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Table of Contents

CHAPTER 1: INTRODUCTION

1.1 Before You Start

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

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

Specifications	
CPU Support	Intel® Celeron® J1800 processor
Memory	Supports Dual Channel DDR3L 1066/1333 (1.35V/1.5V) 2x DDR3L SO-DIMM Memory Slot, Max. Supports up to 16 GB Memory Each DIMM supports non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L module * Please refer to www.biostar.com.tw for Memory support list.
Storage	2x SATA 3Gb/s Connector, Supports Native IDE, AHCI Mode
LAN	Realtek RTL 8111G 10/ 100/ 1000 Mb/s auto negotiation, Half / Full duplex capability
Audio Codec	ALC662, 5.1 Channels, High Definition Audio
USB	6x USB 2.0 port (1 on rear I/Os and 5 via internal header) 1x USB 3.0 port (1 on rear I/Os)
Expansion Slots	1x mini PCIe Slot
Rear I/Os	1x DC-IN 19V Jack 1x VGA Port 1x HDMI Port 1x USB 3.0 Port 1x USB 2.0 Port 1x LAN port 2x Audio Jack (Mic-In, Line-Out)
Internal I/Os	2x SATA 3.0Gb/s Connector 1x SATA Power Connector 1x 2-Pin Power Connector 1x Front Panel Header 1x Front Audio Header 2x USB 2.0 2x5 Header (each header supports 2 USB 2.0 ports) 1x USB 2.0 1x5 Header 2x 4-Pin Fan Connector 1x Front Panel Display Connector (LVDS) 1x Front Panel Display Brightness Connector 1x Monitor Switch Header 1x Internal Stereo Speaker 1x Clear CMOS Jumper 1x LVDS Voltage Jumper 2x LVDS Jumper 1x Front Panel Display Voltage Jumper 1x Digital Microphone Header
Form Factor	Thin Mini-ITX Form Factor, 170 mm x 170 mm
OS Support	Windows 7 / 8 / 8.1 Biostar reserves the right to add or remove support for any OS with or without notice.

1.4 Rear Panel Connectors

DC-IN 19V

Mic In

USB 2.0 USB 3.0   LAN   HDMI   VGA   Line Out
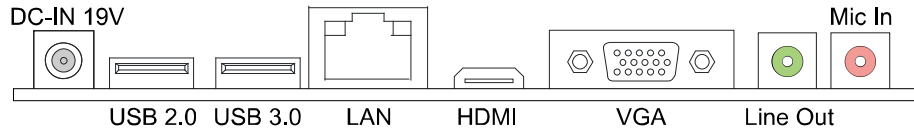
Note 1: Since the audio chip supports High Definition Audio Specification, the function of each audio jack can be defined by software. The input / output function of each audio jack listed above represents the default setting. However, when connecting external microphone to the audio port, please use the Line In (Blue) and Mic In (Pink) audio jack.
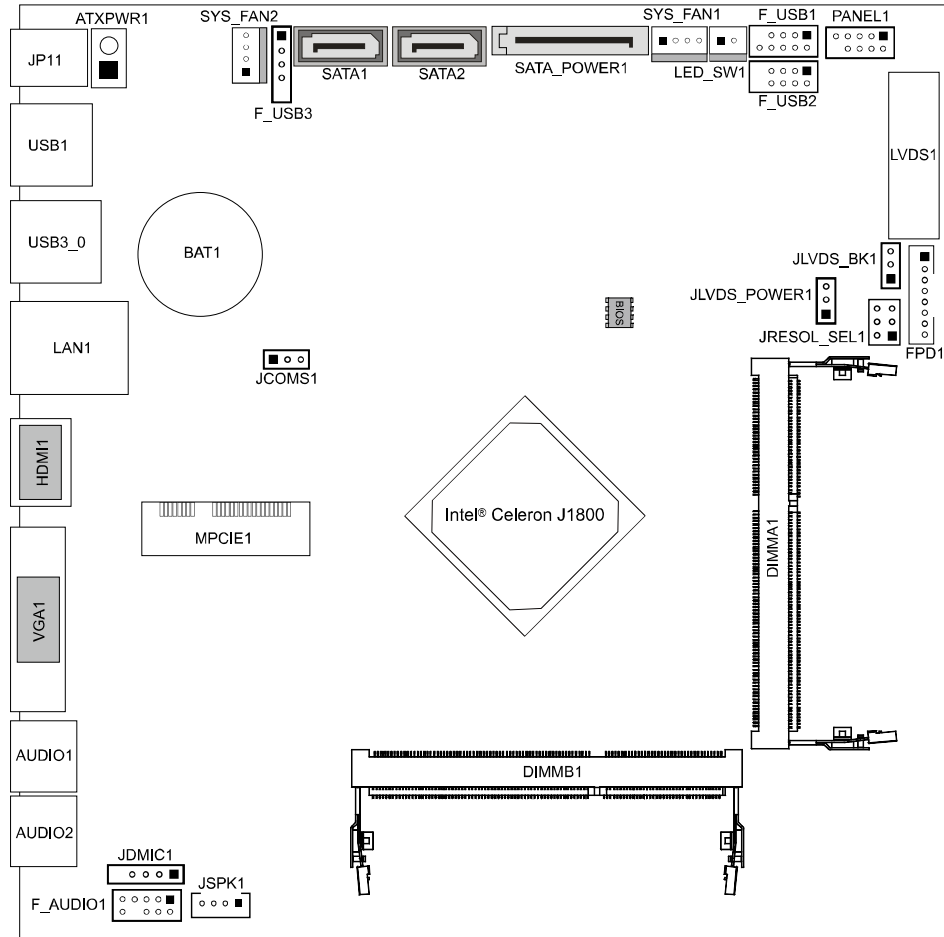**Note 2:** Maximum resolution:
　　　HDMI: 1920 x 1200 @60Hz
　　　VGA: 2560 x 1600 @60Hz

1.5 Central Processing Unit (CPU)

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

| Model Name:	Onboard CPU:
J1800TH	Intel® Celeron® J1800 processor (Dual core, 1M Cache, 2.58 GHz)

1.6 Motherboard Layout

Note 1: ■ 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.

SYS_FAN1/2: System Fan Header

Pin	Assignment
1	GND
2	+12V
3	Fan RPM rate sense
4	Smart Fan Control
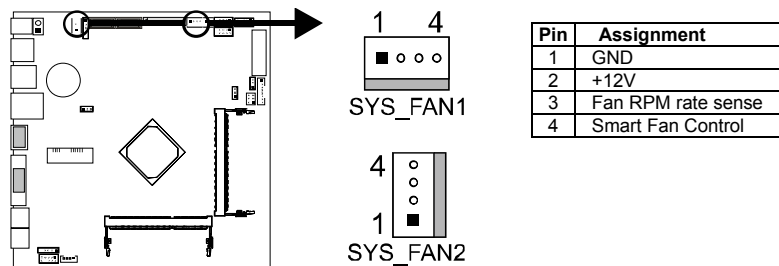
Note: SYS_FAN1/2 support both 4-pin (PWM mode) and 3-pin (DC-Mode) smart fan control. When connecting with wires onto connectors, please note that the red wire is the positive and should be connected to pin#2, and the black wire is Ground and should be connected to GND.

2.2 Install System Memory

A. DDR3L SO-DIMM Module (1.35V/1.5V)
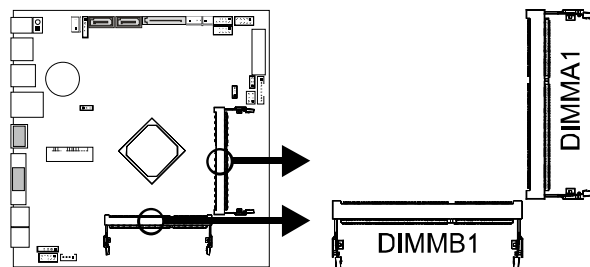
Step 1: Align a DIMM on the slot such that the notch on the DIMM matches the break on the Slot.
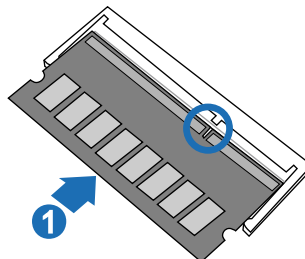
Step 2: Insert the DIMM firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.

Note1: The DIMM must be installed to DIMMA1 slot first.

Note2: If the DIMM does not go in smoothly, do not force it. Pull it all the way out and try again.

B. Memory Capacity

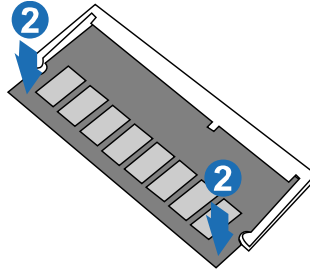| DIMM Socket Location	DDR3L Module	Total Memory Size
DIMMA1	512MB/1GB/2GB/4GB/8GB	Max is 16GB
DIMMB1	512MB/1GB/2GB/4GB/8GB	

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	DIMMA1	DIMMB1
Disabled	O	X
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

MPCIE1: mini PCI Express slot

The mini PCIe slot supports half-length mini PCIe card.
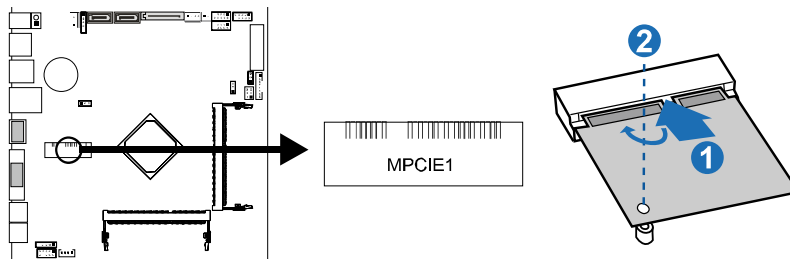
Note1: Read the related expansion card's instruction document before install the expansion card into the computer.

Note2: The slot does not support mSATA SSD.

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".

Pin opened   Pin closed   Pin1-2 closed

JCMOS1: Clear CMOS Jumper

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

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

Pin 2-3 Close:
Clear CMOS data.
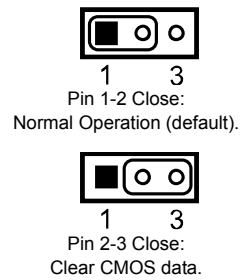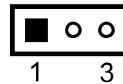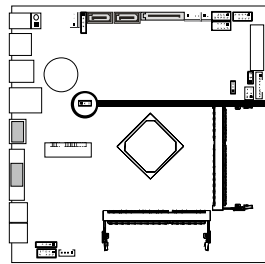
※ **Clear CMOS Procedures:**

1. Remove AC power line.
2. Set the jumper to "Pin 2-3 close".
3. Wait for five seconds.
4. Set the jumper to "Pin 1-2 close".
5. Power on the AC.
6. Load Optimal Defaults and save settings in CMOS.

JRESOL_SEL1: LVDS Resolution Jumper

This jumper selects LVDS resolution.

Pin 1-3 & 2-4 Close:
1600 x 900 (default)

Pin 1-3 & 4-6 Close:
1920 x 1080

Pin 3-5 & 2-4 Close:
1366 x 768

Pin 3-5 & 4-6 Close:
N.A.
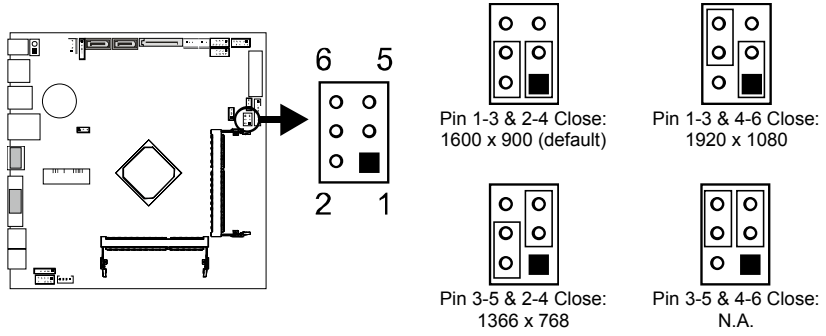
JLVDS_POWER1: LVDS Voltage Jumper

This jumper sets different screen voltage.

Pin 1-2 Close: 5V (default).

Pin 2-3 Close: 3.3V
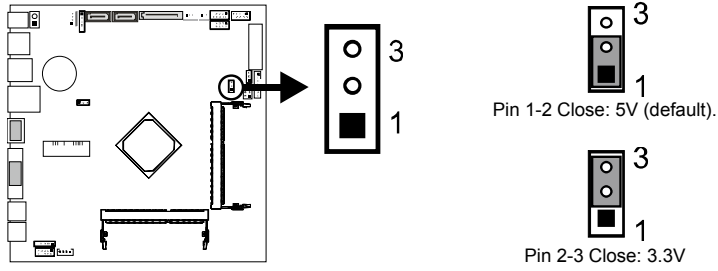
JLVDS_BK1: Front Panel Display Voltage Jumper

This jumper selects the required operating voltage for the backlight panel.

Pin 1-2 Close: 19V (default).

Pin 2-3 Close: 12V
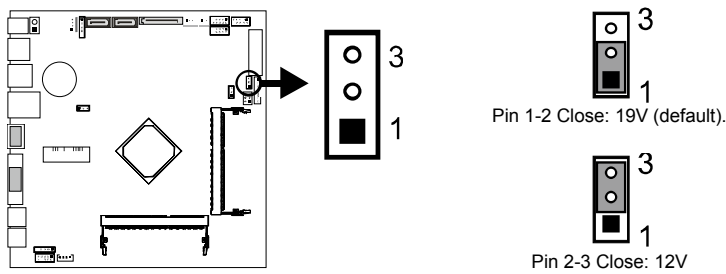
Caution: Incorrect voltage selection may damage the LVDS panel or inverter board.

2.5   Headers & Connectors

SATA_POWER1: SATA Power Connector

This connector provides the appropriate power connection to support both HDDs and ODD.

Pin	Assignment
1	3.3V
2	3.3V
3	3.3V
4	Ground
5	Ground
6	Ground
7	5V
8	5V
9	5V
10	Ground
11	NC
12	Ground
13	12V
14	12V
15	12V
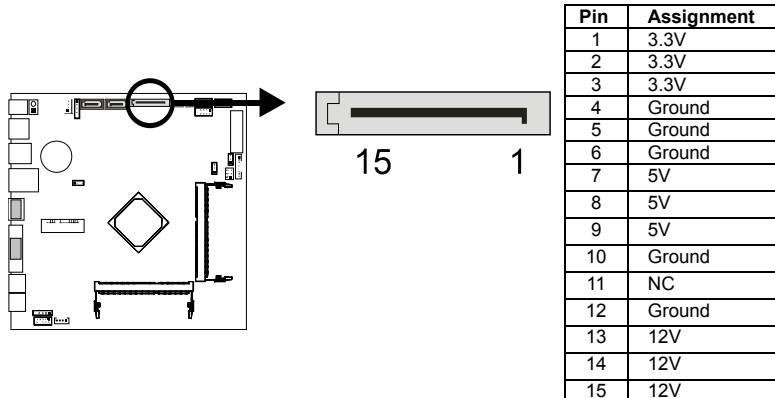
SATA1/2: Serial ATA Connectors

These connectors connect to SATA hard disk drives via SATA cables. It satisfies the SATA 2.0 specification and with transfer rate of 3.0Gb/s.

Pin	Assignment
1	Ground
2	TX+
3	TX-
4	Ground
5	RX-
6	RX+
7	Ground
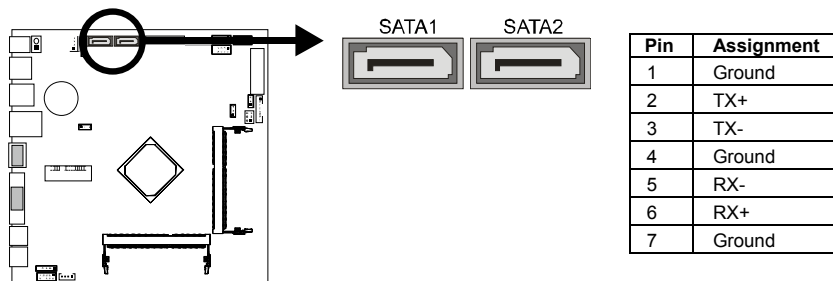
JSPK1: Internal Stereo Speakers Header

The connector is for connecting Internal Stereo Speakers.

Pin	Assignment
1	SPKRN
2	SPKRP
3	SPKLN
4	SPKLP
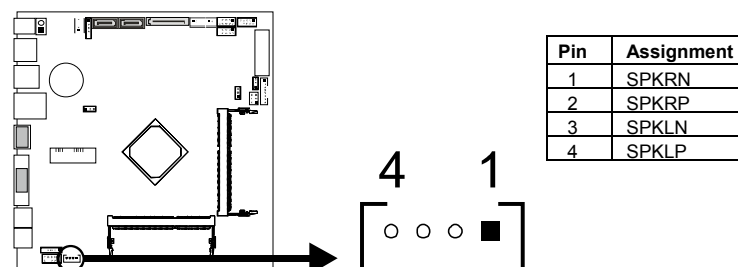
F_AUDIO1: Front Panel Audio Header

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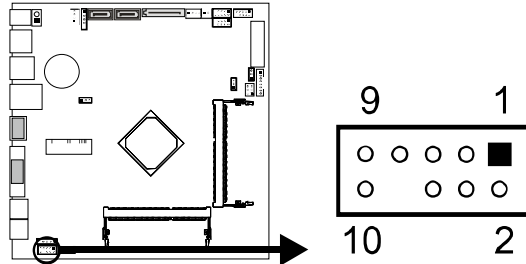
HD Audio		AC'97	
Pin	Assignment	Pin	Assignment
1	Mic Left in	1	Mic In
2	Ground	2	Ground
3	Mic Right in	3	Mic Power
4	GPIO	4	Audio Power
5	Right line in	5	RT Line Out
6	Jack Sense	6	RT Line Out
7	Front Sense	7	Reserved
8	Key	8	Key
9	Left line in	9	LFT Line Out
10	Jack Sense	10	LFT Line Out

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.

PANEL1: Front Panel Header

This connector includes Power-on, Reset, HDD LED and Power LED connections. It allows user to connect the PC case's front panel switch functions.
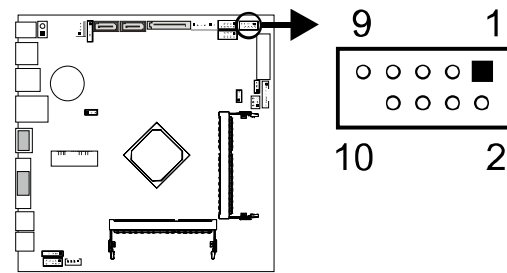
Pin	Assignment	Function	Pin	Assignment	Function
1	HDD_POWER_LED	HDD LED	2	POWER_LED_MAIN	Power LED
3	HDD_LED#		4	POWER_LED_ALT	
5	GND	Reset Switch	6	POWER_SWITCH#	Power Switch
7	RESET_SWITCH#		8	GND	
9	+5V_DC	Power	10	Key	None

F_USB1: Front Panel Dual USB 2.0 Header

The connector extends USB ports to the front panel of your system.

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

F_USB2: Internal Dual USB 2.0 Header

The connector connects to internal USB devices such as webcam, card reader and touch panel.

Pin	Assignment
1	+5V DC
2	+5V DC
3	USB-
4	USB-
5	USB+
6	USB+
7	Ground
8	Ground
9	Key
10	Key

F_USB3: Internal Single USB 2.0 Header

The connector connects to internal USB devices such as webcam, card reader and touch panel.

Pin	Assignment
1	+5V DC
2	USB-
3	USB+
4	Ground
5	Key

Note: This USB port is shared with mini PCIe slot.

FPD1: Front Panel Display Brightness Connector

This connector provides an additional connector for powering the inverter or driver board.

Pin	Assignment
1	BKLT_EN (voltage:3.3V)
2	BKLT_PWM
3	BKLT_PWR**
4	BKLT_PWR**
5	BLK_GND/Brightness_GND
6	BLK_GND/Brightness_GND
7	Brightness_Up
8	Brightness_Down
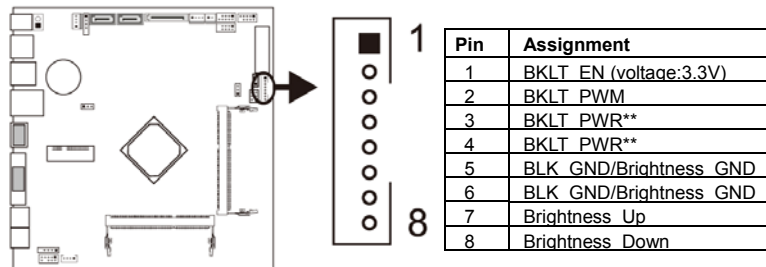
LVDS1: 40-pin LVDS Connector

This connector provides an internal 40-pin connector for flat panel display and backlight connectivity.
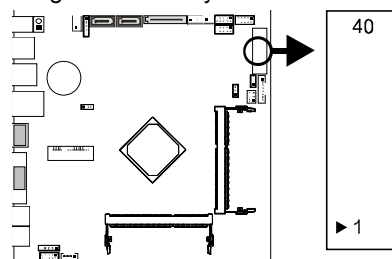
Pin	Assignment	Pin	Assignment
1	ODD_Lane3_P	2	ODD_Lane3_N
3	ODD_Lane2_P	4	ODD_Lane2_N
5	ODD_Lane1_P	6	ODD_Lane1_N
7	ODD_Lane0_P	8	ODD_Lane0_N
9	EVEN_Lane3_P	10	EVEN_Lane3_N
11	EVEN _Lane2_P	12	EVEN _Lane2_N
13	EVEN _Lane1_P	14	EVEN _Lane1_N
15	EVEN _Lane0_P	16	EVEN _Lane0_N
17	EDIE_GND	18	LCD_VCC*
19	LCD_VCC*	20	LCD_VCC*
21	N/C	22	EDID_3.3V
23	LCD_GND	24	LCD_GND
25	LCD_GND	26	ODD_CLK_P
27	ODD_CLK_N	28	BKLT_GND
29	BKLT_GND	30	BKLT_GND
31	EDIE_CLK	32	BLK_ENABLE
33	BKLT_PWM_DIM	34	EVEN_CLK_P
35	EVEN_CLK_N	36	BKLT_PWR**
37	BKLT_PWR**	38	BKLT_PWR**
39	N/C	40	EDIE_DATA

Note: * Voltage selected by JLVDS_POWER1. ** Voltage selected by JLVDS_BK1.

LCD_SW1: Monitor Switch

This header allows user to turn on or off the flat panel display backlight.
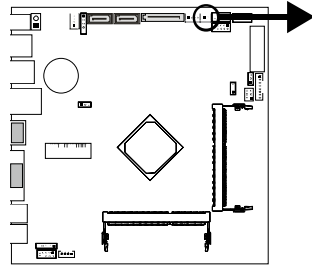
Pin	Assignment
1	MOM_SW
2	GND

JDMIC1: Digital Microphone Header

The connector is for connecting a digital microphone.
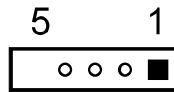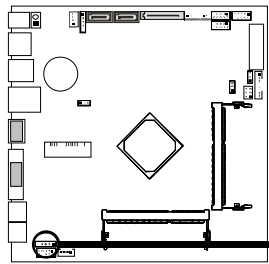
Pin	Assignment
1	+3.3V
2	DMIC_DATA
3	Ground
4	DMIC_CLK
5	Key

ATXPWR1: ATX Power Source Connector

The connector is for connecting a DC-19V power source.
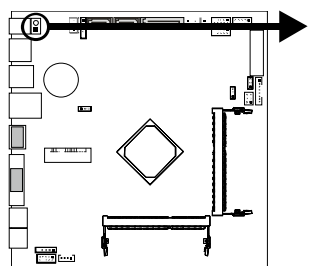
Pin	Assignment
1	+19V_IN
2	GND

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 in the Setup DVD.

3.2 BIOS Update

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

- BIOSTAR 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.
- 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 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 BIOSTAR 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.
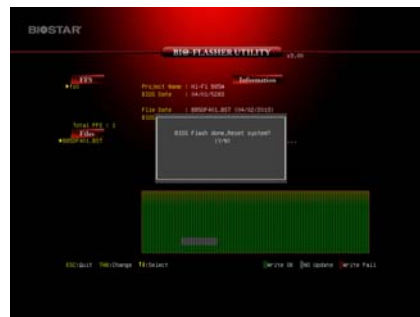
8. While the system boots up and the full screen logo shows up, press <DEL> key to enter BIOS setup.
   After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, 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.
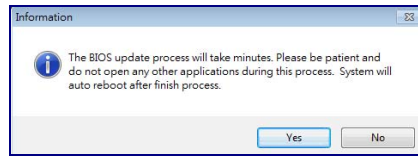
5. If there is a new BIOS version, the utility will ask you to download it. Click **Yes** to proceed.
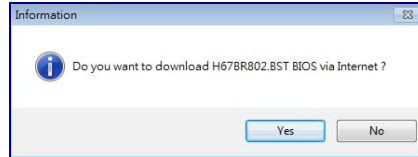
6. After the download is completed, you will be asked to program (update) the BIOS or not. Click **Yes** to proceed.
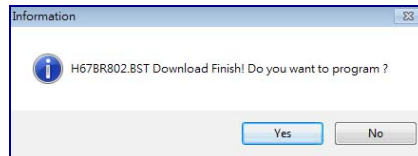
7. After the updating process is finished, you will be asked you to reboot the system. Click **OK** to reboot.
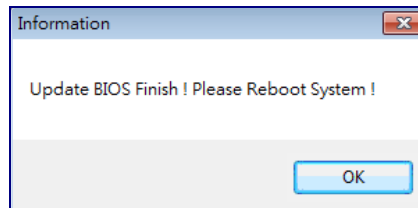
8. While the system boots up and the full screen logo shows up, press <DEL> key to enter BIOS setup.
After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, 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.
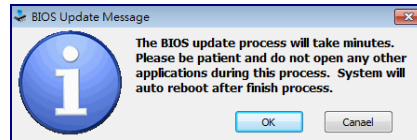
5. Choose the location for your BIOS file in the system. Please select the proper BIOS file, and then click on **Open**. It will take several minutes, please be patient.

6. After the BIOS Update process is finished, click on **OK** to reboot the system.
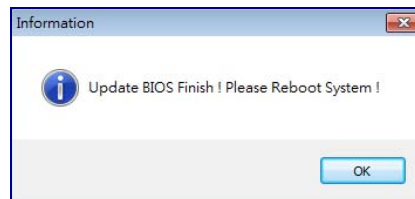
7. While the system boots up and the full screen logo shows up, press <DEL> key to enter BIOS setup.
After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, 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**.
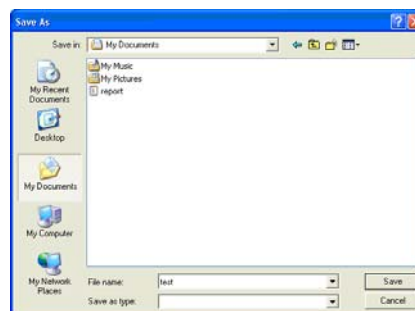
3.3 Software

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.

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.

<u>BIOScreen Utility</u>

This utility allows you to personalize your boot logo easily. You can choose BMP as your boot logo so as to customize your computer.
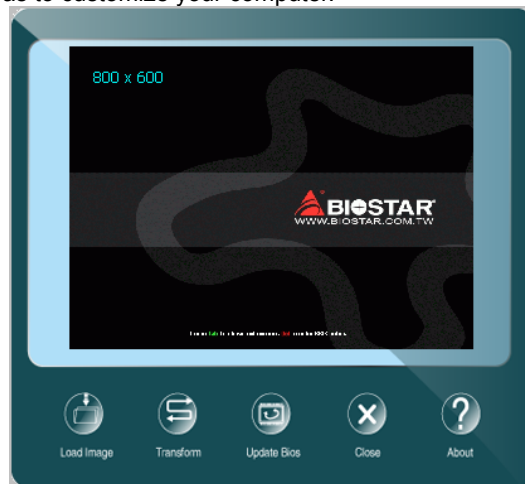
Please follow the step-by-step instructions below to update boot logo:

● 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.

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.


```
=====================
Base board informatiom :
Caption : Base Board
CreationClassName : Win32_Basel
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
```

Symption Description :

Region :

CC E-mail :

Memory Module Manufacture :

Power Supply Manufacture/model :

Send   Save As...   Exit

＊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.

Send the mail out.

Exit this dialog.

Save these information to a .txt file

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.

Outlook Express

A program is attempting to send the following e-mail message on your behalf:

To: support@biostar-usa.com,XXX@xxx.xxx.xxx.xx

Subject: TP35D2-A7 (P35BAC05 BS) report

Would you like to send the message?

Send   Do Not Send
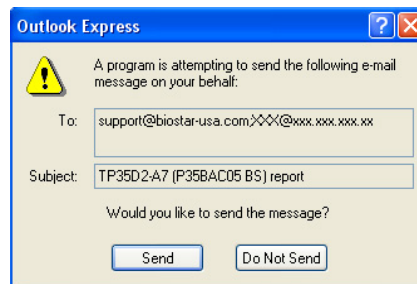
Enter the file name and then click
"**Save**". Your system information will be
saved to a .txt file.
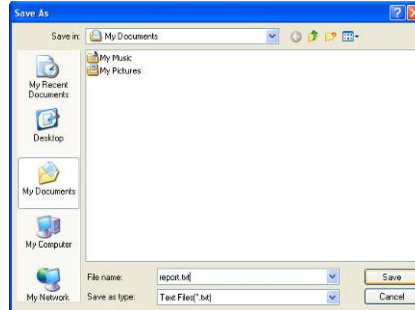
Open the saved .txt file, you will see
your system information including
motherboard/BIOS/CPU/video/
device/OS information. This
information is also concluded in the
sent mail.
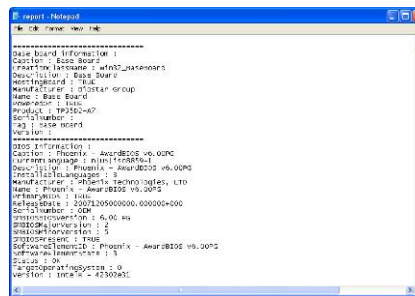
Note1: We will not share customer's data with any other third parties, so please feel free to provide
your system information while using eHot-Line service.

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.

Smart Connect Technology

Intel® Smart Connect Technology is designed to update programs by periodically waking your computer from sleep/standby mode for a short time. This function works with applications that automatically get their data from the Internet.

System Requirement:
- Intel Smart Connect Technology enabled in BIOS Setup
- Set the "ACPI Sleep State" to S3 in BIOS Setup.
- Windows 7, Windows 8 and Windows 8.1
- Normal internet connection

Configuring Intel Smart Connect Technology

Step 1: After installing the operating system and motherboard drivers, install the Intel Smart Connect Technology application. Restart your computer when completed.

Step 2: Click on start menu and input "regedit" in the search bar. Press enter to open the registry editor. Look for the following directory in the registry editor:
Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Intel\Intel Smart Connect Technology

Right-click on *Intel Smart Connect Technology* and select *New > Key*. Type "OEM".

Note: Intel Smart Connect Technology is for S3 mode only. During the updating process, the monitor will not light up and no sound will be output from the speaker.

Step 3: As shown in the screenshot below, right-click on OEM, select New > Multi-String Value, and type "WhiteList". Double-click WhiteList and type the application name to be added in Edit Multi-String. For example, to add Microsoft Live Mail, type "wlmail.exe". Restart your computer when completed.
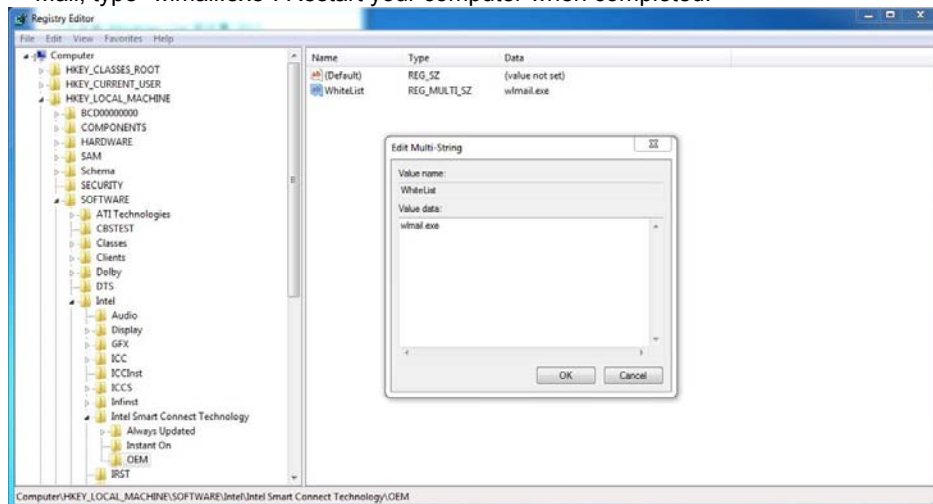
Step 4: After completing the steps above, go to Start\All Programs\Intel and launch Intel(R) Smart Connect Technology.

Configuration Utility

The Intel Smart Connect Technology Configuration Utility allows configuration of the sleep duration, extended hours sleep duration, and viewing of the Event History along with other settings. To launch the application, select the application "Intel® Smart Connect Technology in the Start menu (Windows* 7) or Start screen (Windows* 8/8.1) to launch the configuration GUI. Once launched, the following is presented:
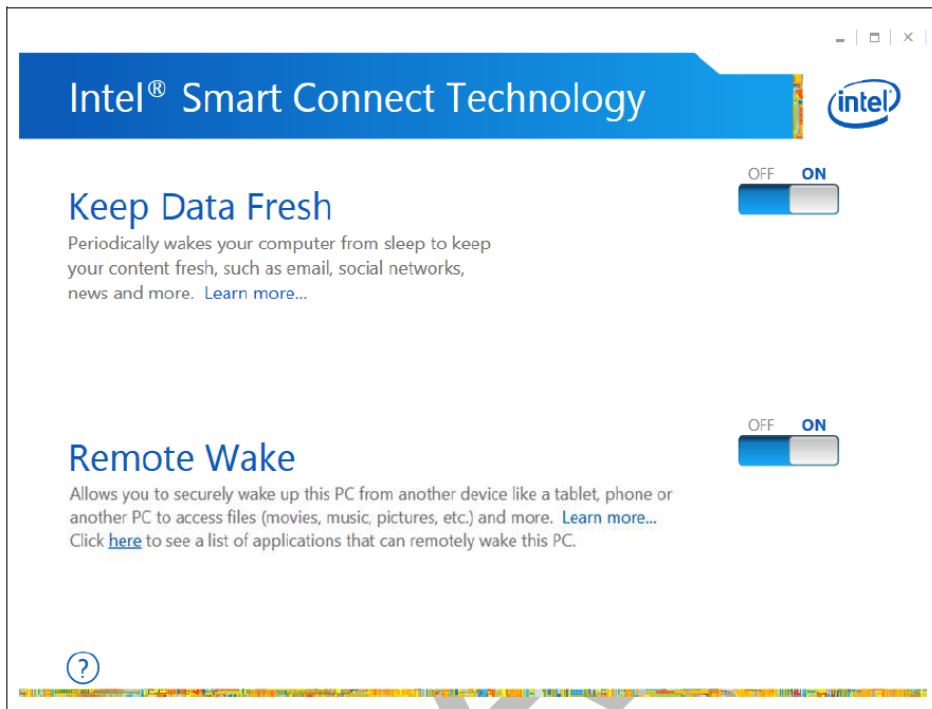
Note: For detailed setting of Intel® Smart Connect Technology, please check the below link.
http://www.intel.com/support/services/smartconnect/sb/CS-033109.htm

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 manuals.

Note1: 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.
Note2: 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/
Note3: Intel(R) Trusted Execution Engine Interface Driver is only supported with Windows 8/8.1 & Windows 7. For Windows 7 user, please install Microsoft Kernel-Mode Driver Framework (KMDF) version 1.1. Otherwise, you found a yellow bang appears as "Intel Trusted Execution Engine Interface" under system device manager. Also, you can follow the Microsoft instructions from the link: KB2685811. http://support.microsoft.com/kb/2685811

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.
2. Wait for seconds.
3. Power on the system again.

APPENDIX: SPEC IN OTHER LANGUAGES

Arabic

المواصفات	
Intel® Celeron® J1800 processor	قاعدة وحدة المعالجة المركزية
تدعم قناة مزدوجة دي. دي. ار. (1.35V/1.5V) DDR3L 1066/1333 2x دي. دي. ار. DDR3L فتحات الذاكرة المزدوجة SO-DIMM، تتحمل كحد أقصى 16 جيجابايت ذاكرة كل فتحة مزدوجة DIMM تتحمل دون 512ECC ميجا بايت /8/4/2/1 جيجابايت دي. دي. ار DDR3L * يرجى الرجوع إلى الموقع www.biostar.com.tw لقائمة دعم الذاكرة.	الذاكرة
وصلة 2x ساتا SATA3 جيجا بايت / الثانية تتحمل رايد الأم IDE / AHCI	التخزين
Realtek RTL 8111G 10 / 100 / 1000 ميجابايت / الثانية ، تحديد تلقائي ، النصف / القدرة القصوى المزدوجة	شبكة محلية LAN
ALC662 5.1 قنوات عالية الدقة	الترميز الصوتي
منافذ 6 x ناقل متسلسل عام USB 2.0 (1 في المداخل والمخارج الخلفية و 5 من خلال الموزع الداخلي) منافذ 1 x ناقل متسلسل عام USB 3.0 (1 في المداخل والمخارج الخلفية)	ناقل متسلسل عام USB
1 x فتحة منفذ الملحقات الإضافية mini PCIe	فتحات التوسع
1 مقبس تيار مباشر 19 فولت 1 منفذ VGA 1 منفذ HDMI 1 منفذ USB 3.0 1 منفذ USB 2.0 1 منفذ LAN 2 مقبس صوتي (إدخال ميكرفون، مخرج خط خارجي)	المداخل والمخارج الخلفية
2 موصل ساتا 3 جيجا بيت/ ثانية 1 موصل طاقة ساتا 1 موصل طاقة 1 رأس لوحة أمامية 1 رأس صوتي أمامية 2 رأس USB 2.0 2x5(يدعم الرأس 2 منفذ USB 2.0) 1 رأس USB 2.0 1x5(يدعم الرأس 2 منفذ USB 2.0) 2 موصل مروحة ذو أربع مسامير 1 موصل لوحة شاشة أمامي (LVDS) 1 موصل لوحة سطوع الشاشة الأمامية 1 رأس مفتاح الشاشة 1 سماعة ستريو داخلية 1 رابط CMOS 2 رباط فرق LVDS 1 رباط فرق جهد لوحة الشاشة الأمامية 1رأس ميكـــروفون الرقميـــة	المداخل والمخارج الداخلية
عامل شكل مدد التكنولوجيا المتقدمة Mini-ITX، 170 مم x 170 مم	عامل الشكل
ويندوز إكس ب Windows 7 / 8 / 8.1 بيوستار BIOSTAR تحتفظ بحق إضافة أو أزلة الدعم لأي نظام تشغيل مع أو بدون أنظار.	أنظمة التشغيل المدعومة

French

Spécifications	
Support Unité Centrale	Intel® Celeron® J1800 processor
Mémoire	Supporte mémoire DDR3L double canal 1066/1333 (1.35V/1.5V) Banc de mémoire 2x DDR3L SO-DIMM, Supporte max. jusqu'à une mémoire de 16 GB Chaque module DIMM supporte module DDR3L 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 2x SATA 3Gb/s Supporte système indigène IDE & AHCI mode
Réseau local	Realtek RTL 8111G 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 6x USB 2.0 (1 sur les I/O arrières et 5 en interne) Port 1x USB 3.0 (1 sur les I/O arrières)
Connecteur d'extension	1xmini PCIe Fente
I/O arrirèes	1x DC-IN 19V Jack 1x VGA Port 1x HDMI Port 1x USB 3.0 Port 1x USB 2.0 Port 1x LAN Port 2x Audio Jack (Mic-Entrée, Line-Sortie)
I/O en interne	2x SATA 3.0Gb/s Connecteur 1x SATA Prise Électrique 1x 2-Fiche Prise Électrique 1x En-tête du Panneau Avant 1x Front Audio Header En-tête d'Audio Avant 2x USB 2.0 2x5 En-tête (chaque en-tête supporte 2 USB 2.0 ports) 1x USB 2.0 1x5 En-tête (supporte 1 USB 2.0 port) 2x 4-Fiche Ventilateur Connecteur 1x Écran Connecteur du Panneau Avant (LVDS) 1x Écran Luminosité Connecteur du Panneau Avant 1x En-tête du Commutateur du Moniteur 1x Haut-parleur Stéréo Interne 1x Claire CMOS Cavalier 2x LVDS Cavalier 1x Écran Cavalier du Voltage du Panneau Avant 1x microphone numérique-tête
Facteur d'encombrement	Facteur d'encombrement Mini-ITX, 170 mm x 170 mm
Support SE	Windows 7 / 8 / 8.1 Biostar se réserve le droit d'ajouter ou d'enlever le support pour toute SE avec ou sans préavis.

German

Spezifikationen	
CPU-Unterstützung	Intel® Celeron® J1800 processor
Festplattenspeicher	Unterstützt zweikanaliges DDR3L 1066/1333 (1.35V/1.5V) 2x DDR3L SO-DIMM-SpeicherSlot, Max. Uterstützung bis zu 16 GB-Speicher Jedes DIMM unterstützt nicht-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L-Module * Bitte konsultieren Sie www.biostar.com.tw für für Speicherunterstützung Liste.
Arbeitsspeicher	2x SATA 3Gb-Verbindung Unterstützt Ureinwohner IDE & AHCI Modus
LAN	Realtek RTL 8111G 10/ 100/ 1000 Mb Auto-Negotiation, Halb- / Voll-Duplex-fähig
Audio-Codec	ALC662, 5.1 Kanäle, HD-Audio
USB	6x USB 2.0-Port (1 hintere I/Os und 5 via interne Header) 1x USB 3.0-Port (1 hintere I/Os)
Erweiterungsanschlüsse	1x mini PCIe-Slot
Hintere I/Os	1x DC-IN 19V Klinkenstecker 1x VGA Anschluss 1x HDMI Anschluss 1x USB 3.0 Anschluss 1x USB 2.0 Anschluss 1x LAN Anschluss 2x Audio Klinkenstecker (Mic-In, Line-Out)
Interne I/Os	2x SATA 3.0Gb/s Steckverbinder 1x SATA Steckdose 1x 2-Stecknadel Steckdose 1x Frontplattenstecker 1x Frontaudiostecker 2x USB 2.0 2x5 Stecker (jeder Stecker unterstützt 2 USB 2.0 Anschluss) 1x USB 2.0 1x5 Stecker (unterstützt 1 USB 2.0 Anschluss) 2x 4-Stecknadel Lüftersteckverbinder 1x Frontplatten Displaysteckverbinder (LVDS) 1x Frontplattendisplay Helligkeitsteckverbinder 1x Monitorschalterstecker 1x Internen Stereolautsprecher 1x Helle CMOS Steckbrücke 2x LVDS Steckbrücke 1x Frontplattendisplay Spannung Steckbrücke 1x Digitalmikrofon Kopf
Formfaktor	Mini-ITX Formfaktor, 170 mm x 170 mm
OS-Unterstützung	Windows 7 / 8 / 8.1 Biostar reserves the right to add or remove support for any OS with or without notice.

Italian

Specificazioni	
Supporto processore	Intel® Celeron® J1800 processor
Memoria	Supporta DDR3L 1066/1333 Doppio Canale (1.35V/1.5V) 2x DDR3L SO-DIMM Slot di Memoria Supporta fino a 16 GB Memoria Ogni DIMM supporta non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L moduli * Si prega di consultare www.biostar.com.tw per la lista di supporto del memoria.
Memorizzazione	Connettore 2x SATA 3Gb/s Supporta nativo IDE & AHCI modo
Catena	Realtek RTL 8111G 10/ 100/ 1000 Mb auto negoziazione, capacita di duplex Meta / Completo
Codec Audio	ALC662 Canali Audio di Alta Definizione 5.1
USB	Slot 6x USB 2.0 (1 nei ingressi/ uscite posteriore e 5 da distributori interni) Slot 1x USB 3.0 (1 nei ingressi/ uscite posteriore)
Slot di espansione	Slot 1x mini PCIe
Ingressi/ Uscite Posteriore	Presa 1x CC-Ingresso 19V 1x porta VGA 1x porta HDMI 1x porta USB 3.0 1x porta USB 2.0 1x porta LAN 2x prese Audio (Ingresso Microfono, Uscita Linea)
Ingressi/ Uscite Interni	2x connettori SATA 3.0Gb/s 1x connettore elettrico SATA 1x connettore elettrico 2-Perni 1x collettore pannello frontale 1x collettore audio frontale 2x collettore USB 2.0 2x5 (ogni collettore supporta 2 porte USB 2.0) 1x collettore USB 2.0 1x5 (supporta 1 porta USB 2.0) 2x connettori 4-Perni ventola 1x connettore schermo pannello frontale (LVDS) 1x connettgore luminosità schermo pannello frontale 1x collettore interruttore monitor 1x altoparlante stereo interno 1x ponticello pulizia CMOS 2x ponticello LVDS 1x ponticello voltaggio schermo pannello frontale 1x microfono digitale Header
Fattore di Forma	Fattore di Forma Mini-ITX, 170 mm x 170 mm
Supporto SO	Windows 7 / 8 / 8.1 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	Intel® Celeron® J1800 processor
メモリ	デュアルチャンネル DDR3L 1066/1333 をサポート(1.35V/1.5V) 2x DDR3L SO-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 DDR3L 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	2x 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 8111G 10/ 100/ 1000 Mb/s オートネゴーシエーション、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	6x USB 2.0 ポート (後部 I/O に1つ 及び 内蔵ヘッダー経由に5つ) 1x USB 3.0 ポート (後部 I/O に1つ)
拡張スロット	1x mini PCIe スロット
後部 I/O	1x DC-IN 19V ジャック 1x VGA ポート 1x HDMI ポート 1x USB 3.0 ポート 1x USB 2.0 ポート 1x LAN ポート 2x オーディオ ジャック (Mic-In、Line-Out)
内蔵 I/O	2x SATA 3.0Gb/s コネクタ 1x SATA電源コネクタ 1x 2-ピン電源コネクタ 1xフロントパネルコネクタ 1x フロントオーディオヘッダ 2x USB 2.0 2x5 ヘッダ (各ヘッダはUSB 2.0ポートの2つに対応) 1x USB 2.0 1x5 ヘッダ (USB 2.0 ポートの1つに対応) 2x 4-ピン・ファンコネクタ 1x フロントパネル・ディスプレイコネクタ (LVDS) 1x フロントパネル・ディスプレイ輝度コネクタ 1x モニタースイッチ・ヘッダ 1x 内蔵ステレオスピーカー 1x CMOS クリアジャンパ 2x LVDS ジャンパ 1x フロントパネル・ディスプレイ・電圧ジャンパ 1x デジタルマイクヘッダー
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 7 / 8 / 8.1 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	Intel® Celeron® J1800 processor
Pamięć	Pojedynczy pamięci DDR3L 1066/1333 Dwukanałowa (1.35V/1.5V) 2x DDR3L SO-DIMM Pamięć Gniazda procesora (Slot), Maksymalna wielkość pamięci 16 GB Każdy DIMM obsługuje jeden moduł non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L * Proszę sprawdzić listę obsługiwanych pamięć na stronie internetowej www.biostar.com.tw
Przechowywanie	Złącze 2x SATA 3Gb/s, Obsługa rodzimy IDE & AHCI tryb
LAN	Realtek RTL 8111G 10/ 100/ 1000 Mb auto negocjacja, pojemność dupleks Połowe / Pełny
Codec Audio	ALC662 Kanały Audio wysokiej Definicji 5.1
USB	6 x złącza USB 2.0 (1 przez tylne porty wejścia/ wyjścia oraz 5 przez wewnętrzne porty) 1x złącza USB 3.0 (1 przez tylne porty wejścia)
Złącza rozszerzeń	złącza 1x mini PCIe
Tylne porty wejścia/ wyjścia	1x gniazdo DC-IN 19V 1x Port VGA 1x Port HDMI 1x Port USB 3.0 1x Port USB 2,0 1x Port LAN 2x gniazdo Audio (wej. mik, wyj. linia)
Wewnętrzne porty wejścia/ wyjścia	2x złącze SATA 3.0Gb/s 1x złącze zasilania SATA 1x złącze zasilania 2-pinowe 1x złącze płyty głównej 1x złącze Audio 2x USB 2.0 złącza 2x5 (każde złącze obsługuje 2 porty USB 2.0) 1x USB 2.0 złącze 1x5 (obsługuje 1 port USB 2,0) 2x 4-pinowe złącze wentylatora 1x złącze wyświetlacza płyty głównej (LVDS) 1x złącze jaskrawości wyświetlacza płyty głównej 1x złącze wyłącznika monitora 1x wewnętrzny głośnik stereo 1x zworka resetu CMOS 2x zworka LVDS 1x zworka napięcia wyświetlacza płyty głównej 1x Nagłówek 1x mikrofon cyfrowy
Obudowa	Obudowa Mini-ITX, 170 mm x 170 mm
Obsługa OS	Windows 7 / 8 / 8.1 Biostar zastrzega sobie prawo do dodania lub wycofania obsługi dla OS, z wypowiedzeniem lub bez wypowiedzenia.

Portuguese

Especificações	
Suporte Processador	Intel® Celeron® J1800 processor
Memória	Suporta DDR3L 1066/1333 Canal Duplo (1.35V/1.5V) 2x DDR3L SO-DIMM Slot de memória Suporta até 16 GB Memória Cada DIMM suporta non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L módulo * Por favor consulte www.biostar.com.tw para obter uma lista de suporte do memória.
Armazenamento	Conector 2x SATA 3Gb/s,Suporta nativo IDE & AHCI modo
LAN	Realtek RTL 8111G 10/ 100/ 1000 Mb auto negociação, capacidade duplex Metade / Cheio
Codec de Audio	ALC662 Canais de Áudio de Alta Definição 5.1
USB	Porta 6x USB 2.0 (1 nas entradas/saídas traseiras e 5 pelos Dispositivos internos) Porta 1x USB 3.0 (1 nas entradas/saídas traseiras)
Slots de expansão	Porta 1x mini PCIe
Entradas/Saídas no painel traseiro	1x Entrada DC-IN 19V 1x Porta VGA 1x Porta HDMI 1x Porta USB 3.0 1x Porta USB 2.0 1x Porta LAN 2x Entrada de Áudio (Mic-In, Line-Out)
Conectores na placa	2x Conector SATA 3.0Gb/s 1x Conector de Alimentação SATA 1x Conector de Alimentação 2 Pinos 1x Cabeçalho de Painel Frontal 1x Cabeçalho de Áudio Frontal 2x Cabeçalho USB 2.0 2x5 (cada cabeçalho suporta 2 portas USB 2.0) 1x Cabeçalho USB 2.0 1x5 (suporta 1 porta USB 2.0) 2x Conector de Ventoínha de 4 Pinos 1x Conector de Ecrã de Painel Frontal (LVDS) 1x Conector de Brilho de Ecrã de Painel Frontal 1x Cabeçalho de Interruptor de Monitor 1x Coluna Estérea Interna 1x Jumper CMOS Transparente 2x Jumper LVDS 1x Jumper de Voltagem de Ecrã de Painel Frontal 1x Microfone Digital Header
Fator de Fôrma	Fator de Fôrma Mini-ITX, 170 mm x 170 mm
Suporte OS	Windows 7 / 8 / 8.1 Biostar reserva seu direito de adicionar ou retirar o suporte para qualquer OS com ou sem notificação.

Russian

Спецификации	
Поддержка центрального процессора	Intel® Celeron® J1800 processor
Память	Поддерживает двухканальный DDR3L 1066/1333 (1.35V/1.5V) 2 гнезда платы памяти DDR3L SO-DIMM, максимальная память до 16 Гб Каждый модуль DIMM поддерживает модуль не-ECC 512 Мб/ 1/ 2/ 4/ 8 Гб DDR3L * Перечень поддержки памяти смотрите на www.biostar.com.tw.
Накопитель	Соединитель 2x SATA 3 Гб/с, Поддерживает родной IDE & AHCI режим
Локальная сеть	Realtek RTL 8111G Автосогласование 10/ 100/ 1000 Мб/с, работает в полно/полудуплексном режиме
Аудиокодек	ALC662 Каналы 5.1, высококачественное аудио
USB	6 порта USB 2.0 (1 сзади ввода-вывода и 5 через внутренние контакты) 1 порта USB 3.0 (1 сзади ввода-вывода)
Гнезда расшир.	1x mini PCIe гнездо
Задняя плата ввода-вывода	1x 19V гнездо входа постоянного тока 1x Порт VGA 1x Порт HDMI 1x Порт USB 3.0 1x Порт USB 2.0 1x Порт LAN 2x Аудио вход (Микрофон-Вход, Выход в линию)
Внутр. Плата ввода-вывода	2x Разъем SATA 3.0 Гбит/сек. 1x Разъем питания SATA 1x Разъем питания 2-контактный 1x Разъем передней панели 1x Передний разъем аудио 2x USB 2.0 2x5 Разъем (каждый разъем поддерживает 2 USB 2.0 порта) 1x USB 2.0 1x5 Разъем (поддерживает 1 USB 2.0 порт) 2x 4-контактный Разъем вентилятора 1x Разъем для дисплея на передней панели (LVDS) 1x Разъем для яркости дисплея на передней панели 1x Переключатель разъема для монитора 1x Внутренний стерео динамик 1x Перемычка чистого КМОП (CMOS) 2x LVDS напряжения 1x Перемычка напряжения дисплея на передней панели 1x Цифровой микрофон Заголовок
Конструктив	Форм-фактор Mini-ITX, 170мм x 170 мм
Поддержка ОС	Windows 7 / 8 / 8.1 Biostar оставляет за собой право добавлять или удалять поддержку любой ОС, с уведомлением или без.

Spanish

Especificaciones	
Compatibilidad con el procesador	Intel® Celeron® J1800 processor
Memoria	Soporta DDR3L 1066/1333 Doble Canal (1.35V/1.5V) 2x DDR3L SO-DIMM Ranura de memoria Soporta hasta 16 GB Memoria Cada DIMM soporta un modulo non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L *Por favor consultar con www.biostar.com.tw para la lista de compatibilidad con el memoria.
Almacenamiento de información	Conector 2x SATA 3Gb/s, Soporta nativo IDE & AHCI modo
LAN	Realtek RTL 8111G 10/ 100/ 1000 Mb/s auto negociación, capacidad dúplex Mitad/Completo
Códec Audio	ALC662, Canales Audio de Alta Definición 5.1
USB	Ranura 6x USB 2.0 (1 en las entradas/salidas posteriores y 5 por los distribuidores internos) Ranura 1x USB 3.0 (1 en las entradas/salidas posteriores)
Ranuras de Extinción	Ranura 1x mini PCIe
I/Os Trasera	1x Jack de DC-IN 19V 1x Puerto de VGA 1x Puerto de HDMI 1x Puerto de USB 3.0 1x Puerto de USB 2.0 1x Puerto de LAN 2x Audio Jack (Mic-Entrada, Línea-Salida)
I/Os Interna	2x Conector de SATA 3.0Gb/s 1x Conector de Potencia SATA 1x Conector de Potencia 2-Pin 1x Cabecera de Panel Delantero 1x Cabecera de Audio Delantero 2x USB 2.0 2 x 5 Cabecera (cada cabecera suministra 2 Puertos de USB 2.0) 1x USB 2.0 1x 5 Cabecera (suministrar 1 Puerto de USB 2.0) 2x Conector de Ventilador de 4-Pin 1x Conector de Exposición de Panel Delantero (LVDS) 1x Conector de Brillo de Exposición de Panel Delantero 1x Cabecera de Interruptor de Monitor 1x Altavoz de Estéreo Interna 1x Jumper de CMOS Claro 2x Jumper de LVDS 1x Jumper de Voltaje de Exposición de Panel Delantero 1x Micrófono Digital Header
Factor de Forma	Factor de Forma Mini-ITX, 170 mm x 170 mm
Soporte OS	Windows 7 / 8 / 8.1 Biostar reserva su derecho de añadir o retirar el soporte para cada OS con o sin notificación.

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