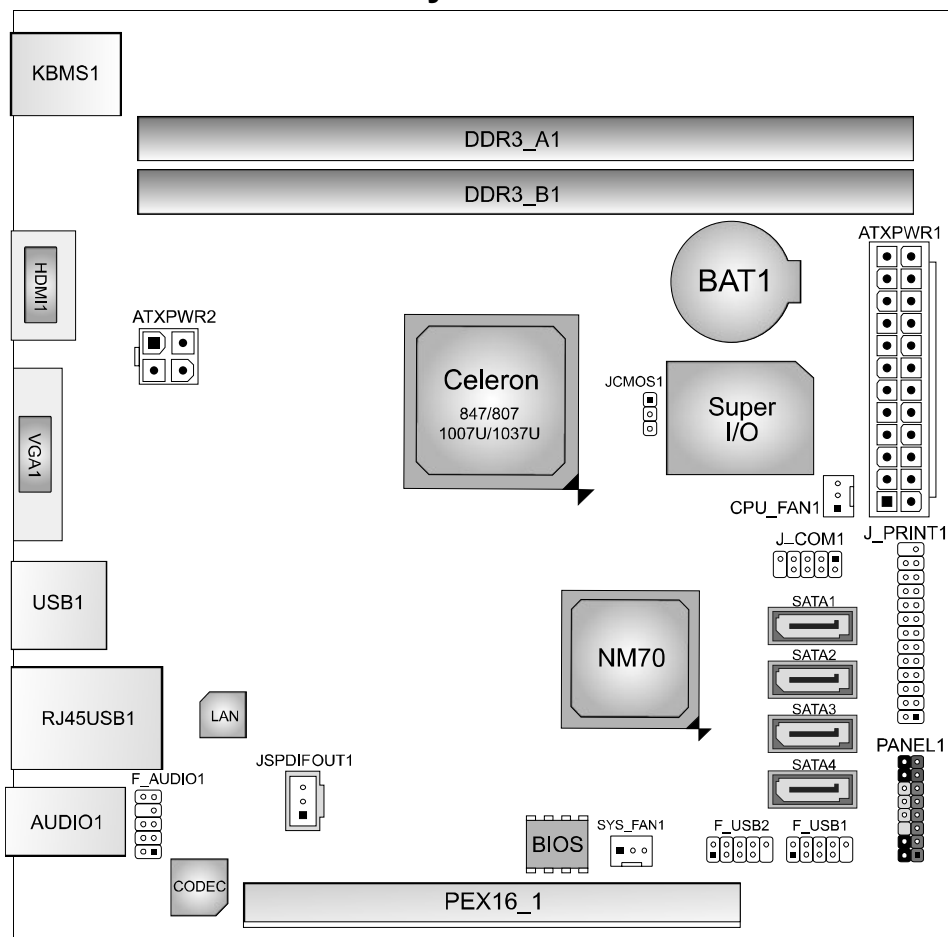
1.5 Rear Panel Connectors



Note 1: 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 2: Maximum resolution:
VGA: 2048 x 1536 @75Hz
HDMI: 1920 x 1200 @60Hz

1.6 Motherboard Layout



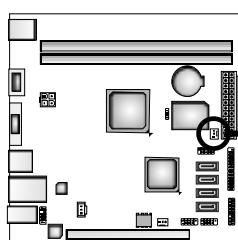
Note: ■ represents the 1st pin.

CHAPTER 2: HARDWARE INSTALLATION

2.1 Connect Cooling Fans

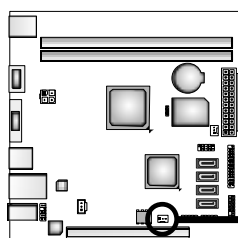
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer. Connect the fan cable to the connector while matching the black wire to pin#1.

CPU_FAN1: CPU Fan Header



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

SYS_FAN1: System Fan Header

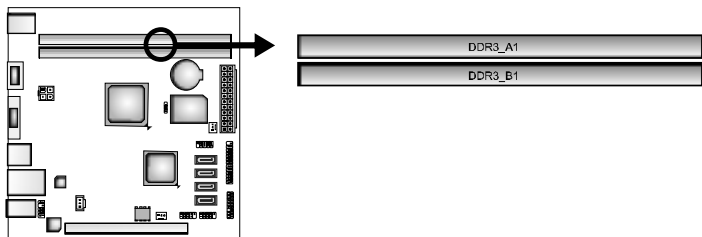


Pin	Assignment
1	Ground
2	+12V
3	FAN RPM rate sense

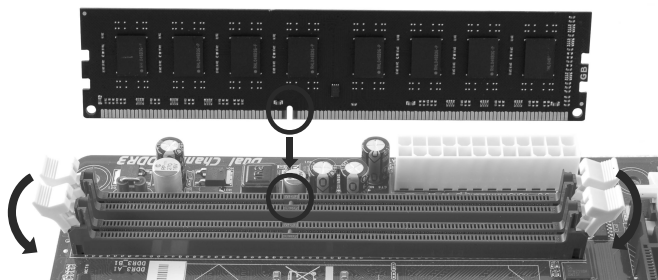
Note: CPU_FAN1, SYS_FAN1 support 4-pin and 3-pin head connectors. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.2 Install System Memory

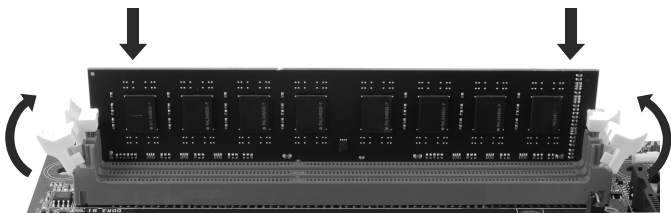
A. DDR3 Modules



Step 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.



Step 2: Insert the DIMM vertically and firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.



Note: If the DIMM does not go in smoothly, do not force it. Pull it all the way out and try again.

B. Memory Capacity

DIMM Socket Location	DDR3 Module	Total Memory Size
DDR3_A1	512MB/1GB/2GB/4GB/8GB	Max is 16GB.
DDR3_B1	512MB/1GB/2GB/4GB/8GB	

C. Dual Channel Memory Installation

Please refer to the following requirements to activate Dual Channel function:
Install memory module of the same density in pairs, shown in the table.

Dual Channel Status	DDR3_A1	DDR3_B1
Disabled	O	X
Disabled	X	O
Enabled	O	O

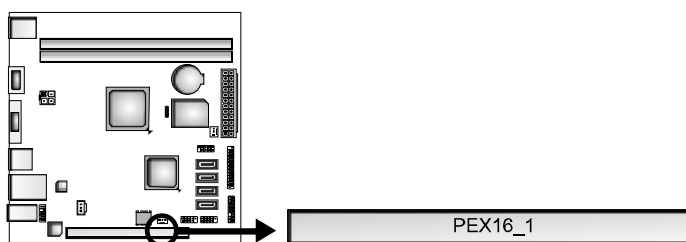
(O means memory installed, X means memory not installed.)

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

2.3 Expansion Slots

PEX16_1: PCI-Express Gen2 x8 Slot

- PCI-Express 2.0 compliant.
- Data transfer bandwidth up to 4GB/s per direction; 8GB/s in total.



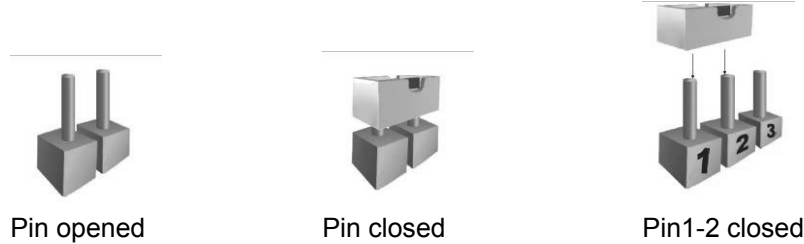
Install an Expansion Card

You can install your expansion card by following steps:

1. Read the related expansion card's instruction document before install the expansion card into the computer.
2. Remove your computer's chassis cover, screws and slot bracket from the computer.
3. Place a card in the expansion slot and press down on the card until it is completely seated in the slot.
4. Secure the card's metal bracket to the chassis back panel with a screw.
5. Replace your computer's chassis cover.
6. Power on the computer, if necessary, change BIOS settings for the expansion card.
7. Install related driver for the expansion card.

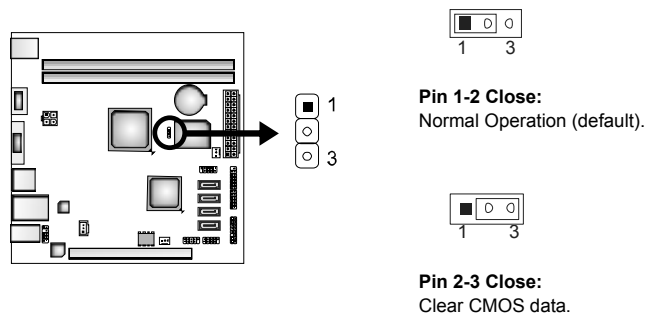
2.4 Jumper Setting

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”.



JCMOS1: Clear CMOS Header

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.



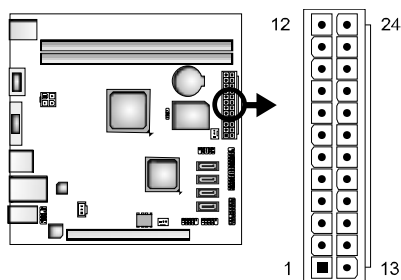
※ Clear CMOS Procedures:

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. Load Optimal Defaults and save settings in CMOS.

2.5 Headers & Connectors

ATXPWR1: ATX Power Source Connector

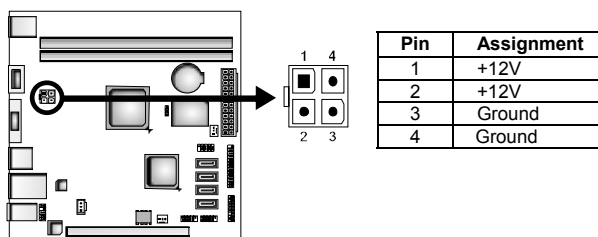
This connector allows user to connect 24-pin power connector on the ATX power supply.



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

ATXPWR2: ATX Power Source Connector

This connector will provide +12V to CPU power circuit.



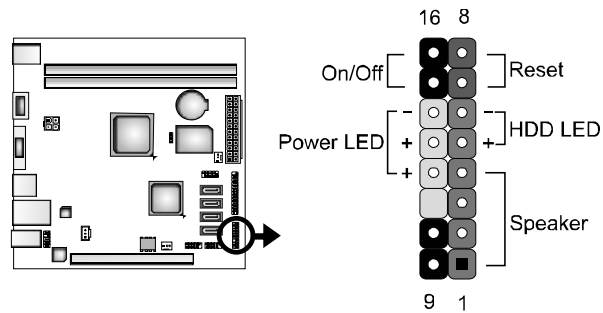
Pin	Assignment
1	+12V
2	+12V
3	Ground
4	Ground

Note1: Before you power on the system, please make sure that both ATXPWR1 and ATXPWR2 connectors have been plugged-in.

Note2: Insufficient power supplied to the system may result in instability or the peripherals not functioning properly. Use of a PSU with a higher power output is recommended when configuring a system with more power-consuming devices.

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.

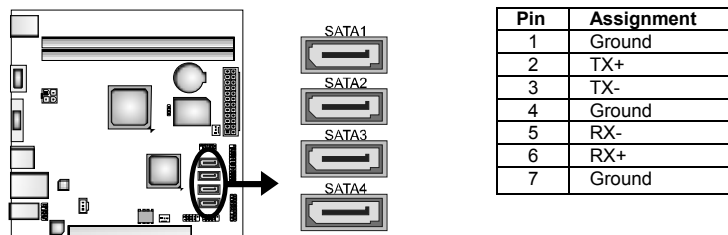


Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker Connector	9	N/A	N/A
2	N/A		10	N/A	N/A
3	N/A		11	N/A	N/A
4	Speaker	Hard drive LED	12	Power LED (+)	Power LED
5	HDD LED (+)		13	Power LED (+)	
6	HDD LED (-)		14	Power LED (-)	
7	Ground	Reset button	15	Power button	Power-on button
8	Reset control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

SATA1/2/3/4: Serial ATA Connectors

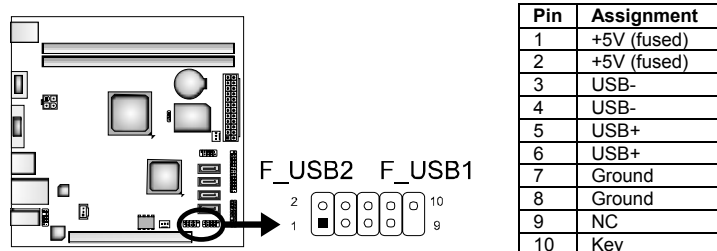
These connectors connect to SATA hard disk drives via SATA cables.

- SATA1: Supporting SATA3, up to 6 Gb/s data transfer rate.
- SATA2/3/4: Supporting SATA2, up to 3 Gb/s data transfer rate.



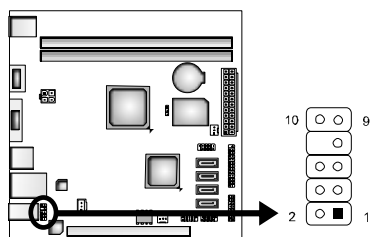
F_USB1/F_USB2: Headers for USB 2.0 Ports at Front Panel

This header allows user to connect additional USB cable on the PC front panel, and also can be connected with a wide range of simultaneously accessible external Plug and Play peripherals.



F_AUDIO1: Front Panel Audio Header

This header allows user to connect the front audio output cable with the PC front panel. This header supports HD and AC'97 audio front panel connector.



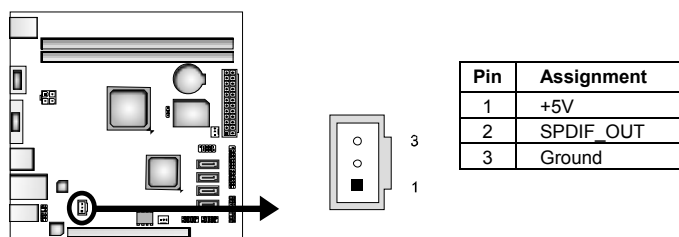
HD Audio		AC'97	
Pin	Assignment	Pin	Assignment
1	Mic Left in	1	Mic In
2	Ground	2	Ground
3	Mic Right in	3	Mic Power
4	GPIO	4	Audio Power
5	Right line in	5	RT Line Out
6	Jack Sense	6	RT Line Out
7	Front Sense	7	Reserved
8	Key	8	Key
9	Left line in	9	LFT Line Out
10	Jack Sense	10	LFT Line Out

Note1: It is recommended that you connect a high-definition front panel audio module to this connector to avail of the motherboard's high definition audio capability.

Note2: Please try to disable the "Front Panel Jack Detection" if you want to use an AC'97 front audio output cable. The function can be found via O.S. Audio Utility.

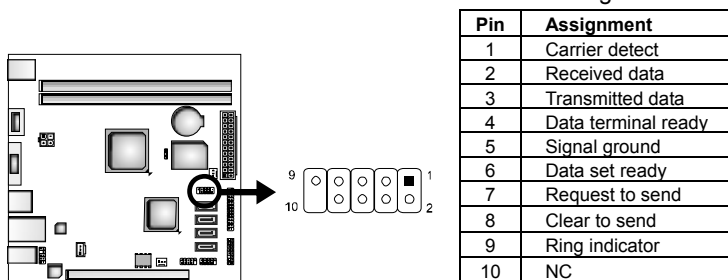
JSPDIFOUT1: Digital Audio-out Connector

The JSPDIFOUT1 is for connecting the PCI bracket SPDIF output.



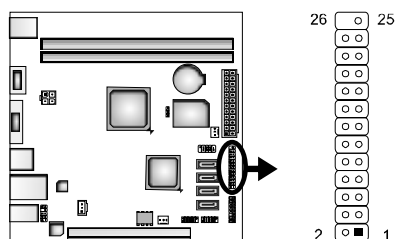
J_COM1: Serial Port Connector

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



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

CHAPTER 3: UEFI BIOS & SOFTWARE

3.1 UEFI BIOS Setup

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

3.2 BIOS Update

- BIOS-FLASHER: Using this utility, the BIOS can be updated from a file on a hard disk, a USB drive (a flash drive or a USB hard drive), or a CD-ROM.
- BIOS-FLASHER Update Utility: It enables automated updating while in the Windows environment. Using this utility, the BIOS can be updated from a file on a hard disk, a USB drive (a flash drive or a USB hard drive), or a CD-ROM, or from the file location on the Web.

BIOSTAR BIOS Flasher

BIOSTAR BIOS Flasher is a BIOS flashing utility providing you an easy and simple way to update your BIOS via USB pen drive.

Note1: This utility only allows storage device with FAT32/16 format and single partition.

Note2: Shutting down or resetting the system while updating the BIOS will lead to system boot failure.

Updating BIOS with BIOS-FLASHER

1. Go to the website to download the latest BIOS file for the motherboard.
2. Then, copy and save the BIOS file into a USB flash (pen) drive.
3. Insert the USB pen drive that contains the BIOS file to the USB port.
4. Power on or reset the computer and then press <F12> during the POST process.

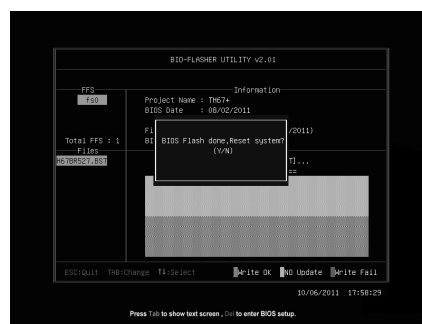
5. After entering the POST screen, the BIOS-FLASHER utility pops out. Choose [fs0] to search for the BIOS file.



6. Select the proper BIOS file, and a message asking if you are sure to flash the BIOS file. Click Yes to start updating BIOS.



7. A dialog pops out after BIOS flash is completed, asking you to restart the system. Press the [Y] key to restart system.



8. While the system boots up and the full screen logo shows up, press key to enter BIOS setup. After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

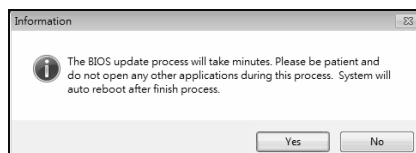
BIOS Update Utility (through the Internet)

1. Installing BIOS Update Utility from the DVD Driver.
2. Please make sure the system is connected to the internet before using this function.

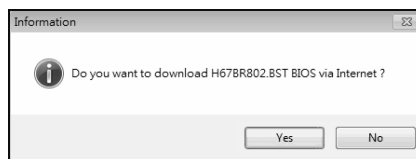
3. Launch BIOS Update Utility and click the **Online Update** button on the main screen.



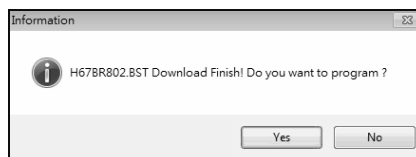
4. An open dialog will show up to request your agreement to start the BIOS update. Click **Yes** to start the online update procedure.



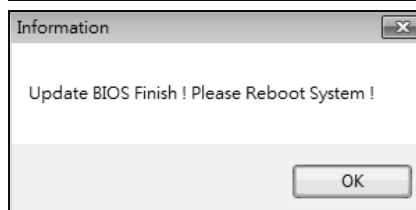
5. If there is a new BIOS version, the utility will ask you to download it. Click **Yes** to proceed.



6. After the download is completed, you will be asked to program (update) the BIOS or not. Click **Yes** to proceed.



7. After the updating process is finished, you will be asked you to reboot the system. Click **OK** to reboot.



8. While the system boots up and the full screen logo shows up, press key to enter BIOS setup.
After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

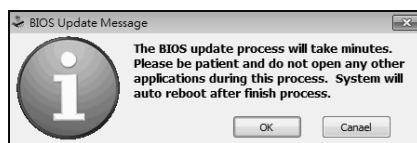
BIOS Update Utility (through a BIOS file)

1. Installing BIOS Update Utility from the DVD Driver.
2. Download the proper BIOS from <http://www.biostar.com.tw/>

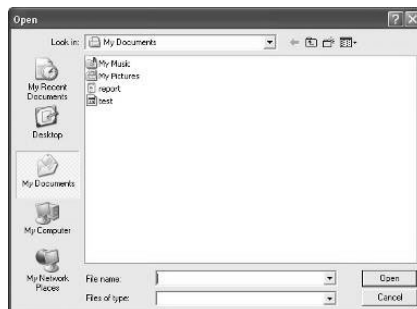
3. Launch BIOS Update Utility and click the **Update BIOS** button on the main screen.



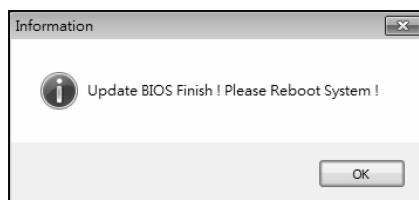
4. A warning message will show up to request your agreement to start the BIOS update. Click **OK** to start the update procedure.



5. Choose the location for your BIOS file in the system. Please select the proper BIOS file, and then click on **Open**. It will take several minutes, please be patient.



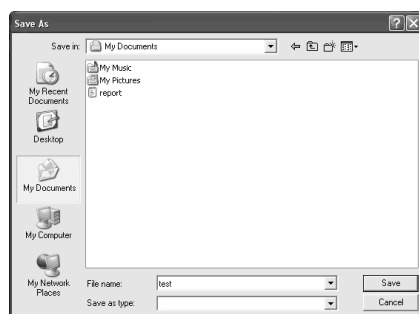
6. After the BIOS Update process is finished, click on **OK** to reboot the system.



7. While the system boots up and the full screen logo shows up, press key to enter BIOS setup. After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

Backup BIOS

Click the Backup BIOS button on the main screen for the backup of BIOS, and select a proper location for your backup BIOS file in the system, and click **Save**.



3.3 Software

Installing Software

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

Note1: All the information and content about following software are subject to be changed without notice. For better performance, the software is being continuously updated.

Note2: The information and pictures described below are for your reference only. The actual information and settings on board may be slightly different from this manual.

Launching Software

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

eHot-Line

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.

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

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

This block will show the information which would be collected in the mail.

*Describe condition of your system.

The screenshot shows the eHot-Line utility window. On the left is a text box titled "Base board information :" containing system details. To its right is a large "Symptom Description :" text area. Below these are input fields for "Region :", "CC E-mail :", "Memory Module Manufacture :", and "Power Supply Manufacture/model :". At the bottom are "Send", "Save As...", and "Exit" buttons. Annotations with arrows point to various parts of the window: the left text box, the symptom description area, the Region dropdown, the CC E-mail field, the Memory Module Manufacture field, the Power Supply Manufacture/model field, the Send button, the Save As... button, and the Exit button.

Base board information :
Caption : Base Board
CreationClassName : Win32_BaseBoard
Description : Base Board
HostingBoard : TRUE
HotSwappable : FALSE
Manufacturer : BIOSTAR Group
Name : Base Board
PoweredOn : TRUE
Product : TA780G M2+
Removable : FALSE
Replaceable : TRUE
RequiresDaughterBoard : FALSE
SerialNumber : None
Status : OK
Tag : Base Board
Version : 6.0

Symptom Description :

Region :

CC E-mail :

Memory Module Manufacture :

Power Supply Manufacture/model :

Send Save As... Exit

Send the mail out. Save these information to a .txt file Exit this dialog.

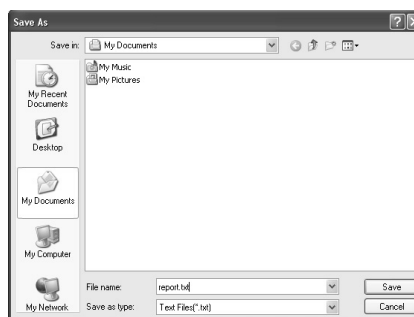
*Select your area or the area close to you.
Provide the e-mail address that you would like to send the copy to.
*Provide the name of the memory module manufacturer.
Provide the name of the power supply manufacturer and the model no.

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.

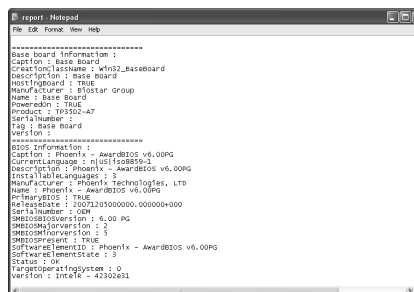


If you want to save this information to a .txt file, click **"Save As..."** and then you will see a saving dialog appears asking you to enter file name.

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.



Note1: 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.

Note2: 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 website <http://www.biostar.com.tw/app/en/about/contact.php> for getting our contact information.

Motherboard Manual

BIOScreen Utility

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



Please follow the step-by-step instructions below to update boot logo:

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

Rapid Start Technology

Intel® Rapid Start technology enables your system to get up and running faster from even the deepest sleep, saving time and power consumption. Feel secure knowing that your system will still resume to working conditions in the event of unexpected power loss while in sleep mode.

System Requirement:

- An Intel® SATA SSD (SATA Gen2 or Gen3. Preferably Gen3, and 80 GB or larger)
- Windows 7 and Windows 8

Note1: Please visit below webpage for more details about operating systems supporting http://www.intel.com/p/en_US/support

Installing Intel® SBA:

Step 1: BIOS Setting

1-1 Go to [Advanced Menu] > [ACPI Settings], and set [ACPI Sleep State] to S3 (Suspend to RAM)

1-2 Go to [Advanced Menu] > [SATA Configuration], and set [SATA Mode Selection] to AHCI

1-3 Go to [Advanced Menu] and set [Intel(R) Rapid Start Technology] to Enabled

1-4 Save your changes, and then exit the BIOS Setup.

Step 2: Operating System Installation

Step 3: Installing Intel® Rapid Start Application

3-1 Insert the setup Driver DVD into your optical drive. Click “Intel Rapid Start Technology” to launch the program.

3-2 Below window will pop-out, then click “Create Disk” to start disk partition. After disk partition finished, please click “OK” then system will reboot automatically.




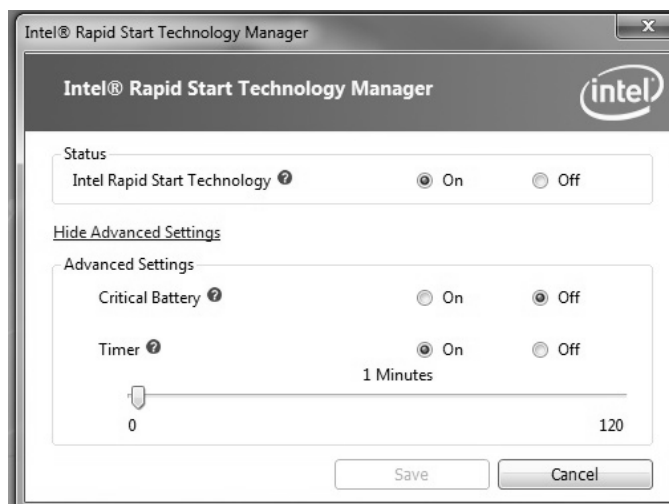
Motherboard Manual

3-3 After rebooting, the system will setup Intel® Rapid Start Technology automatically. We recommend you restart the system after this installation is complete,



Step 4: Configuring Intel® Rapid Start Application

Launch the Intel® Rapid Start Technology Manager application from [Start] > [All Programs] > [Intel] or click the icon  in the notification area.

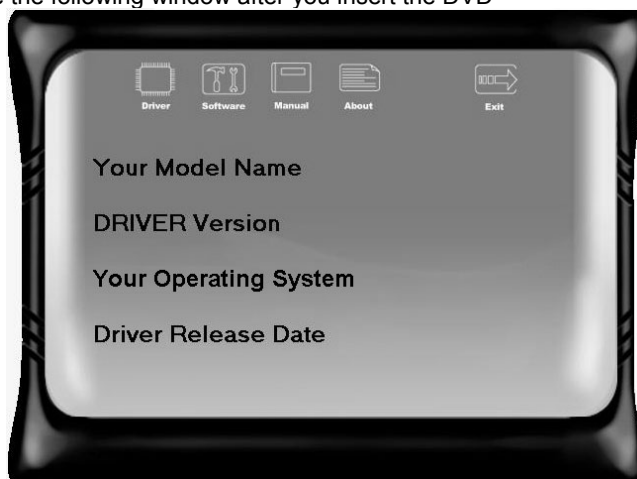


CHAPTER 4: USEFUL HELP

4.1 Driver Installation

After you installed your operating system, please insert the Fully Setup Driver DVD into your optical drive and install the driver for better system performance.

You will see the following window after you insert the DVD



The setup guide will auto detect your motherboard and operating system.

Note: If this window didn't show up after you insert the Driver DVD, 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 DVD. 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://get.adobe.com/reader/>

4.2 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.

4.3 AMI BIOS Beep Code

Boot Block Beep Codes

Number of Beeps	Description
Continuing	Memory sizing error or Memory module not found

POST BIOS Beep Codes

Number of Beeps	Description
1	Success booting.
8	Display memory error (system video adapter)

4.4 Troubleshooting

Probable	Solution
<ol style="list-style-type: none"> 1. There is no power in the system. Power LED does not shine; the fan of the power supply does not work 2. Indicator light on keyboard does not shine. 	<ol style="list-style-type: none"> 1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
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.	<ol style="list-style-type: none"> 1. Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup. 2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.
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.	<ol style="list-style-type: none"> 1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
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.	<ol style="list-style-type: none"> 1. Set master/slave jumpers correctly. 2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives.

APPENDIX: SPEC IN OTHER LANGUAGES

Arabic

المواصفات	
NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)	قاعدة وحدة المعالجة المركزية
Intel NM70	مجموعة الشرائح
(NM70I-847 & NM70I-807) DDR3 1066/1333 دي. دي. ار. 16 جيجابايت ذاكرة (NM70I-1007U & NM70I-1037U) DDR3 1600/1333 دي. دي. ار. x2 كل قطة مزدوجة DIMM تتحمل نون 512 ECC ميجابايت / 8/4/2/1 جيجابايت دي. دي. ار. DDR3 * يرجى الرجوع إلى الموقع www.biostar.com.tw لقائمة دعم الذاكرة.	الذاكرة
وصلة x1 سنا 6 SATA جيجابايت / الثانية ، وصلة x3 سنا 3 SATA جيجابايت / الثانية تتحمّل رايد الأم AHCI / IDE	التخزين
ريالتيك رتل 8111 F REALTEK 1000 / 100 / 10 ميجابايت / الثانية ، تحديد تلقائي ، النصف / الفترة القصوى المزدوجة	شبكة محلية LAN
ALC662 5.1 قنوات عالية الدقة	الترميز الصوتي
منفذ 8 x نقل متسلسل عام USB 2.0 (4 في الداخل والمخارج الخلفية و 4 من خلال الموزع الداخلي)	نقل متسلسل عام USB
1 x قطة منفذ الملحقات الإضافية PCI Express 2.0 x 16 (8x)	قطة التوسع
1 x PS/2 الفارة 1 x PS/2 لوحة المفاتيح للكمبيوتر قطة توصيل عدد 1 x HDMI وسيط متعدد العلي الوضوح قطة توصيل عدد 1 x منظومة العرض المرئي VGA قطة توصيل عدد 1 x الشبكة المحلية LAN قطة توصيل عدد 4 x نقل متسلسل عام USB 2.0 قطة توصيل عدد 3 x جاك للصوت	الداخل والمخارج الخلفية
وصلة 1 x SATA 6 جيجابايت / الثانية وصلة 3 x SATA 3 جيجابايت / الثانية موزع 2 x نقل متسلسل عام USB 2.0 (كل موزع يتحمل قحتين نقل متسلسل عام USB 2.0) وصلة الطاقة 1 x 4 دبليوس وصلة الطاقة 1 x 24 دبوس وصلة 1 x مروحة تبريد وحدة المعالجة المركزية وصلة 1 x مراوح تبريد المنظومة موزع 1 x اللوحة الأمامية موزع 1 x الصوت الأمامي موزع 1 x سموس مباشر موزع 1 x قطة للطابعة موزع 1 x قطة لتسليطية وصلة 1 x خارجية S/PDIF سوني فيليبس الواجهة الرقمية	الداخل والمخارج الداخلية
عمل شكل مند التكنولوجيا المتقدمة mini-ITX ، 170 x 170 مم	عمل الشكل
ويندوز إكس بي windows xp / ويندوز فيستا / ويندوز 7 / 8 بيوسترار BIOSSTAR تحتفظ بحق إضافة أو إزالة الدعم لأي نظام تشغيل مع أو بدون أنظار.	أنظمة التشغيل المدعومة

French

Spécifications	
Support Unité Centrale	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Jeu de puces	INTEL NM70
Mémoire	Supporte mémoire DDR3 double canal 1066/ 1333 (NM70I-847 & NM70I-807) Supporte mémoire DDR3 double canal 1333/ 1600 (NM70I-1007U & NM70I-1037U) Banc de mémoire 2 x DDR3 DIMM, Supporte max. jusqu'à une mémoire de 16 GB Chaque module DIMM supporte module DDR3 non-ECC 512MB/ 1/ 2/ 4/ 8 GB * Veuillez vous reporter à www.biostar.com.tw pour la liste des soutien de la mémoire.
Stockage	Connecteur 1 x SATA 6Gb/s, Connecteur 3 x SATA 3Gb/s Supporte système indigène IDE & AHCI mode
Réseau local	Realtek RTL 8111F 10/ 100/ 1000 Mb/s auto négociation, capacité bidirectionnelle à l'alternat / bidirectionnelle simultanée
Codec audio	ALC662, Canaux 5.1, écoute audio de haute définition
USB	Port 8x USB 2.0 (4 sur les I/O arrières et 4 en interne)
Connecteur d'extension	1x PCIe 2.0 x16 Fente (x8)
I/O arrières	1x PS/2 Clavier 1x PS/2 Souris 1x Port HDMI 1x Port VGA 1x port LAN 4x Port USB 2.0 3x entrées audio
I/O en interne	1x Connecteur SATA 6.0Gb/s 3x Connecteur SATA 3.0Gb/s 2x embases USB 2.0 (chaque embase supporte 2 Ports USB 2.0) 1x 4-Broche de carte 1x 24-Broche de carte 1x Connecteur ventilateur unité centrale 1x Connecteur ventilateur système 1x Fiche panneau avant 1x Fiche audio avant 1x Fiche mémoire CMOS vide 1x Embase port imprimante 1x Embase port série 1x Connecteur sortie S/PDIF
Facteur d'encombrement	Facteur d'encombrement mini-ITX, 170 mm x 170 mm
Support SE	Windows XP / Vista / 7 / 8 Biostar se réserve le droit d'ajouter ou d'enlever le support pour toute SE avec ou sans préavis.

Spezifikationen	
CPU-Unterstützung	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Chipset	INTEL NM70
Festplattenspeicher	Unterstützt zweikanaliges DDR3 1066/ 1333 (NM70I-847 & NM70I-807) Unterstützt zweikanaliges DDR3 1333/ 1600 (NM70I-1007U & NM70I-1037U) 2 x DDR3 DIMM-SpeicherSlot, Max. Unterstützung bis zu 16 GB-Speicher Jedes DIMM unterstützt nicht-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3-Module * Bitte konsultieren Sie www.biostar.com.tw für Speicherunterstützung Liste.
Arbeitsspeicher	1x SATA 6Gb-Verbindung, 3x SATA 3Gb-Verbindung Unterstützt Ureinwohner IDE & AHCI Modus
LAN	Realtek RTL 8111F 10/ 100/ 1000 Mb Auto-Negotiation, Halb- / Voll-Duplex-fähig
Audio-Codec	ALC662, 5.1 Kanäle, HD-Audio
USB	8x USB 2.0-Port (4 hintere I/Os und 4 via interne Header)
Erweiterungsanschlüsse	1x PCIe 2.0 x16-Slot (x8)
Hintere I/Os	1x PS/2-Maus 1x PS/2-Keyboard 1x HDMI-Port 1x VGA-Port 1x LAN-Port 4x USB 2.0-Port 3x Audio Jack
Interne I/Os	1x SATA 6.0Gb/s-Verbindung 3x SATA 3.0Gb/s-Verbindung 2x USB 2.0-Header (jeder Header unterstützt 2 USB 2.0-Ports) 1x 4-Pin-Stromverbindung 1x 24-Pin-Stromverbindung 1x CPU-Ventilatorverbindung 1x System-Ventilatorverbindung 1x Header für Frontpanel 1x Header für Frontaudio 1x Header für klares CMOS 1x Header für Druckerport 1x Serieller Port-Header 1x S/PDI-Auswurfsverbindung
Formfaktor	mini-ITX Formfaktor, 170 mm x 170 mm
OS-Unterstützung	Windows XP / Vista / 7 / 8 Biostar reserves the right to add or remove support for any OS with or without notice.

Italian

Specificazioni	
Supporto processore	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Tipo scheda	INTEL NM70
Memoria	Supporta DDR3 1066/ 1333 Doppio Canale (NM70I-847 & NM70I-807) Supporta DDR3 1333/ 1600 Doppio Canale (NM70I-1007U & NM70I-1037U) 2 x DDR3 DIMM Slot di Memoria Supporta fino a 16 GB Memoria Ogni DIMM supporta non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 moduli * Si prega di consultare www.biostar.com.tw per la lista di supporto del memoria.
Memorizzazione	Connettore 1x SATA 6Gb/s, Connettore 3x SATA 3Gb/s Supporta nativo IDE & AHCI modo
Catena	Realtek RTL 8111F 10/ 100/ 1000 Mb auto negoziazione, capacita di duplex Meta / Completo
Codec Audio	ALC662 Canali Audio di Alta Definizione 5.1
USB	Slot 8x USB 2.0 (4 nei ingressi/ uscite posteriore e 4 da distributori interni)
Slot di espansione	Slot 1x PCIe 2.0 x16 (x8)
Ingressi/ Uscite Posteriore	Mouse 1x PS/2 Tastiera 1x PS/2 Slot 1x HDMI Slot 1x VGA Slot 1x LAN Slot 4x USB 2.0 Jack audio 3x
Ingressi/ Uscite Interni	Connettore 1x SATA 6.0Gb/s Connettore 3x SATA 3.0Gb/s Distributore 2x USB 2.0(ogni distributore supporta 2 slot USB 2.0) Connettore con 4 pin x1 Connettore con 24 pin x1 Connettore Ventilatore processore x1 Connettore Ventilatore Sistema x1 Distributore Pannello Frontale x1 Distributore Audio Frontale x1 Distributore CMOS Diretto x1 Distributore Slot Stampante x1 Distributore Slot Serie x1 Connettore esterno S/PDIF x1
Fattore di Forma	Fattore di Forma mini-ITX, 170 mm x 170 mm
Supporto SO	Windows XP / Vista / 7 / 8 Biostar si riserva il diritto di aggiungere o ritirare il supporto per qualsiasi SO con o senza preavviso.

Japanese

仕様	
CPU サポート	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
チップセット	INTEL NM70
メモリ	デュアルチャンネル DDR3 1066/ 1333 をサポート(NM70I-847 & NM70I-807) デュアルチャンネル DDR3 1333/ 1600 をサポート(NM70I-1007U & NM70I-1037U) 2 x DDR3 DIMM メモリ スロット、最大 16GB メモリまでサポート 各 DIMM は、非-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 モジュールをサポートしています *サポートされているメモリのリストについては、 www.biostar.com.tw を参照してください。
保存スペース	1x SATA 6Gb/s コネクタ, 3x SATA 3Gb/s コネクタ ネイティブ IDE & AHCI モード のサポート
LAN	Realtek RTL 8111F 10/ 100/ 1000 Mb/s オートネゴシエーション、半/全 二重通信
オーディオ コーデック	ALC662 5.1 チャンネル, ハイ デフィニション オーディオ
USB	8x USB 2.0 ポート (後部 I/O に4つ 及び 内蔵ヘッダー経由に4つ)
拡張スロット	1x PCIe 2.0 x16 スロット (x8)
後部 I/O	1x PS/2 キーボード 1x PS/2 マウス 1x HDMI ポート 1x VGA ポート 1x LAN ポート 4x USB 2.0 ポート 3x オーディオ ジャック
内蔵 I/O	1x SATA 6.0Gb/s コネクタ 3x SATA 3.0Gb/s コネクタ 2x USB 2.0 ヘッダー (各ヘッダーは、2つの USB 2.0 ポートをサポートしています) 1x 4-Pin パワー コネクタ 1x 24-Pin パワー コネクタ 1x CPU ファン コネクタ 1x システム ファン コネクタ 1x フロント パネル ヘッダー 1x フロント オーディオ ヘッダー 1x クリア CMOS ヘッダー 1x プリンター ポート ヘッダー 1x シリアル ポート ヘッダー 1x S/PDIF アウト コネクタ
フォーム ファクタ	mini-ITX フォーム ファクタ、170 mm x 170 mm
サポート OS	Windows XP / Vista / 7 / 8 Biostar には、通知なしでサポート OS を変更する権限があります。

Polish

Specyfikacje techniczne	
Obsługa procesora	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Rodzaj płyty	INTEL NM70
Pamięć	Pojedynczy pamięci DDR3 1066/ 1333 Dwukanałowa (NM70I-847 & NM70I-807) Pojedynczy pamięci DDR3 1333/ 1600 Dwukanałowa (NM70I-1007U & NM70I-1037U) 2 x DDR3 DIMM Pamięć Gniazda procesora (Slot), Maksymalna wielkość pamięci 16 GB Każdy DIMM obsługuje jeden moduł non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 * Proszę sprawdzić listę obsługiwanych pamięć na stronie internetowej www.biostar.com.tw
Przechowywanie	Złącze 1x SATA 6Gb/s, Złącze 3x SATA 3Gb/s, Obsługa rodzimy IDE & AHCI tryb
LAN	Układ RTL 8111F 10/ 100/ 1000 Mb auto negocjacja, pojemność duplex Połowe / Pełny
Codec Audio	ALC662 Kanały Audio wysokiej Definicji 5.1
USB	8 x złącza USB 2.0 (4 przez tylne porty wejścia/ wyjścia oraz 4 przez wewnętrzne porty)
Złącza rozszerzeń	złącza 1x PCIe 2.0 x16 (x8 Slot)
Tylne porty wejścia/ wyjścia	Myszka 1x PS/2 Klawiatura 1x PS/2 Port 1x HDMI (gniazdo) Port 1x VGA Port 1x LAN Porty 4x USB 2.0 Porty audio 3x
Wewnętrzne porty wejścia/ wyjścia	Złącza 1x SATA 6.0Gb/s Złącza 3x SATA 3.0Gb/s Złącza 2x USB 2.0 (każde złącze obsługuje dodatkowe 2 porty USB 2.0) Złącza 4 pionowe x 1 Złącza 24 pionowe x 1 Złącze wentylatora CPU x 1 Złącze wentylatora obudowy x 1 Złącze przedniego panelu x1 Złącze audio przedniego panelu x1 Złącze bezpośrednie CMOS x1 Złącze port drukarki x1 Port szeregowy x1 Port zewnętrzny S/PDIF x1
Obudowa	Obudowa mini-ITX, 170 mm x 170 mm
Obsługa OS	Windows XP / Vista / 7 / 8 Biostar zastrzega sobie prawo do dodania lub wycofania obsługi dla OS, z wypowiedzeniem lub bez wypowiedzenia.

Portuguese

Especificações	
Suporte Processador	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Tipo Placa Mãe	INTEL NM70
Memória	Suporta DDR3 1066/ 1333 Canal Duplo (NM70I-847 & NM70I-807) Suporta DDR3 1333/ 1600 Canal Duplo (NM70I-1007U & NM70I-1037U) 2 x DDR3 DIMM Slot de memória Suporta até 16 GB Memória Cada DIMM suporta non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 módulo * Por favor consulte www.biostar.com.tw para obter uma lista de suporte do memória.
Armazenamento	Conector 1x SATA 6Gb/s, Conector 3x SATA 3Gb/s, Suporta nativo IDE & AHCI modo
LAN	Realtek RTL 8111F 10/ 100/ 1000 Mb auto negociação, capacidade duplex Metade / Cheio
Codec de Audio	ALC662 Canais de Áudio de Alta Definição 5.1
USB	Porta 8x USB 2.0 (4 nas entradas/saídas traseiras e 4 pelos Dispositivos internos)
Slots de expansão	Porta 1x PCIe 2.0 x16 (x8)
Entradas/Saídas no painel traseiro	Mouse 1x PS/2 Teclado 1x PS/2 Porta 1x HDMI Porta 1x VGA Porta 1x LAN Porta 4x USB 2.0 Soquete audio 3x
Conectores na placa	Conector 1x SATA 6.0Gb/s Conector 3x SATA 3.0Gb/s Dispositivo 2x USB 2.0 (cada Dispositivo suporta 2 portas USB 2.0) Conector de 4 pinos x1 Conector de 24 pinos x1 Conector de Ventoinha processador x1 Conector de Ventoinha Sistema x1 Dispositivo Painel Frontal x1 Dispositivo de Audio Frontal x1 Dispositivo CMOS Direct x1 Dispositivo Porta Impressora x1 Dispositivo Porta Série x1 Conector Externo S/PDIF x1
Fator de Fôrma	Fator de Fôrma mini-ITX, 170 mm x 170 mm
Suporte OS	Windows XP / Vista / 7 / 8 Biostar reserva seu direito de adicionar ou retirar o suporte para qualquer OS com ou sem notificação.

Russian

Спецификации	
Поддержка центрального процессора	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Набор микросхем	INTEL NM70
Память	Поддерживает двухканальный DDR3 1066/ 1333 (NM70I-847 & NM70I-807) Поддерживает двухканальный DDR3 1333/ 1600 (NM70I-1007U & NM70I-1037U) 2 гнезда платы памяти DDR3 DIMM, максимальная память до 16 Гб Каждый модуль DIMM поддерживает модуль не-ECC 512 Мб/ 1/ 2/ 4/ 8 Гб DDR3 * Перечень поддержки памяти смотрите на www.biostar.com.tw .
Накопитель	Соединитель 1x SATA 6 Гб/с, Соединитель 3x SATA 3 Гб/с, Поддерживает родной IDE & AHCI режим
Локальная сеть	Realtek RTL 8111F Автосогласование 10/ 100/ 1000 Мб/с, работает в полно/полудуплексном режиме
Аудиокодек	ALC662 Каналы 5.1, высококачественное аудио
USB	8 порта USB 2.0 (4 сзади ввода-вывода и 4 через внутренние контакты)
Гнезда расшир.	1x PCIe 2.0 x16 гнездо (x8)
Задняя плата ввода-вывода	1 мышь PS/2 1 клавиатура PS/2 1 порт HDMI 1 порт VGA 1 порт локальной сети 4 порта USB 2.0 3 гнезд для подключения наушников
Внутр. Плата ввода-вывода	Соединитель 1x SATA 6 Гб/с Соединитель 3x SATA 3 Гб/с 2 контакта USB 2.0 (каждый контакт поддерживает 2 порта USB 2.0) 1 4-выводный разъем питания 1 24-выводный разъем питания 1 разъем вентилятора ЦП 1 разъема вентилятора системы 1 контакт передней панели 1 контакт передней аудиопанели 1 контакт микросхемы Clear CMOS 1 контакт порта принтера 1 контакт последовательного порта 1 соединитель S/PDIF-Out
Конструктив	Форм-фактор mini-ITX, 170 мм x 170 мм
Поддержка ОС	Windows XP / Vista / 7 / 8 Biostar оставляет за собой право добавлять или удалять поддержку любой ОС, с уведомлением или без.

Spanish

Especificaciones	
Compatibilidad con el procesador	NM70I-847: Intel® Celeron® Processor 847 (Dual Core 1.1GHz) NM70I-807: Intel® Celeron® Processor 807 (Single Core 1.5GHz) NM70I-1007U: Intel® Celeron® Processor 1007U (Dual Core 1.5 GHz) NM70I-1037U: Intel® Celeron® Processor 1037U (Dual Core 1.8 GHz)
Tipo de Placa	INTEL NM70
Memoria	Soporta DDR3 1066/ 1333 Doble Canal (NM70I-847 & NM70I-807) Soporta DDR3 1333/ 1600 Doble Canal (NM70I-1007U & NM70I-1037U) 2x DDR3 DIMM Ranura de memoria Soporta hasta 16 GB Memoria Cada DIMM soporta un modulo non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 *Por favor consultar con www.biostar.com.tw para la lista de compatibilidad con el memoria.
Almacenamiento de información	Conector 1x SATA 6Gb/s, Conector 3x SATA 3Gb/s, Soporta nativo IDE & AHCI modo
LAN	Realtek RTL 8111F 10/ 100/ 1000 Mb/s auto negociación, capacidad dúplex Mitad/Completo
Códec Audio	ALC662, Canales Audio de Alta Definición 5.1
USB	Ranura 8x USB 2.0 (4 en las entradas/salidas posteriores y 4 por los distribuidores internos)
Ranuras de Extinción	Ranura 1x PCIe 2.0 x16 (x8)
Panel trasero de E/S	Ratón 1x PS/2 Teclado 1x PS/2 Ranura 1x HDMI Ranura 1x VGA Ranura 1x LAN Ranura 4x USB 2.0 Socket audio 3x
Conectores en placa	Conector 1x SATA 6Gb/s Conector 3x SATA 3Gb/s Distribuidor 2x USB 2.0 (cada distribuidor soporta 2 ranuras USB 2.0) Conector con 4 patillas x1 Conector con 24 patillas x1 Conector Ventilador procesador x1 Conector Ventilador Sistema x1 Distribuidor Panel Frontal x1 Distribuidor Audio Frontal x1 Distribuidor CMOS Directo x1 Distribuidor Ranura Impresora x1 Distribuidor Ranura Serie x1 Conector Externo S/PDIF x1
Factor de Forma	Factor de Forma mini-ITX, 170 mm x 170 mm
Soporte OS	Windows XP / Vista / 7 / 8 Biostar reserva su derecho de añadir o retirar el soporte para cada OS con o sin notificación.

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