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Dichiarazione di conformità sintetica
Ai sensi dell'art. 2 comma 3 del D.M. 275 del 30/10/2002
Si dichiara che questo prodotto è conforme alle normative vigenti e soddisfa i requisiti essenziali richiesti dalle direttive 2004/108/CE, 2006/95/CE e 1999/05/CE quando ad esso applicabili

Short Declaration of conformity
We declare this product is complying with the laws in force and meeting all the essential requirements as specified by the directives 2004/108/CE, 2006/95/CE and 1999/05/CE whenever these laws may be applied

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Chapter 1: Introduction

1.1 Before You Start

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

- Prepare a dry and stable working environment with sufficient lighting.
- Always disconnect the computer from power outlet before operation.
- Before you take the motherboard out from anti-static bag, ground yourself properly by touching any safely grounded appliance, or use grounded wrist strap to remove the static charge.
- Avoid touching the components on motherboard or the rear side of the board unless necessary. Hold the board on the edge, do not try to bend or flex the board.
- Do not leave any unfastened small parts inside the case after installation. Loose parts will cause short circuits which may damage the equipment.
- Keep the computer from dangerous area, such as heat source, humid air and water.
- The operating temperatures of the computer should be 0 to 45 degrees Celsius.
- 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
- Quick Installation Guide x1
- Fully Setup Driver DVD x1

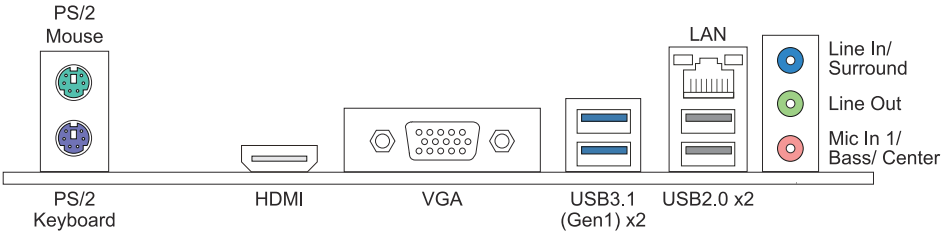
Note

» *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.*

1.3 Specifications

Specifications	
CPU Support	A68N-2100E: AMD® E1-2150 (Dual core 1.05 GHz, 9W) A68N-2100K: AMD® E1-6010 (Dual core 1.35 GHz, 10W) A68N-2100X: AMD® PRO A4-3350B (Quad core 1.2 GHz, 10W) A68N-5600E: AMD® PRO A4-3350B (Quad core 2.0 GHz, Max Supports up 2.4 GHz, 15W)
Memory	A68N-2100E: Supports Single Channel DDR3 & DDR3L 800/ 1066/ 1333 A68N-2100K: Supports Single Channel DDR3 & DDR3L 800/ 1066/ 1333 (1.25V) A68N-2100X: Supports Single Channel DDR3 & DDR3L 800/ 1066/ 1333 (1.25V)/ 1600 (1.35V) A68N-5600E: Supports Single Channel DDR3 800/ 1066/ 1333/ 1600 Supports Single Channel DDR3L 800/ 1066/ 1333
	2 x DDR3 & DDR3L DIMM Memory Slot, Max. Supports up to 16 GB Memory Each DIMM supports non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 & DDR3L module * Please refer to www.biostar.com.tw for Memory support list.
Storage	2x SATA III Connector (6Gb/s) : Supports AHCI
LAN	Realtek RTL 8111H 10/ 100/ 1000 Mb/s auto negotiation, Half / Full duplex capability
Audio Codec	ALC887 7.1 Channels, High Definition Audio
USB	2x USB 3.1(Gen1) port (2 on rear I/Os) 6x USB 2.0 port (2 on rear I/Os and 4 via internal headers)
Expansion Slots	1x PCIe 2.0 x16 Slot (x4)
Rear I/Os	1x PS/2 Mouse 1x PS/2 Keyboard 1x VGA Port 1x HDMI Port 1x LAN port 2x USB 3.1(Gen1) Port 2x USB 2.0 Port 3x Audio Jack
Internal I/Os	2x SATA III 6.0Gb/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 COM Port Header 1x Printer Port Header 1x S/PDIF out Connector 1x TPM Header
Form Factor	Mini-ITX Form Factor, 170 mm x 170 mm
OS Support	Windows 7 / 10 Biostar reserves the right to add or remove support for any OS with or without notice.

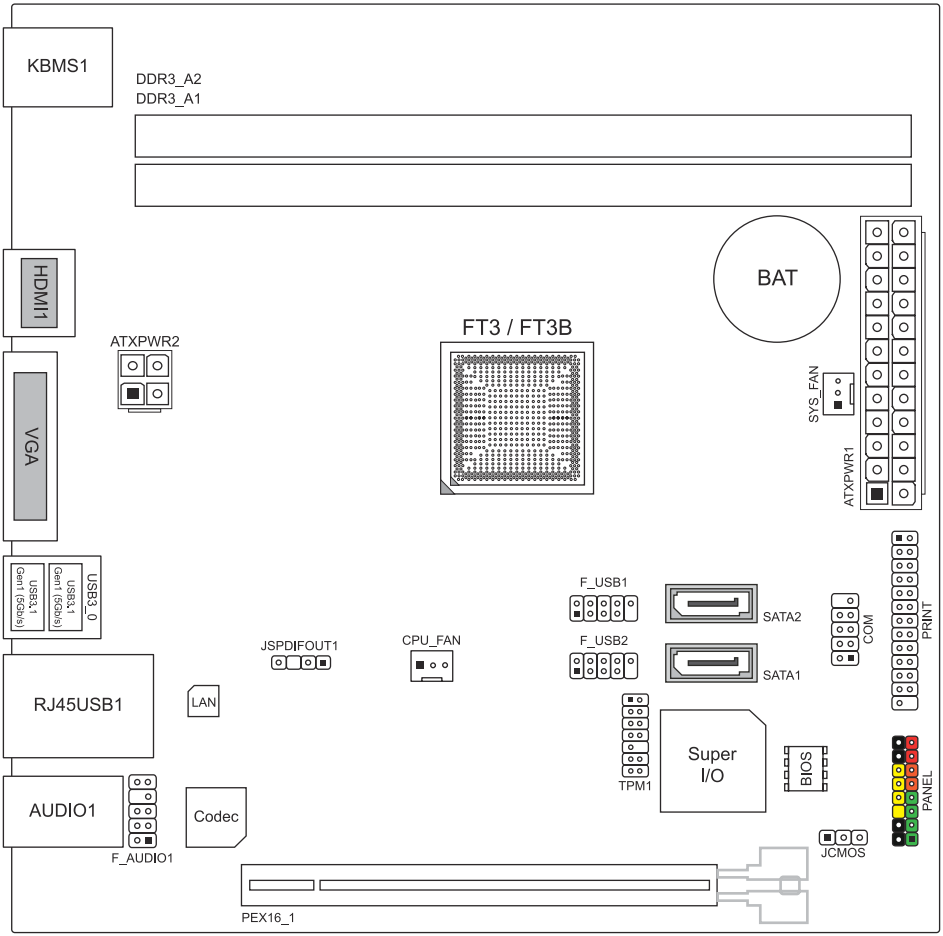
1.4 Rear Panel Connectors



Note

- *HDMI / VGA output require an AMD family processor with intedrated graphics.*
- *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.*
- *Maximum resolution*
  HDMI: 4096 x 2160 @24Hz, compliant with HDMI 1.4
  VGA: 1920 x 1200 @60Hz
- *When using the front HD audio jack and plug in the headset, the rear sound will be automatically Disabled.*

1.5 Motherboard Layout



Note

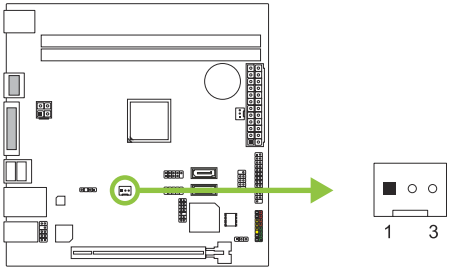
» ■ *represents the 1st pin.*

Chapter 2: Hardware installation

2.1 Connect Cooling Fans

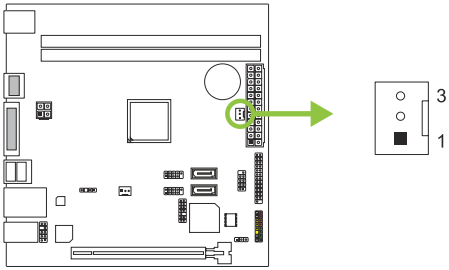
These fan headers support cooling-fans built in the computer. The fan cable and connector may be different according to the fan manufacturer.

CPU_FAN1: CPU Fan Header



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

SYS_FAN1: System Fan Header



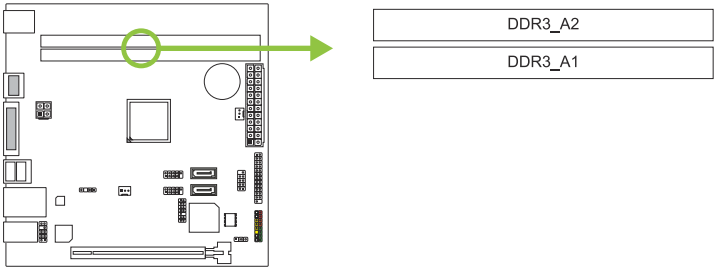
Pin	Assignment
1	Ground
2	Linear FAN Control
3	FAN RPM rate sense

Note

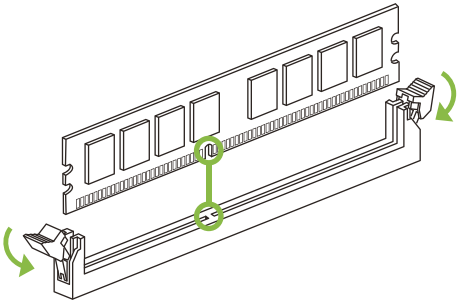
» *CPU_FAN1, SYS_FAN1 support 3-pin head connectors. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to pin#1(GND).*

2.2 Install System Memory

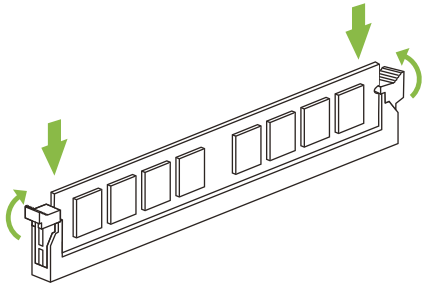
DDR3/ DDR3L Modules



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 clips 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.*

Memory Capacity

DIMM Socket Location	DDR3/ DDR3L Module	Total Memory Size
DDR3_A1	512MB/1GB/2GB/4GB/8GB	Max is 16GB.
DDR3_A2	512MB/1GB/2GB/4GB/8GB	

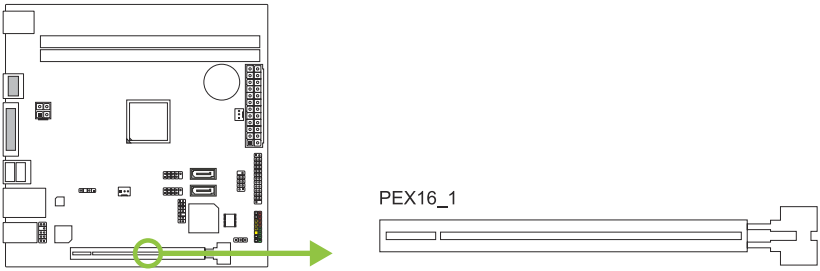
Note

» *When installing more than one memory module, we recommend to use the same brand and capacity memory on this motherboard.*

2.3 Expansion Slots

PEX16_1: PCI-Express Gen2 x16 Slot (x4 speed)

- PCI-Express 2.0 compliant.
- Theoretical maximum bandwidth using two slots simultaneously is 2GB/s for each slot, a total of 4GB/s.



Install an Expansion Card

You can install your expansion card by following steps:

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

2.4 Jumper & Switch 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”.

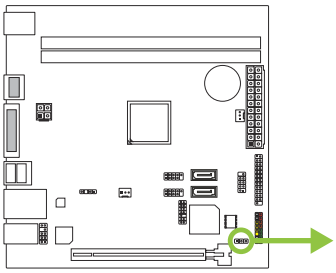
Pin opened

Pin closed

Pin 1-2 closed

JCMOS1: Clear CMOS Jumper

The jumper allows users 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.

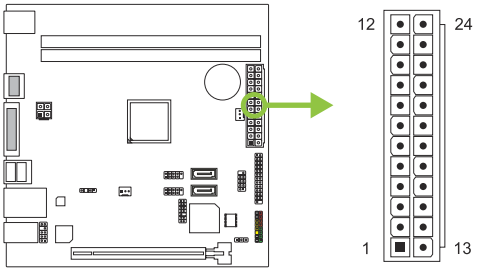
<u>Clear CMOS Procedures:</u>

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

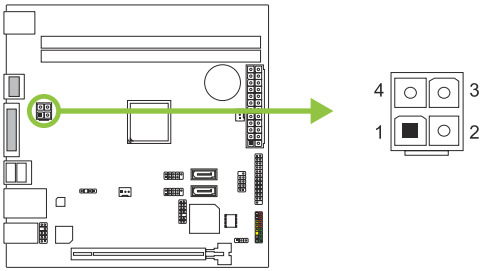
For better compatibility, we recommend to use a standard ATX 24-pin power supply for this connector. Make sure to find the correct orientation before plugging the connector.



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.



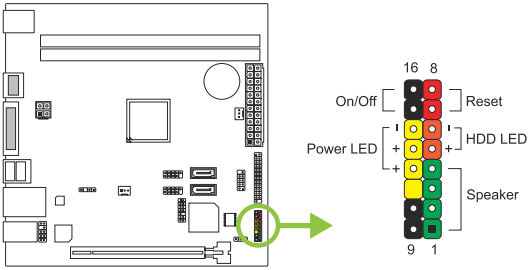
Pin	Assignment
1	+12V
2	+12V
3	Ground
4	Ground

Note

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

PANEL: Front Panel Header

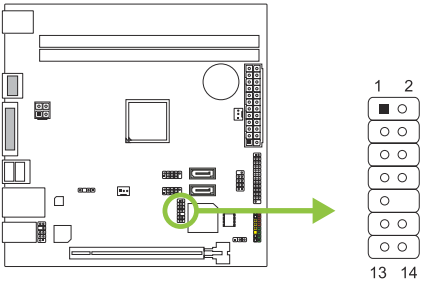
This 16-pin header includes Power-on, Reset, HDD LED, Power LED, and speaker connection.



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	

TPM1: Trusted Platform Module Header

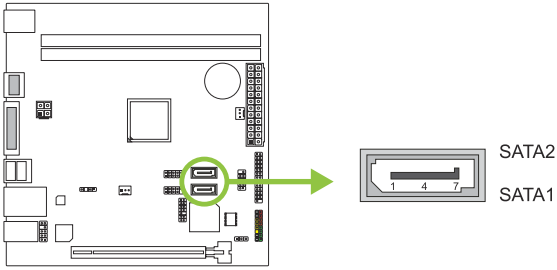
This header allows you to store cryptographic keys that protect information.



Pin	Assignment	Pin	Assignment
1	F_LAD0	2	+3V
3	F_LAD1	4	+3V
5	F_LAD2	6	C_PCICLK_TPM
7	F_LAD3	8	GND
9	F_FRAME#	10	NC
11	F_SERIRQ	12	S_PCIRST#_TBD
13	F_CLKRUN	14	+3VSB

SATA1/ 2: Serial ATA 6.0 Gb/s Connectors

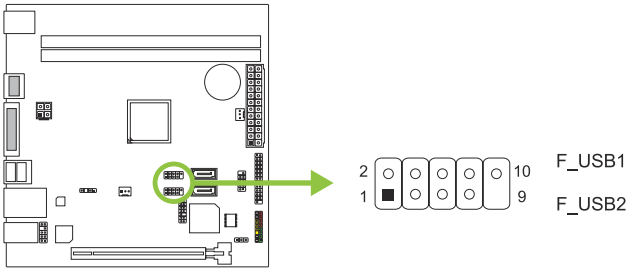
These connectors connect to SATA hard disk drives via SATA cables.



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

F_USB1/ 2: Header for USB 2.0 Ports at Front Panel

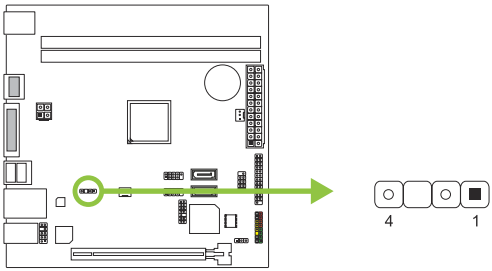
This header allows user to add additional USB ports on the PC front panel, and also can be connected with a wide range of external peripherals.



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

JSPDIFOUT1: Digital Audio-out Connector

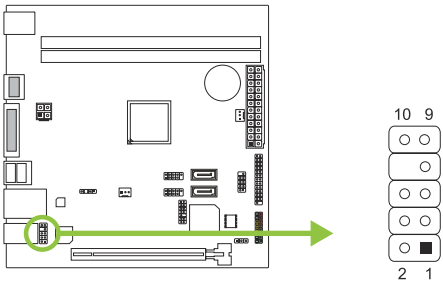
The connector is for connecting the S/PDIF output bracket.



Pin	Assignment
1	Ground
2	SPDIF_OUT
3	N/A
4	+5V

F_AUDIO1: Front Panel Audio Header

This header allows user to connect the chassis-mount front panel audio I/O which supports HD and AC'97 audio standards.



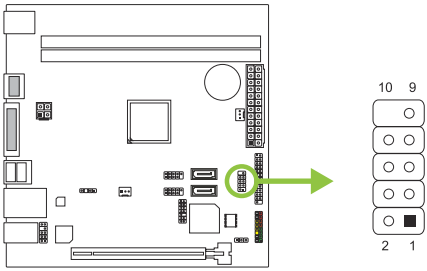
HD Audio		AC'97	
Pin	Assignment	Pin	Assignment
1	Mic Left in	1	Mic In
2	Ground	2	Ground
3	Mic Right in	3	Mic Power
4	GPIO	4	Audio Power
5	Right line in	5	RT Line Out
6	Jack Sense	6	RT Line Out
7	Ground	7	Reserved
8	Key	8	Key
9	Left line in	9	LFT Line Out
10	Jack Sense	10	LFT Line Out

Note

- *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.*
- *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.*

COM: Serial Port Connector

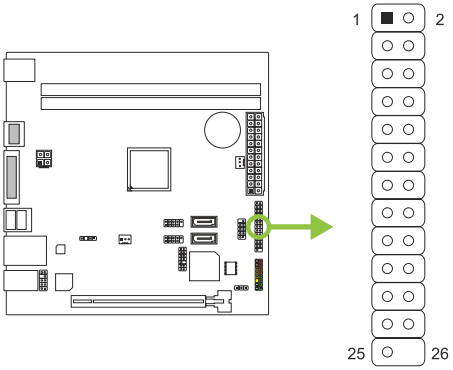
The motherboard has a serial port header for connecting RS-232 Port.



Pin	Assignment
1	Carrier detect
2	Received data
3	Transmitted data
4	Data terminal ready
5	Signal ground
6	Data set ready
7	Request to send
8	Clear to send
9	Ring indicator
10	Key

PRINT: 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

- The BIOS Setup program can be used to view and change the BIOS settings for the computer. The BIOS Setup program is accessed by pressing the <DEL> key after the Power-On Self-Test (POST) memory test begins and before the operating system boot begins.
- For further information of setting up the UEFI BIOS, please refer to the UEFI BIOS Manual on our website.

3.2 BIOS Update

The BIOS can be updated using either of the following utilities:

- BIOSTAR BIO-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.
- BIOSTAR BIOS 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 BIO-Flasher

Note

» *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.*

Updating BIOS with BIOSTAR BIO-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.(Only supported FAT/FAT32 format)
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 BIO-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.

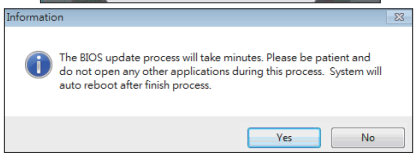
8. While the system boots up and the full screen logo shows up, press <DEL> key to enter BIOS setup.
After entering the BIOS setup, please go to the <Save & Exit>, using the <Restore Defaults> function to load Optimized Defaults, and select <Save Changes and Reset> to restart the computer. Then the BIOS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

BIOS Update Utility (through the Internet)

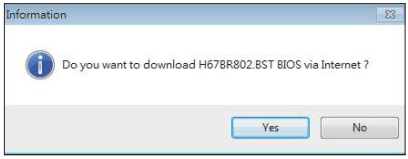
1. Installing BIOS Update Utility from the DVD Driver.
2. Please make sure the system is connected to the internet before using this function.

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

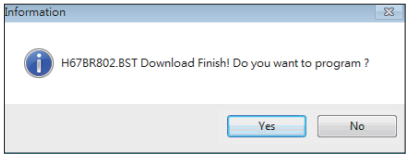
4. An open dialog will show up to request your agreement to start the BIOS update. Click “Yes” to start the online update procedure.



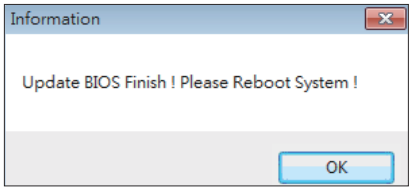
5. If there is a new BIOS version, the utility will ask you to download it. Click “Yes” to proceed.



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.



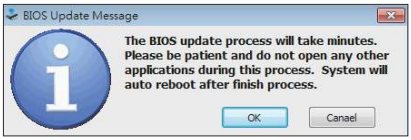
8. While the system boots up and the full screen logo shows up, press <DEL> key to enter BIOS setup.
After entering the BIOS setup, please go to the <Save & Exit>, using the <Restore Defaults> function to load Optimized Defaults, and select <Save Changes> and <Reset> to restart the computer. Then, the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

BIOS Update Utility (through a BIOS file)

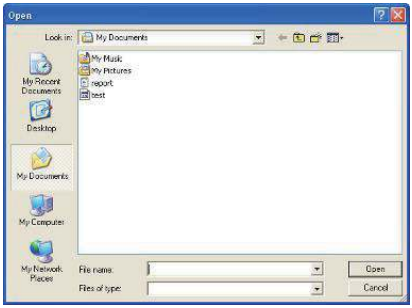
1. Installing BIOS Update Utility from the DVD Driver.
2. Download the proper BIOS from http://www.biostar.com.tw/

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

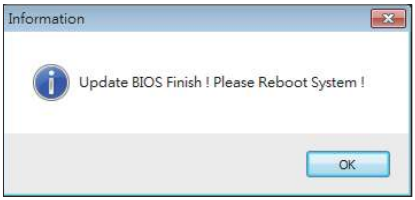
4. A warning message will show up to request your agreement to start the BIOS update. Click “OK” to start the update procedure.



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.



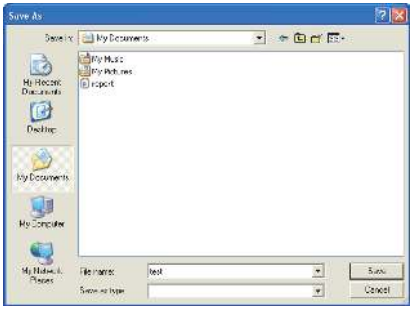
6. After the BIOS Update process is finished, click on “OK” to reboot the system.



7. While the system boots up and the full screen logo shows up, press <DEL> 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 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 Software

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

Note

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

» *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.*

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.

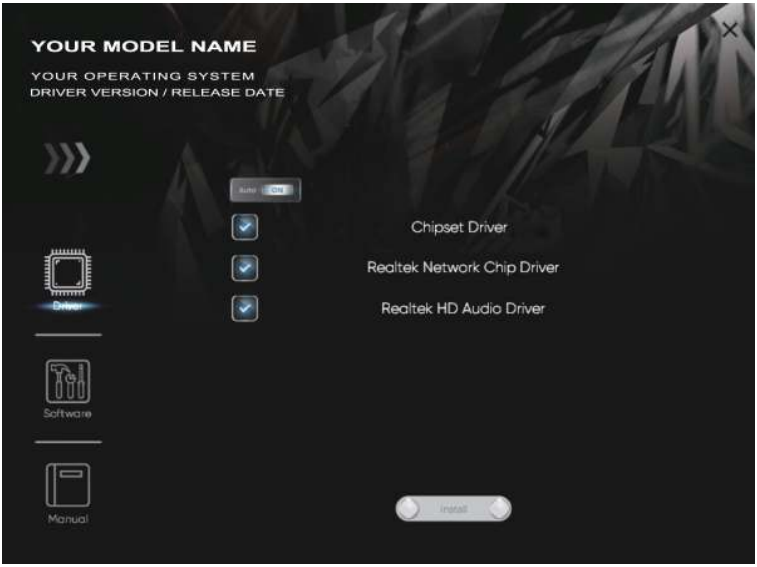
Please follow the step-by-step instructions below to update boot logo:

- 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.

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.

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

- *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.*
- *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/*
- *The motherboard used in the illustrations may not resemble the actual board. these illustrations are for reference only.*

4.2 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)

4.3 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.

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.

APPENDIX I: Specifications in Other Languages

Arabic

المواصفات	
قاعدة وحدة المعالجة المركزية	A68N-2100E : AMD® E1-2150 (9W ، 1.05 GHz Dual core) A68N-2100K : AMD® E1-6010 (10W ، 1.35 GHz Dual core) A68N-2100X : AMD® PRO A4-3350B (10W ، 1.2 GHz Quad core) A68N-5600E : AMD® PRO A4-3350B (15W ، 2.4 GHz ماكس يدعم ، 2.0 GHz Quad core)
الذاكرة	A68N-2100E : قناة واحدة وتدعم DDR3 & DDR3L 800/1066/1333 A68N-2100K : قناة واحدة وتدعم DDR3 & DDR3L 800/1066/1333 (1.25V) A68N-2100X : قناة واحدة وتدعم DDR3 & DDR3L 800/1066/1333 (1.25V)/ 1600 (1.35V) A68N-5600E : قناة واحدة وتدعم DDR3 800/1066/1333/1600 قناة واحدة وتدعم DDR3L 800/1066/1333 x2 دي. دي. ار. DDR3 و DDR3L فتحات الذاكرة المزدوجة DIMM، تتحمل كحد أقصى 16 جيجابايت ذاكرة كل فتحة مزدوجة DIMM تتحمل دون ECC 512 ميجا بايت /8/4/2/1 جيجابايت دي. دي. ار DDR3 و DDR3L * يرجى الرجوع إلى الموقعwww.biostar.com.tw لقائمة دعم الذاكرة.
التخزين	وصلة 2x ساتا SATA III (6Gb/s) : تـدعم AHCI
شبكة محلية LAN	ريبالتيك رت ل RTL 8111H, REALTEK 10 / 100 / 1000 ميجابايت / الثانية ، تحديد تلقائي ، النصف / القدرة القصوى المزدوجة
الترميز الصوتي	ALC887 7.1 قنوات عالية الدقة
ناقل متسلسل عام USB	منافذ x 2 ناقل متسلسل عام USB 3.1(Gen1) (2 في المداخل والمخارج الخلفية) منافذ x 6 ناقل متسلسل عام USB 2.0 (2 في المداخل والمخارج الخلفية و 4 من خلال الموزع الداخلي)
فتحات التوسع	1 x فتحة منفذ الملحقات الإضافية PCIe x2.0 16 (4x)
المداخل والمخارج الخلفية	1 x PS/2 الفارة 1 x PS/2 لوحة المفاتيح للكمبيوت فتحة توصيل عدد 1 x واجهة مرئية رقمية VGA فتحة توصيل عدد 1 x منظومة العرض المرئي HDMI فتحة لتوصيل عدد 1 x الشبكة المحلية LAN فتحة توصيل عدد 2 x ناقل متسلسل عام USB3.1 (Gen1) فتحة توصيل عدد 2 x ناقل متسلسل عام USB 2.0 فتحة توصيل عدد 3 x جاك للصوت
المداخل والمخارج الداخلية	وصلة 2 x SATA III 6 جيجابايت / الثانية موزع 2 x ناقل متسلسل عام USB 2.0 (كل موزع يتحمل فتحتين ناقل متسلسل عام USB 2.0) موصلة للطاقة 1 x 4 دبابيس وصلة للطاقة 1x 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 سيموس مباشر موزع 1 x فتحة تسلسلية موزع 1 x فتحة للطابعة الميـــــاء خارج 1X S / PDIF موزع 1 x TPM
عامل الشكل	عامل شكل مدد التكنولوجيا المتقدمة Mini-ITX ، 170 مم x 170 مم
أنظمة التشغيل المدعومة	ويندوز 7/ ويندوز 10 بيوستار BIOSTAR تحتفظ بحق إضافة أو أزلة الدعم لأي نظام تشغيل مع أو بدون أنظار.

German

Spezifikationen	
CPU-Unterstützung	A68N-2100E: AMD E1-2150 (Dual core 1.05 GHz, 9W) A68N-2100K: AMD E1-6010 (Dual core 1.35 GHz, 10W) A68N-2100X: AMD PRO A4-3350B (Quad Core 1.2 GHz, 10W) A68N-5600E: AMD PRO A4-3350B (Quad Core 2,0 GHz, max. Unterstützung bis 2,4 GHz, 15W)
Festplattenspeicher	A68N-2100E: Unterstützt single-channel DDR3 & DDR3L 800/1066/1333 A68N-2100K: Unterstützt single-channel DDR3 & DDR3L 800/1066/1333 (1.25V) A68N-2100X: Unterstützt single-channel DDR3 & DDR3L 800/1066/1333 (1.25V)/ 1600 (1.35V) A68N-5600E: Unterstützt single-channel DDR3 800/1066/1333/1600 Unterstützt single-channel DDR3L 800/1066/1333
	2 x DDR3 & DDR3L DIMM-SpeicherSlot, Max. Uterstützung bis zu 16 GB-Speicher Jedes DIMM unterstützt nicht-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 & DDR3L-Module * Bitte konsultieren Sie www.biostar.com.tw für für Speicherunterstützung Liste.
Arbeitsspeicher	2x SATA III 6Gb-Verbindung : Unterstützt AHCI
LAN	Realtek RTL 8111H 10/ 100/ 1000 Mb Auto-Negotiation, Halb- / Voll-Duplex-fähig
Audio-Codec	ALC887 7.1 Kanäle, HD-Audio
USB	2x USB 3.1(Gen1)-Port (2 hintere I/Os) 6x USB 2.0-Port (2 hintere I/Os und 4 via interne Header)
Erweiterungsanschlüsse	1x PCIe 2.0 x16-Slot (x4)
Hintere I/Os	1x PS/2-Maus 1x PS/2-Keyboard 1x VGA-Port 1x HDMI-Port 1x LAN-Port 2x USB 3.1(Gen1)-Port 2x USB 2.0-Port 3x Audio Jack
Interne I/Os	2x SATA III 6.0Gb/s-Verbinung 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 Serieller Port-Header 1x Header für Druckerport 1x S/PDIF-Auswurfsverbindung 1x TPM-Header
Formfaktor	Mini-ITX Formfaktor, 170 mm x 170 mm
OS-Unterstützung	Windows 7/ 10 Biostar reserves the right to add or remove support for any OS with or without notice

Russian

Спецификации	
Поддержка центрального процессора	A68N-2100E: AMD® E1-2150 (Dual core 1.05 GHz, 9W) A68N-2100K: AMD® E1-6010 (Dual core 1.35 GHz, 10W) A68N-2100X: AMD® PRO A4-3350B (Quad core 1.2 GHz, 10W) A68N-5600E: AMD® PRO A4-3350B (Quad core 2.0 GHz, максимальная поддержка 2.4 GHz, 15W)
Память	A68N-2100E: Поддерживает Одноканальный DDR3 & DDR3L 800/1066/1333 A68N-2100K: Поддерживает Одноканальный DDR3 & DDR3L 800/1066/1333 (1.25V) A68N-2100X: Поддерживает Одноканальный DDR3 & DDR3L 800/1066/1333 (1.25V)/ 1600 (1.35V) A68N-5600E: Поддерживает Одноканальный DDR3 800/1066/1333/1600 Поддерживает Одноканальный DDR3L 800/1066/1333
	2 гнезда платы памяти DDR3 и DDR3L DIMM, максимальная память до 16 Гб Каждый модуль DIMM поддерживает модуль не-ECC 512мб/ 1/ 2/ 4/ 8 Гб DDR3 и DDR3L * Перечень поддержки памяти смотрите на www.biostar.com.tw.
Накопитель	Соединитель 2x SATA III 6 Гб/с : Поддерживает AHCI
Локальная сеть	Realtek RTL 8111H Автосогласование 10/ 100/ 1000 Мб/с, работает в полно/полудуплексном режиме
Аудиокодек	ALC887 Каналы 7.1, высококачественное аудио
USB	2 порта USB 3.1(Gen1) (2 сзади ввода-вывода) 6 портов USB 2.0 (2 сзади ввода-вывода и 4 через внутренние контакты)
Гнезда расшир.	1x PCIe 2.0 x16 гнездо (x4)
Задняя плата ввода-вывода	1 мышь PS/2 1 клавиатура PS/2 1 порт VGA 1 порт HDMI 1 порт локальной сети 2 порта USB 3.1(Gen1) 2 порта USB 2.0 3 гнезд для подключения наушников
Внутр. Плата ввода-вывода	Соединитель 2x SATA III 6Гб/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 последовательного порта 1 контакт порта принтера 1 соединитель S/PDIF-Out 1 контакт TPM
Конструктив	Форм-фактор Mini-ITX, 170 мм x 170 мм
Поддержка ОС	Windows 7/ 10 Biostar оставляет за собой право добавлять или удалять поддержку любой ОС, с уведомлением или без.

Spanish

Especificaciones	
Compatibilidad con el procesador	A68N-2100E: AMD® E1-2150 (Dual core 1.05 GHz, 9W) A68N-2100K: AMD® E1-6010 (Dual core 1.35 GHz, 10W) A68N-2100X: AMD® PRO A4-3350B (Quad Core 1.2 GHz, 10W) A68N-5600E: AMD® PRO A4-3350B (Quad Core 2.0 GHz, soporta máx. Hasta 2.4 GHz, 15W)
Memoria	A68N-2100E: Soporta DDR3 & DDR3L 800/1066/1333 monocanal A68N-2100K: Soporta DDR3 & DDR3L 800/1066/1333 (1.25V) monocanal A68N-2100X: Soporta DDR3 & DDR3L 800/1066/1333 (1.25V)/ 1600 (1.35V) monocanal A68N-5600E: Soporta DDR3 800/1066/1333/1600 monocanal Soporta DDR3L 800/1066/1333 monocanal
	2x DDR3 y DDR3L DIMM Ranura de memoria Soporta hasta 16 GB Memoria Cada DIMM soporta un modulo non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 y DDR3L *Por favor consultar con www.biostar.com.tw para la lista de compatibilidad con el memoria.
Almacenamiento de información	Conector 2x SATA III (6Gb/s) : Soporta AHCI
LAN	Realtek RTL 8111H 10/ 100/ 1000 Mb/s auto negociación, capacidad dúplex Mitad/Completo
Códec Audio	ALC887 Canales Audio de Alta Definición 7.1
USB	Ranura 2x USB 3.1(Gen1) (2 en las entrada/salidas posteriores) Ranura 6x USB 2.0 (2 en las entradas/salidas posteriores y 4 por los distribuidores internos)
Ranuras de Extinción	Ranura 1x PCIe 2.0 x16 (x4)
Panel trasero de E/S	Ratón 1x PS/2 Teclado 1x PS/2 Ranura 1x VGA Ranura 1x HDMI Ranura 1x LAN Ranura 2x USB 3.1(Gen1) Ranura 2x USB 2.0 Socket audio 3x
Conectores en placa	Conector 2x SATA III 6Gb'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 Serie x1 Distribuidor Ranura Impresora x1 Conector Externo S/PDIF x1 Distribuidor TPM x1
Factor de Forma	Factor de Forma Mini-ITX, 170 mm x 170 mm
Soporte OS	Windows 7/ 10 Biostar reserva su derecho de añadir o retirar el soporte para cada OS con o sin notificación.

Thai

คุณสมบัติ	
ซีพียู	A68N-2100E: AMD® E1-2150 (Dual core 1.05 GHz, 9W) A68N-2100K: AMD® E1-6010 (Dual core 1.35 GHz, 10W) A68N-2100X: AMD® PRO A4-3350B (Quad core 1.2 GHz, 10W) A68N-5600E: AMD® PRO A4-3350B (Quad core 2.0 GHz, สูงสุดถึง 2.4 GHz, 15W)
หน่วยความจำ	A68N-2100E: สนับสนุน Single Channel DDR3 & DDR3L 800/1066/1333 A68N-2100K: สนับสนุน Single Channel DDR3 & DDR3L 800/1066/1333 (1.25V) A68N-2100X: สนับสนุน Single Channel DDR3 & DDR3L 800/1066/1333 (1.25V)/ 1600 (1.35V) A68N-5600E: สนับสนุน Single Channel DDR3 800/1066/1333/1600 สนับสนุน Single Channel DDR3L 800/1066/1333
	รองรับหน่วยความจำ 2 สล็อต DDR3 & DDR3L DIMM สูงสุดถึง 16 GB ทุก DIMM สนับสนุนโมดูล non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 & DDR3L * เข้าชมได้ที่ www.biostar.com.tw สำหรับรายการหน่วยความจำที่สนับสนุน
สตอเรจ	2x SATA III พอร์ตเชื่อมต่อ (6Gb/s) : สนับสนุน AHCI
แลน	Realtek RTL 8111H 10/ 100/ 1000 Mb/s การเจรจาอัตโนมัติ, ความสามารถในการเพล็กซ์ Half / Full
ออดิโอ โคเดก	ALC887 7.1 Channels, High Definition Audio
ยูเอสบี	2x USB 3.1(Gen1) พอร์ต (2 พอร์ตด้านหลัง I/O) 6x USB 2.0 พอร์ต (2 พอร์ตด้านหลัง I/O และ 4 พอร์ต ผ่านพอร์ตเชื่อมต่อภายใน)
สล็อตขยายเพิ่มเติม	1x PCIe 2.0 x16 สล็อต (x4)
พอร์ต I/O ด้านหลัง	1x PS/2 เมาส์ 1x PS/2 คีย์บอร์ด 1x VGA พอร์ต 1x HDMI พอร์ต 1x LAN พอร์ต 2x USB 3.1(Gen1) พอร์ต 2x USB 2.0 พอร์ต 3x Audio Jack
พอร์ต I/O ด้านใน	2x SATA III 6Gb/s พอร์ตเชื่อมต่อ 2x USB 2.0 พอร์ตเชื่อมต่อ (หัวเชื่อมต่อทุกตัวรองรับ 2 พอร์ต USB 2.0) 1x 4-Pin Power พอร์ตเชื่อมต่อ 1x 24-Pin Power พอร์ตเชื่อมต่อ 1x พอร์ตเชื่อมต่อ CPU Fan 1x พอร์ตเชื่อมต่อระบบ Fan 1x พอร์ตเชื่อมแต่แผงด้านหน้า 1x พอร์ตเชื่อมต่อออดิโอด้านหน้า 1x พอร์ต Clear CMOS 1x พอร์ตเชื่อมต่อ Serial Port 1x พอร์ตเชื่อมต่อปริ้นเตอร์ 1x พอร์ตเชื่อมต่อออก S/PDIF 1x พอร์ตเชื่อมต่อ TPM
รูปแบบจากโรงงาน	ขนาน Mini-ITX จากโรงงาน, 170มม. x 170มม.
สนับสนุน OS	Windows 7/ 10 Biostar ขอสงวนสิทธิ์ในการเพิ่มหรือถอดการสนับสนุนสำหรับระบบปฏิบัติการ OS ต่างๆ โดยไม่ต้องแจ้งให้ทราบล่วงหน้า

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FCC条款

依照FCC条款第15部分的规定，本装置已经通过测试并且符合Class B级数字装置的限制。此条款限制了在安装过程中可能造成的有害射频干扰并提供了合理的防范措施。本装置在使用时会产生无线射频辐射，如果没有依照本手册的指示安装和使用，可能会与无线通讯装置产生干扰。然而，并不保证在特定的安装下不会发生任何干扰。

如果关闭和重新开启本设备后，仍确定本装置造成接收广播或电视的干扰，用户可以使用以下列表中的一种或多种方法来减少干扰：

- 重新安装或调整接收天线。
- 增加本设备与接收设备之间的距离。
- 连接设备连接到不同的插座以便于两个设备使用不同的回路。
- 咨询经销商或富有经验的无线电工程师，以获得更多资讯。

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我们声明此产品符合现行标准，并满足2004/108/CE，2006/95/CE 和1999/05/CE指令规定的所有基本要求。

防静电操作规则

静电可能严重损坏您的设备，在处理主板以及其它的系统设备的时候要特别注意，避免和主板上的系统组件的不必要接触，保证在抗静电的环境下工作，避免静电放电可能对主板造成损坏，当在您的机箱中插入或者移除设备时，请保证电源处于断开状态，厂商对于不遵照本操作规则或者不遵守安全规范而对主板造成的损坏不负责。

警告

主板易受静电损坏

请遵守操作规则

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第一章: 主板介绍

1.1 前言

感谢您选购我们的产品，在开始安装主板前，请仔细阅读以下安全指导说明：

- 选择清洁稳定的工作环境。
- 操作前请确保计算机断开电源。
- 从抗静电袋取出主板之前，先轻触安全触地器或使用触地手腕带去除静电以确保安全。
- 避免触摸主板上的零件。手持电路板的边缘，不要折曲或按压电路板。
- 安装之后，确认没有任何小零件置于机箱中，一些小的零件可能引起电流短路并可能损坏设备。
- 确保计算机远离危险区域，如：高温、潮湿、靠近水源的地方。
- 计算机的工作温度应保持在0-45℃之间
- 为避免受伤，请注意以下幾點：
  主板或連接器上尖銳的針腳
  机箱上的粗糙边缘和尖角
  破损的线缆可能引起短路

1.2 包装清单

- Serial ATA数据线 x2
- ATX机箱后置I/O面板 x1
- 安装指南 x1
- 驱动光盘 x1 (包括安装驱动)

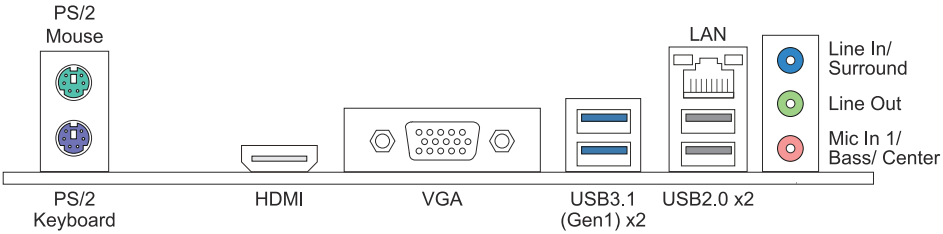
注意

» 此清单可能因销售区域或主板型号不同而异，相关标配详情请咨询当地经销商。

1.3 主板特性

规格	
CPU支援	A68N-2100E: AMD® E1-2150 (Dual core 1.05 GHz, 9W) A68N-2100K: AMD® E1-6010 (Dual core 1.35 GHz, 10W) A68N-2100X: AMD® PRO A4-3350B (Quad core 1.2 GHz, 10W) A68N-5600E: AMD® PRO A4-3350B (Quad core 2.0 GHz, 最大速度为2.4 GHz, 15W)
内存	A68N-2100E: 支持单通道DDR3 & DDR3L 800/1066/1333 A68N-2100K: 支持单通道DDR3 & DDR3L 800/1066/1333 (1.25V) A68N-2100X: 支持单通道DDR3 & DDR3L 800/1066/1333 (1.25V)/ 1600 (1.35V) A68N-5600E: 支持单通道DDR3 800/1066/1333/1600 支持单通道DDR3L 800/1066/1333
	2个DDR3和DDR3L DIMM插槽，最大内存容量为16GB 每个DIMM支持非ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3和DDR3L内存模组 * 请访问 www.biostar.com.tw 获取内存的支持列表
存储器	2个SATA III接口 (6Gb/s) : 支持AHCI
网络	Realtek RTL 8111H 10/ 100/ 1000 Mb/s自适应传输模式，半双工/全双工工作模式
音效	ALC887 8声道音频输出，支持高清音频
USB	2个USB 3.1(Gen1)端口(背板2个端口) 6个USB 2.0端口(背板2个端口，板载接头支持4个端口)
扩展槽	1个PCIe 2.0 x16插槽 (x4)
背板接口	1个PS/2鼠标接口 1个PS/2键盘接口 1个VGA端口 1个HDMI端口 1个LAN端口 2个USB3.1(Gen1)端口 2个USB2.0端口 3个音频插孔
板载接口	2个SATA III接口(6Gb/s) 2个USB2.0接头(每个接头支持2个USB2.0端口) 1个电源接口(4针) 1个电源接口(24针) 1个CPU风扇接头 1个系统风扇接头 1个前置面板接头 1个前置音频接头 1个清空CMOS数据接头 1个串行端口接头 1个打印机端口 1个S/PDIF输出接头 1个TPM接头
主板尺寸	Mini-ITX Form Factor，170 mm x 170 mm
操作系统支持	Windows 7/ 10 * 如有增加或减少任何OS支持，Biostar保留不预先通知的权利。

1.4 后置面板接口



注意

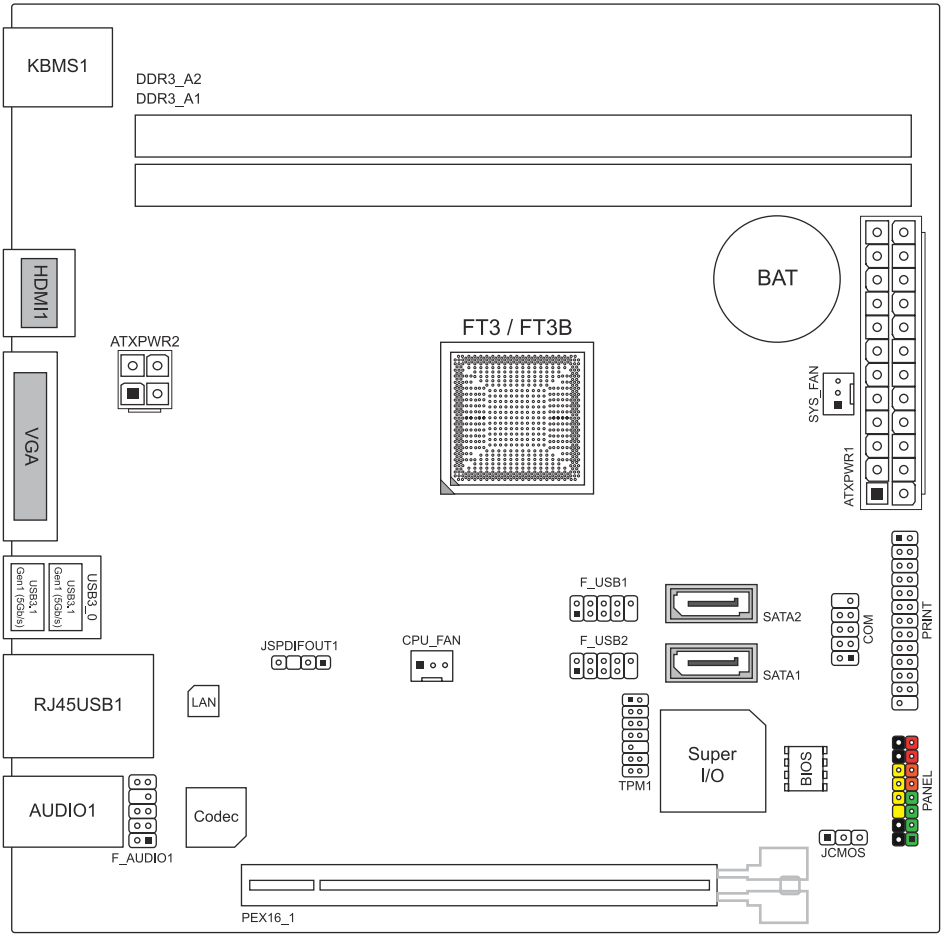
» 仅AMD集成显卡处理器支持HDMI和VGA端口。

» 由于音频芯片支持高保真音频规格，各音频插座的功能由软件定义。上面所列出的各音频插孔的输入/输出功能表示其默认设置。当连接外部麦克风到音频接口时，请使用Line In（蓝色）和Mic In（粉红色）插孔。

» 最高分辨率：
HDMI: 4096 x 2160 @24Hz，符合HDMI 1.4规范
VGA: 1920 x 1200 @60Hz

» 当使用前置HD音频插孔并插入耳机/麦克风时，后置声音将自动禁用。

1.5 主板布局图



注意

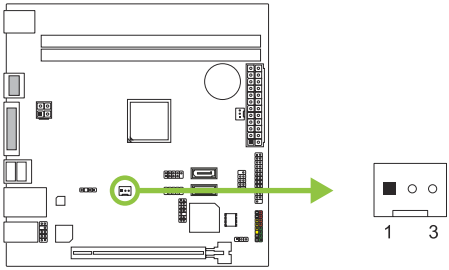
» ■ 标示为针脚1

第二章: 硬件安装

2.1 风扇接头

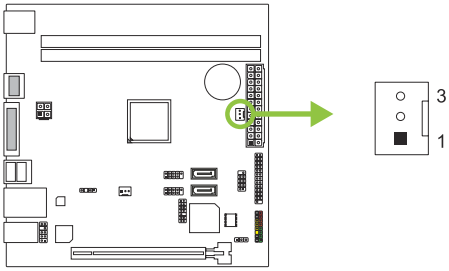
此风扇接头支持电脑内置的冷却风扇，风扇引线和插头可能因制造商而异。

CPU_FAN1: CPU 风扇接头



针	定义
1	接地
2	+12V
3	FAN RPM rate sense

SYS_FAN1: 系统风扇接头



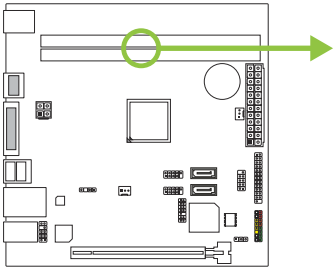
针	定义
1	接地
2	Linear FAN Control
3	FAN RPM rate sense

注意

» CPU_FAN1、SYS_FAN1支持3针脚接口；接线时请注意红线是正极需接到第二个针脚，黑线接地需接到GND针脚。

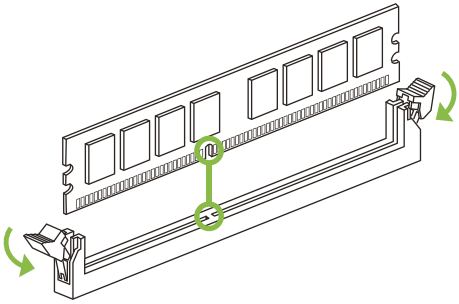
2.2 系统内存

DDR3/ DDR3L内存模组

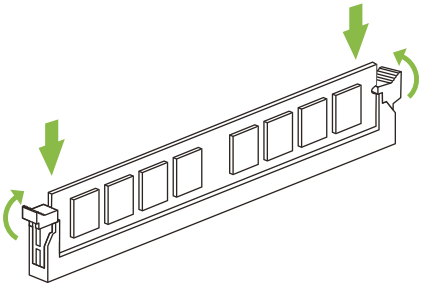


DDR3_A2
DDR3_A1

步骤1: 向外推开固定夹，打开DIMM插槽。将DIMM按顺序放在插槽上， DIMM上的切口须与插槽凹口匹配。



步骤2: 垂直插入DIMM并固定好，直到固定夹跳回原位，DIMM就位。



注意

» 如果DIMM未顺利插入，请勿强行按压。将DIMM拔出，再重插一次。

内存容量

DIMM插槽位置	DDR3/ DDR3L模组	总内存
DDR3_A1	512MB/1GB/2GB/4GB/8GB	最大为 16GB.
DDR3_A2	512MB/1GB/2GB/4GB/8GB	

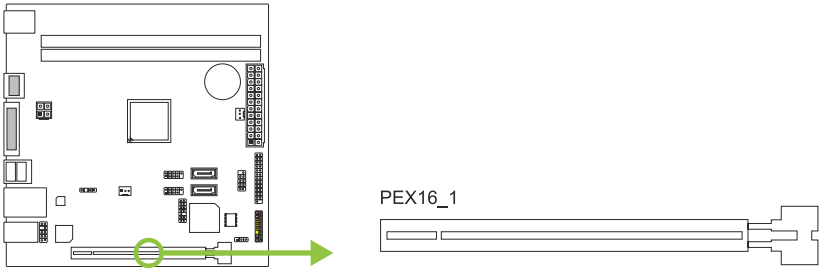
注意

» 当安装多个内存模块時，我们建议使用相同品牌和容量的内存於主板上。

2.3 扩展槽

PEX16_1: PCI-Express Gen2 x16 插槽(x4 模式)

- 符合PCI-Express 2.0规范。
- 同步单向最大理论带宽为2GB/s，总带宽为4GB/s。



安装扩展卡

请参照以下步骤安装扩展卡：

- 安装扩展卡前请阅读扩展卡的相关指示说明。
- 打开电脑机箱后盖，移除螺丝和插槽支架。
- 将扩展卡按照正确的方向插入插槽，直到扩展卡完全就位。
- 用螺丝将扩展卡的金属支架固定到机箱后置面板。
- 还原电脑机箱后盖。
- 开机。如有必要，可为扩展卡更改BIOS设置。
- 安装扩展卡的驱动。

2.4 跳线设置

下图展示如何设置跳线。当跳帽放置在针脚上时，跳线为闭合(close)状态。否则跳线为断开(open)状态。

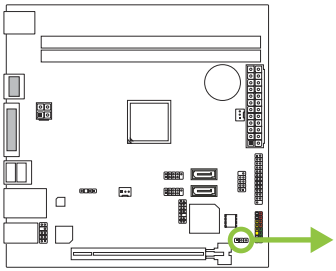
Pin 打开

Pin 闭合

Pin 1-2 闭合

JCMOS1: 清空CMOS 跳线

用户可清空CMOS数据并恢复BIOS安全设置，请按照以下步骤操作以免损坏主板。



Pin 1-2 闭合: 正常操作(默认)

Pin 2-3 闭合: 清空CMOS数据

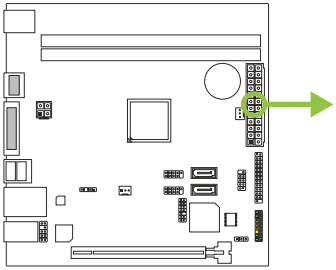
清空CMOS数据过程:

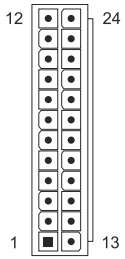
1. 断开AC电源。
2. 将跳线设置成2-3接脚闭合。
3. 等待5秒钟。
4. 将跳线设置成1-2接脚闭合。
5. 接通AC电源。
6. 开机然后按下<Del>键进入BIOS设置。

2.5 接口和插槽

ATXPWR1: ATX电源接口

为了更好的兼容性，我们建议使用标准的ATX24-pin电源供应此接口的电源。

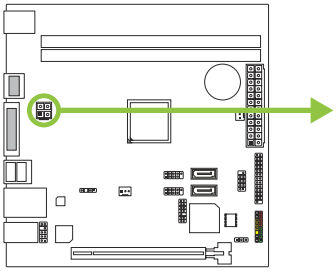


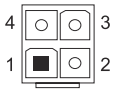


针	定义	针	定义
13	+3.3V	1	+3.3V
14	-12V	2	+3.3V
15	接地	3	接地
16	PS_ON	4	+5V
17	接地	5	接地
18	接地	6	+5V
19	接地	7	接地
20	NC	8	PW_OK
21	+5V	9	唤醒电压+5V
22	+5V	10	+12V
23	+5V	11	+12V
24	接地	12	+3.3V

ATXPWR2: ATX电源接口

此接口给CPU电路提供+12V电压。





针	定义
1	+12V
2	+12V
3	接地
4	接地

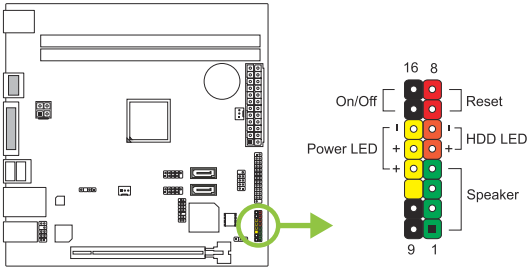
注意

» 开机前，请确保ATXPWR1和ATXPWR2接口都已插上电源。

» 电压不足可能导致系统不稳或者外围设备不能正常运行。当配置使用大功率设备的系统时，建议您使用带有大功率输出的电源。

PANEL: 前置面板接头

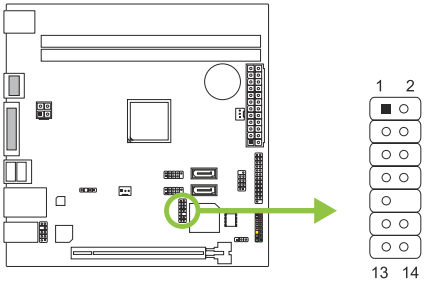
此16针脚接口包含开机，重启，硬盘指示灯，电源指示灯和扬声器接口。



针	定义	功能	针	定义	功能
1	+5V	扬声器接口	9	N/A	N/A
2	N/A		10	N/A	
3	N/A		11	N/A	N/A
4	扬声器		12	Power LED (+)	电源指示灯
5	HDD LED (+)	硬盘指示灯	13	Power LED (+)	
6	HDD LED (-)		14	Power LED (-)	
7	接地	重启按钮	15	电源按钮	开机按钮
8	Reset control		16	接地	

TPM1: TPM接头

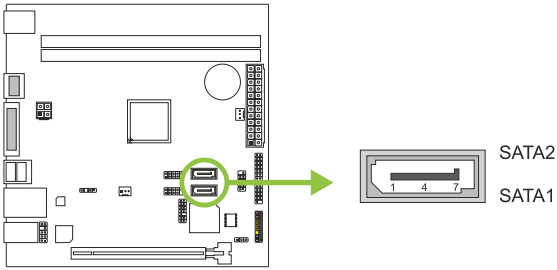
此接头可连接可信任安全平台模组系统，可用来储存金钥、认证与资料，并增加网路安全性。



针	定义	针	定义
1	F_LAD0	2	+3V
3	F_LAD1	4	+3V
5	F_LAD2	6	C_PCICLK_TPM
7	F_LAD3	8	GND
9	F_FRAME#	10	NC
11	F_SERIRQ	12	S_PCIRST#_TBD
13	F_CLKRUN	14	+3VSB

SATA1/2: 串行ATA 6.0 Gb/s 接口

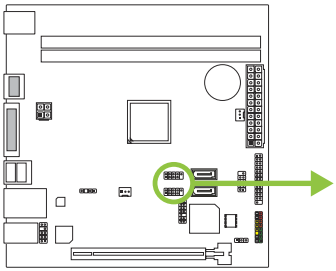
此接口通过SATA数据线连接SATA硬盘。

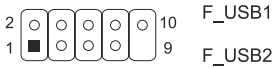


针	定义
1	接地
2	TX+
3	TX-
4	接地
5	RX-
6	RX+
7	接地

F_USB1/2: 前置面板USB 2.0接头

PC前置面板支持附加的USB数据线，也可连接即插即用外围设备。

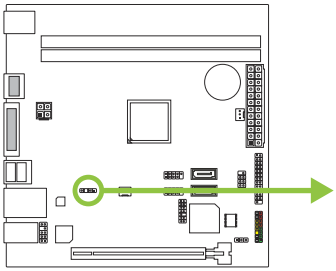




针	定义
1	+5V (fused)
2	+5V (fused)
3	USB-
4	USB-
5	USB+
6	USB+
7	接地
8	接地
9	Key
10	NC

JSPDIFOUT1: 数字音频输出接口

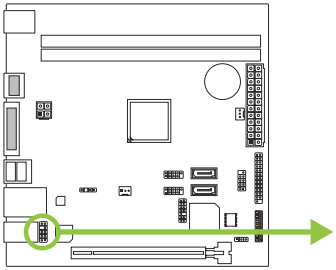
此接口连接PCI支架SPDIF输出接头。

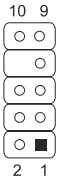


针	定义
1	接地
2	SPDIF_OUT
3	N/A
4	+5V

F_AUDIO1: 前置面板音频接头

此接头可连接音频输出数据线，支持HD(高清)音频和AC’97。





HD Audio		AC’97	
针	定义	针	定义
1	Mic Left in	1	Mic In
2	接地	2	接地
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

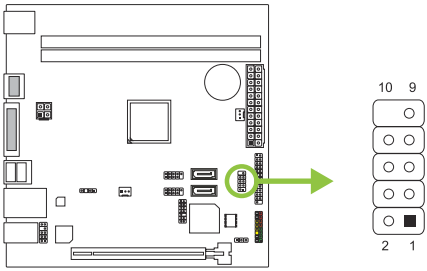
注意

» 建议您连接前置高清音频插孔，享用主板高清音频功能。

» 如果要连接AC’97前置音频输出数据线，请关闭”前置面板插孔检测功能”。此功能在系统音频工具中可见。

COM: 串行端口

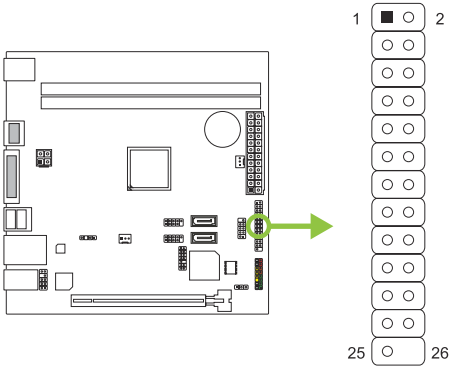
此主板有一个串行端口可接出RS-232接头。



针	定义
1	Carrier detect
2	Received data
3	Transmitted data
4	Data terminal ready
5	Signal ground
6	Data set ready
7	Request to send
8	Clear to send
9	Ring indicator
10	Key

PRINT: 打印机端口

此接头可连接打印机端口。



HD Audio		AC’ 97	
针	定义	针	定义
1	-Strobe	14	接地
2	-ALF	15	Data 6
3	Data 0	16	接地
4	-Error	17	Data 7
5	Data 1	18	接地
6	-Lnit	19	-ACK
7	Data 2	20	接地
8	-Scltin	21	Busy
9	Data 3	22	接地
10	接地	23	PE
11	Data 4	24	接地
12	接地	25	SCLT
13	Data 5	26	Key

第三章: UEFI BIOS和软件

3.1 UEFI BIOS设置

- BIOS设置程序可用于查看和更改计算机的BIOS设置。开机自检时，按<DEL>键可进入BIOS设置程序。
- 更多相关UEFI BIOS设置信息，请参考网站上的UEFI BIOS手册。

3.2 刷新BIOS

以下任意一种工具都可以刷新BIOS:

- BIOSTAR BIO-Flasher: 使用此工具，BIOS可通过硬盘上的文件刷新，USB驱动刷新，或者CD-ROM 刷新。
- BIOSTAR BIOS刷新工具: 能够在Windows 环境下自动刷新。使用此工具，BIOS可通过硬盘上的文件刷新， USB驱动刷新，CD-ROM 刷新或者从网站上的文件地址刷新。

BIOSTAR BIO-Flasher

注意

» 此工具仅允许可使用FAT32/16格式化或单个分区的存储设备。
» 刷新BIOS时如关机或重启系统将导致系统引导失败。

使用BIOSTAR BIO-Flasher刷新BIOS

1. 进入网站下载与主板相匹配的最新BIOS文件。
2. 然后保存BIOS文件到U-盘。(仅支持FAT/FAT32格式)
3. 插入包含BIOS文件的U-盘到USB接口
4. 开机或重启后，在自检过程中按<F12>键。.

5. 进入自检后，屏幕会弹出BIO-FLASHER工具。选择<fs0>搜索BIOS文件。

6. 选择合适的BIOS文件，并按” Yes” 执行BIOS刷新程序。

7. BIOS刷新后会弹出是否重启系统的对话框。按<Y>重启系统

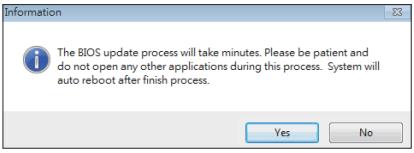
8. 系统引导并出现相关标识信息时，按<DEL>键进入BIOS设置。
选择<Save & Exit>，使用<Restore Defaults>功能加载系统默认值，然后选择<Save Changes and Reset>来重启系统，完成BIOS刷新。

BIOS刷新工具（通过网络）

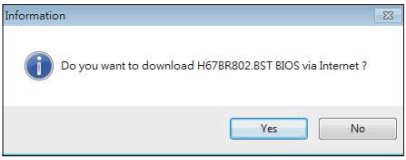
1. 用DVD驱动安装BIOS Update Utility。
2. 使用此功能时，请确保电脑联网。

3. 打开BIOS刷新工具，然后点击”Online Update”按钮。

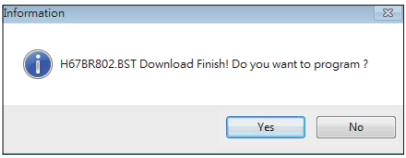
4. 屏幕弹出是否执行刷新BIOS程序的对话请求，点击”Yes”开始刷新BIOS。



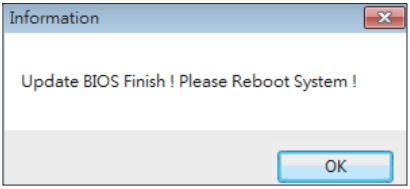
5. 如果BIOS有新版本，屏幕会弹出提示您下载最新版本的对话框。点击”Yes”下载。



6. 完成下载后，屏幕弹出提示您刷新BIOS的对话框，点击”Yes”开始刷新。



7. 刷新程序结束后，屏幕弹出提示您重启系统的对话框。点击”OK”重启系统。



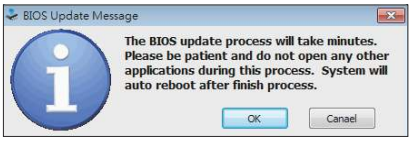
8. 系统引导并出现相关标识信息时，按<DEL>键进入BIOS设置。
选择<Save & Exit>，使用<Restore Defaults>功能加载系统默认值，然后选择<Save Changes and Reset>来重启系统，完成BIOS刷新。

BIOS刷新工具（通过BIOS文件）

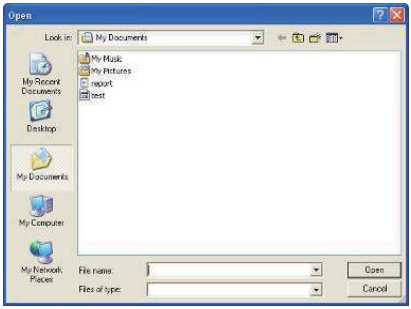
1. 用DVD驱动安装BIOS刷新工具。
2. 从我们的网站www.biostar.com.tw 下载合适的BIOS.

3. 在主页面打开BIOS Updat Utility，然后点击”Update BIOS”按钮。

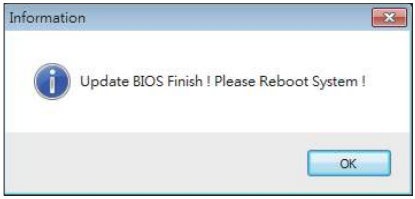
4. 屏幕弹出是否执行刷新BIOS程序的对话请求，点击”OK”开始刷新BIOS。



5. 选择BIOS文件的存放目录。然后选择合适的BIOS文件，点击”Open”。
刷新BIOS要花几分钟时间，请耐心等待。



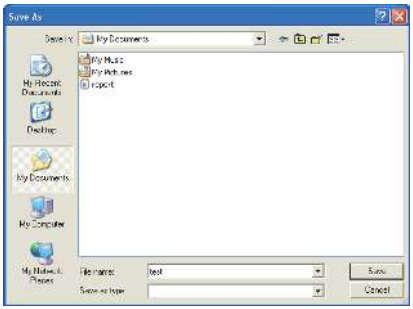
6. BIOS刷新过程结束后，点击”OK”重启系统。



7. 系统引导并出现相关标识信息时，按<DEL>键进入BIOS设置。
选择<Save & Exit>，使用<Restore Defaults>功能加载系统默认值，然后选择<Save Changes and Reset>来重启系统，完成BIOS刷新。

BIOS备份

点击BIOS备份按钮，选择存储备份文件的合适目录，然后点击”Save”。



3.3 软件

安装软件

1. 将光盘放入光驱，若Autorun功能已激活，驱动安装程序将会出现。
2. 选择Software Installation，然后点击各软件图标。
3. 根据屏幕上的指令完成安装。

启动软件

安装程序完成后，桌面上将出现软件图标。请双击图标启动软件工具。

注意

» 所有软件的相关信息和内容若有变更，恕不另行通知。为使系统性能更佳，软件会不断升级。
» 下面的图片和信息仅供参考，此主板的实际信息和设置可能与手册稍有差异。

BIOScreen 工具

此实用工具可以将开机画面个性化。您可以选择BMP格式来自定义计算机开机画面。

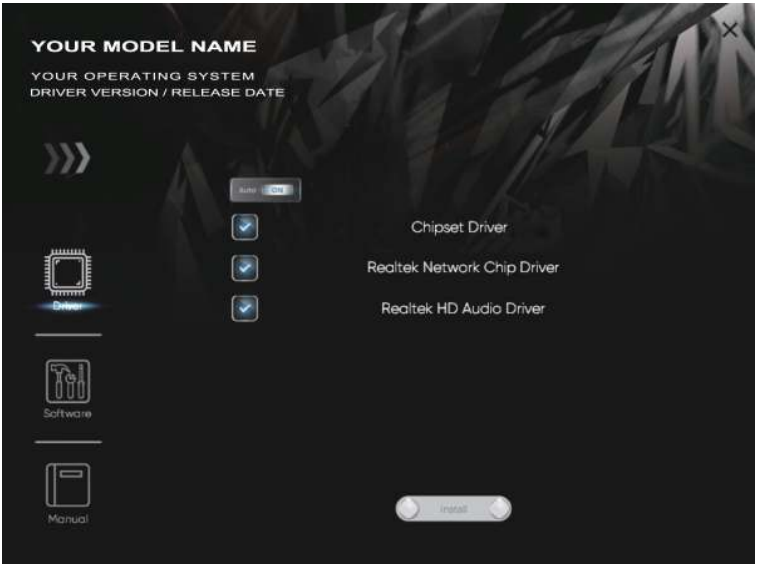
请参照以下步骤来更新开机画面：

- 加载画面(Load Image)：选择图片作为开机画面。
- 转换(Transform)：转换图片并预览。
- 更新BIOS(Update Bios)：将图片写入BIOS内存，然后完成更新。

第四章:帮助信息

4.1 驱动程序安装注意事项

为获得更好的系统性能，在操作系统安装完成后，请插入您的系统驱动到光驱并安装。插入DVD后，将出现如下所示窗口。



此设置向导将自动检测您的主板和操作系统。

A. 驱动程序安装

安装驱动程序，请点击驱动器图标。设置向导将列出主板兼容驱动和操作系统。点击各设备驱动程序，以开始安装进程。

B. 软件安装

安装软件，请点击软件图标。设置向导将列出系统可用软件，点击各软件名称，以开始安装进程。

C. 使用手册

除了书本形式的手册，我们也提供光盘形式的使用指南。点击Manual图标，浏览可用相关使用指南。

注意

» 在插入驱动之后，如此窗口未出现，请用文件浏览器查找并执行SETUP.EXE文件。
» 若需要Acrobat Reader打开manual文件。请从网站http://get.adobe.com/reader/下载最新版本的Acrobat Reader软件。
» 插图中使用的主板可能与实际的主板不同。 这些插图仅供参考。

4.2 AMI BIOS 哔声代码

引导模块哔声代码

哔声次数	含义
持续哔声	持续哔声

BIOS 开机自检哔声代码

哔声次数	含义
1	系统引导成功
8	显存错误(系统视频适配器)

4.3 问题解答

问题	解决方法
1. 系统没有电，电源指示灯不亮，电源风扇不转动。 2. 键盘上的指示灯不亮。	1. 确定电源线是否接好。 2. 更换线材。 3. 联系技术支持。
系统不起作用。键盘指示灯亮，电源指示灯亮，硬盘正常运作。	用力按压内存两端，确保内存安置于插槽中。
系统不能从硬盘启动，能从光盘启动。	1. 检查硬盘与主板的连线，确定各连线是否确实接好，检查标准CMOS设置中的驱动类型。 2. 硬盘随时都有可能坏掉，所以备份硬盘数据是很重要的。
系统只能从光盘启动。硬盘能被读，应用程序能被使用，但是不能从硬盘启动。	1. 备份数据和应用程序。 2. 重新格式化硬盘。用后备盘重新安装应用程序和数据。
屏幕提示“Invalid Configuration” 或“CMOS Failure”。 再次检查系统设备，确定设定是否正确安装了第二个硬盘	再次检查系统设备，确定设定是否正确
安装了第二个硬盘后，系统不能启动。	1. 正确设置主/从硬盘跳线。 2. 运行安装程序，选择正确的驱动类型。与驱动器厂商联系，寻求驱动兼容性的技术支持。

CPU过热保护系统

在开启系统数秒后如有自动关机的现象，这说明CPU保护功能已被激活。CPU过热时，防止损坏CPU，主机将自动关机，系统则无法重启。

此种情况下，请仔细检查。

1. CPU 散热器平放在CPU表面。
2. CPU风扇能正常旋转。
3. CPU风扇旋转速度与CPU运行速度相符。

确认后，请按以下步骤缓解CPU保护功能。

1. 切断电源数秒。
2. 等待几秒钟。
3. 插上电源开启系统。

或是:

1. 清除CMOS数据。(查看 “Close CMOS Header: JCMOS1” 部分)
2. 等待几秒钟。
3. 重启系统。

» 附录I：产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅（Pb）	汞（Hg）	镉（Cd）	六价铬（Cr(VI)）	多溴联苯（PBB）	多溴二苯醚（PBDE）
PCB板	O	O	O	O	O	O
结构件	O	O	O	O	O	O
芯片及其它主动零件	X	O	O	O	O	O
连接器	X	O	O	O	O	O
被动电子元器件	X	O	O	O	O	O
焊接金属	O	O	O	O	O	O
线材	O	O	O	O	O	O
助焊剂，散热 膏，标签及其它耗材	O	O	O	O	O	O

O：表示该有毒有害物质在该部件所有均质材料中的含量在SJ/T11363-2006标准规定的限量要求以下。
X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求。
备注：在芯片及其它主动零件、连接器、被动电子元器件Pb栏位中有打X，表示Pb在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求，但均符合欧盟ROHS指令豁免条款。