倍控®
BKHD

BKHD-ITX-1493-TI4 Motherboard Manual

VER 1.0

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Safety Guide

To ensure optimal use of Beikong products, please review the user manual in its entirety. Before reviewing product-specific information, we kindly request that you carefully read the safety instructions.

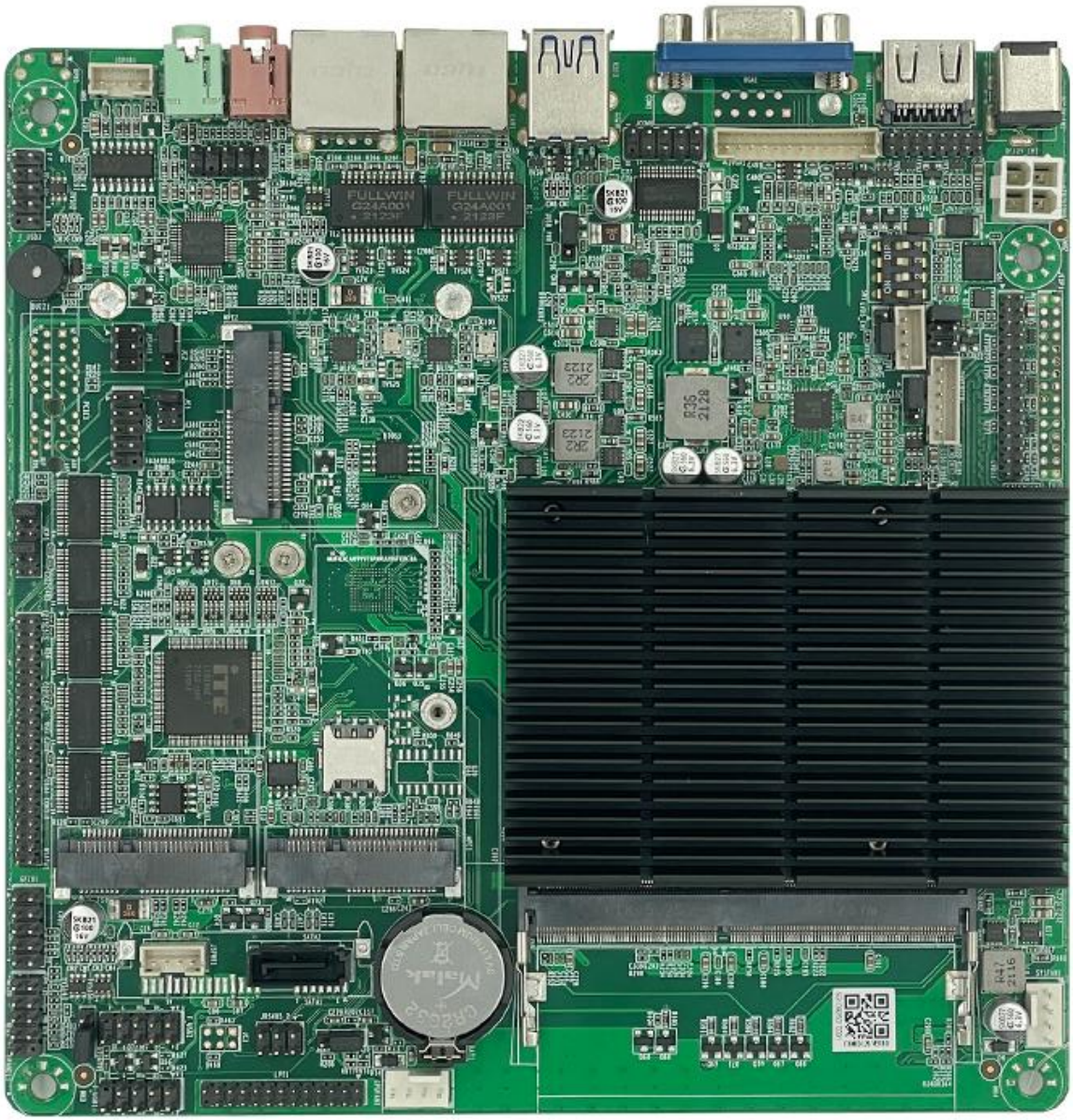
Product Version Identification

The product version number can be found on the motherboard, where X.X represents a number. For example, if the version is indicated as [VER1.0], it signifies that the current version of the motherboard is 1.0. The BIOS interface homepage provides information such as [XXXXNP-XXXX], which denotes the BIOS version number utilized by the current product. When updating the motherboard's BIOS, driver, or referencing other technical documents, please refer to the product version label for the most up-to-date information.

Catalog

Product Images

Please be advised that products manufactured in different batches may exhibit slight variations in appearance. To ensure the most accurate representation, please refer to the actual received goods.



Product Profile

The ITX-1493-TI4-MB is an industrial-grade Mini-ITX embedded motherboard powered by an Intel Celeron J-series processor, designed for industrial control, IoT gateways, commercial displays, all-in-one terminals, and lightweight edge computing. Within its compact form factor, it integrates dual Gigabit Ethernet, supports up to three independent displays, and provides rich industrial I/O and GPIO. With M.2 and mPCIe expansion, low power consumption, high stability, and strong customization flexibility, it is well suited for 24/7 continuous operation.

Main features:

Low Power Consumption & High Stability

Powered by an Intel Celeron J-series processor, the platform supports dual-channel DDR4 SO-DIMM memory up to 32GB. Its low-power design minimizes heat generation, making it ideal for unattended operation and continuous 24/7 use.

Flexible Multi-Display Solutions

The board integrates VGA, HDMI, and LVDS/eDP headers, providing highly customizable display configurations to match different panel suppliers and cost requirements. Displays can be flexibly combined to support primary/secondary screens, information boards, and other multi-display applications, significantly improving information presentation efficiency.

Comprehensive Industrial Interfaces

Supports up to 6x COM serial ports, a standard LPT parallel port, and GPIO for seamless connection to PLCs, scanners, printers, and other industrial or commercial peripherals. Additional onboard headers allow expansion of multiple USB 2.0 ports, easily supporting keyboards, mice, USB storage, dongles, and other peripherals.

Flexible Network Configuration

Equipped with dual Gigabit Ethernet ports, it supports network isolation and separation of data acquisition and management networks, making it suitable for industrial field networks, device connectivity, and lightweight gateway applications.

Dual Power Input Options

Supports both 12V DC input and ATX 4-pin power, providing flexibility for use in industrial chassis as well as selected standard enclosures.

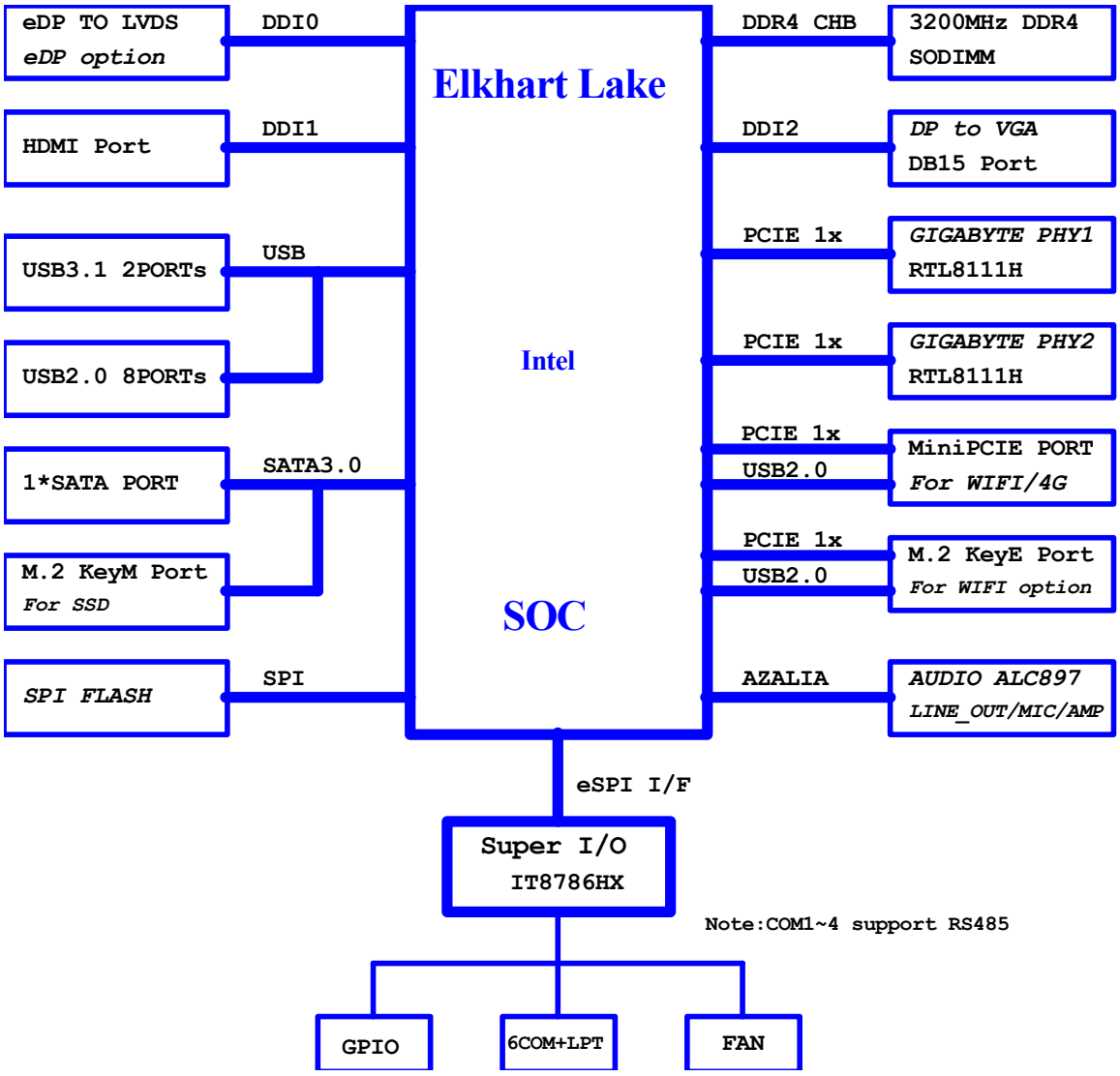
Enhanced Connectivity & Expansion

Includes M.2 Key-E and mPCIe expansion slots, enabling easy integration of Wi-Fi, BT, and 3G/LTE modules for wireless connectivity.

Motherboard Specifications

Processor	Product Collection	Intel Celeron Processor J Series
	Sockets Supported	FCBGA1493
Memory specifications	Memory Type	DDR4 SO-DIMM 260Pin 1.2V
	Maximum Capacity	32GB
	Maximum Frequency	3200 MHz
Storage specifications	SATA	1*SATA 3.0 (6Gb/s)
	M.2	1*M.2 Key-B+M SSD (SATA/PCIe x1)
Network features	Ethernet	2*1GbE
	Controller	2*Realtek RTL8111H
Extension interface	M.2	1*M.2 Key-E 2230 (PCIe x1+USB2.0)
	mPCIe	1*mPCIe (PCIe x1+USB2.0)
Display functions	Port	1*VGA, 1*HD or eDP[1] (Optional)
	Pins	1*LVDS or eDP[2]
	Chip	Intel UHD Graphics
I/O Chip	Chip	IT8786HX for COM/GPIO/Fan control
Backplane I/O	Ethernet	1*RJ45+2*USB-A 2.0 or 2*RJ45
	USB	2*USB-A 3.0
	Audio	1*Line Out, 1*Mic In
	Display	1*VGA/1*HD
	Power supply	1*Jack DC 5.5/2.5mm
Onboard I/O	SATA	1*SATA Data connector/1*SATA Power socket
	SIM	1*SIM Card solts
	Fan	1*CPU Fan, 1*System Fan
	Pins	1*F_PANEL
		2*J_COM (2x5 pins), 1*J_COM (2x20 pins)
		3*F_USB (Expandable USB 2.0 ports)
		1*LVDS or eDP1, 1*HD (Default) or eDP2
		1*LPT
		1*GPIO
		1*F_Audio
		1*J_SPKR
Power supply mode	DC	Jack DC 12V or ATX 4-Pin
Motherboard size	Specification	170*170 (mm)
Work Environment	Temperature	-10~60℃(Work), -20~70℃(Storage)
	Humidity	5%~95% (Relative humidity, no condensation)

Motherboard Block Diagram



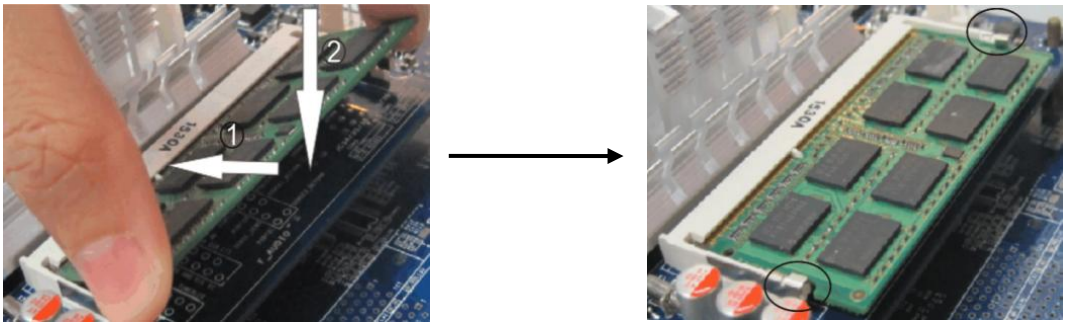
Motherboard Installation

Safety Note

- Please do not remove the serial number and agent warranty sticker from the motherboard prior to installation. Doing so may affect the product's warranty recognition standard.
- Prior to installing or removing the motherboard or other hardware devices, please ensure that the power is turned off and the power cord is unplugged from the socket.
- When installing additional hardware devices on the motherboard interfaces, please ensure that the connectors and sockets are securely fastened.
- When handling the motherboard, please avoid contact with the metal wiring components to prevent the risk of short circuits.
- It is recommended that an anti-static wrist strap be worn when handling the motherboard, central processing unit (CPU), or memory. In the absence of an anti-static wrist strap, it is advisable to ensure that your hands are dry and to touch a metal object first in order to eliminate static electricity.
- Before installing the motherboard, we kindly request that place it on an antistatic mat or in an antistatic bag.
- Make sure the power adapter is turned off before unplugging the motherboard power connector.
- Before turning on the power, make sure the voltage of the adapter is within the standard voltage range.
- Before turning on the power, make sure all hardware device cables and power cords are properly connected.
- Do not allow the fixing screws to collide with the circuits or parts on the motherboard to avoid damage or malfunction of the motherboard.
- Make sure there are no loose screws or metal parts on the motherboard or inside the computer case before using the unit.
- Please secure the computer host in a stable location before starting the device.
- To prevent system failure, do not place the unit in an environment where the temperature is excessive.
- Turning on the power before installation is complete may damage the motherboard, other equipment, or yourself.
- If you are unfamiliar with how to perform the installation, or if you have any technical problems using this product, please contact a professional technician.

Memory Installation

The motherboard provides DDR4 SODIMM memory slot.



Before installing memory:

1. Please confirm that the memory you purchased is compatible with the specifications supported by this motherboard.

2. Before installing or removing the memory, please make sure that the power of the computer is turned off to avoid damage.

3. The memory design has a foolproof mark. If you insert the memory in the wrong direction, the memory cannot be installed. Please change the direction.

When installing memory:

1. Before installing or removing memory, please turn off the power and unplug the power cord.

2. Carefully hold the two ends of the Memory Stick and do not touch the metal contacts on the Memory Stick.

3. Align the metal contacts of the memory with the memory slot, making sure that the concave hole is aligned with the convex point of the upper slot.

4. Insert the memory into the slot at an angle of 30 degrees, then press the Memory Stick down until you hear a "click," indicating that the memory has been successfully installed and is ready to use. (Note: Do not press the Memory Stick too hard to avoid damaging the memory).

5. To remove the Memory Stick, push out the tabs at both ends of the memory slot simultaneously, and then remove the Memory Stick.

To remove the memory:

Use two fingers to push the latches at either end of the slot outward, the memory will pop up, then remove the memory.

Jumper Setting

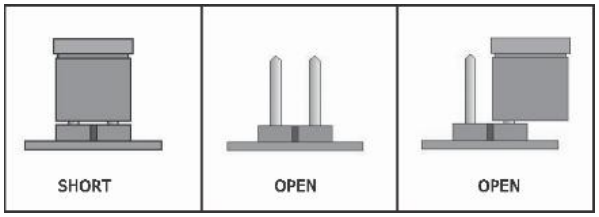
Before installing the hardware device, you can set the corresponding jumpers according to your needs based on the following table.

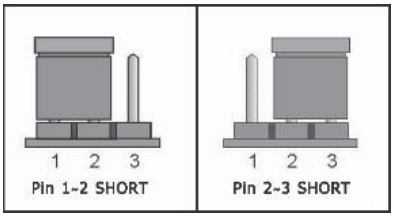
To identify the first pin of a jumper or connector

Look at the marking next to the jumper or connector. The triangle symbol "▲" or "1" or a bold line indicates the first pin; check the pad on the back of the motherboard. The square pad is the first pin. When connecting the connector to the device, be careful to distinguish the first pin. Mixing the pins will damage the motherboard.

2-pin headers: Insert a jumper cap into both pins turns them off (short).

3-pin headers: Insert a jumper cap into pins 1-2 or pins 2-3 to off (short) them.





Clear CMOS Jumper Setting (JBAT)

Image	Status	Setting
	1-2	Normal (Default)
	2-3	Restore BIOS to default settings

Before clearing the CMOS, please turn off the device and disconnect the power to avoid damaging the motherboard.

AUTO_ON Jumper Setting (AT-ATX)

Image	Status	Setting
	1-2	Automatic power on (Default)
	2-3	Normal

USB3 Wake-up Function Settings (USB_PWR)

Image	Status	Setting
	1-2	Disable USB3 wake-up function
	2-3	Enable USB3 wake-up function

Motherboard Pin Definition

SATA Data

The motherboard provides 7-pin SATA data socket

Image	PIN	Definition	PIN	Definition
	1	GND	2	SATA_TXP
	3	SATA_TXN	4	GND
	5	SATA_RXN	6	SATA_RXP
	7	GND	-	

SATA PWR

The motherboard provides 4-pin SATA power socket

Image	PIN	Definition
	1	+12V
	2	GND
	3	GND
	4	+5V

Tip: The 1st pin of the SATA_PWR hard disk power supply interface is +12V output, and the 4th pin is +5V output.

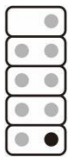
Serial Port (COM)

The motherboard supports Up to 6 serial ports with flexible communication options

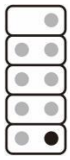
- COM1 & COM2: RS232 / RS485
- COM3: RS232 / RS485 / RS422
- COM4: RS232 / RS485
- COM5 & COM6: RS232

The motherboard provides COM pins (2*5-pin, 2.54 mm pitch)

[COM1/COM2] Status RS232

Image	PIN	Definition	PIN	Definition
	1	DCD#	2	RXD
	3	TXD	4	DTR#
	5	GND	6	DSR#
	7	RTS#	8	CTS#
	9	RI#	10	/

[COM1/COM2] Status RS485

Image	PIN	Definition	PIN	Definition
	1	DATA+ (A)	2	DATA- (B)
	3	/	4	/
	5	GND	6	/
	7	/	8	/
	9	/	10	/

JP_COM_SW Setting (JCOM1_SW1/JCOM2_SW2)

This jumper is used to set the protocol status of COM1 and COM2.

Both **JC1** and **JCOM_SW must be configured together** to define the COM port mode.
For example, to set COM1 to RS485, configure JC1 to pins 3–5 and JCOM1_SW1 to pins 3–5 and 4–6.

Image	Status	Definition
	1-3 2-4	RS-232
	3-5 4-6	RS-485

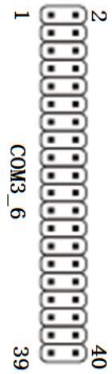
JP_COM Setting (JC1)

Image	Status	Definition
 COM1	1-3	RS-232
	3-5	RS-485
 COM2	2-4	RS-232
	4-6	RS-485

JCOM1 & JCOM2 PIN 9 Voltage Selection (JCP1)

Image	Status	Definition
 COM1	1-2	RS232
	3-4	+5V
	5-6	+12V
 COM2	7-8	RS232
	9-10	+5V
	11-12	+12V

The motherboard provides a 4-in-1 built-in serial port (2*20-pin, 2.00mm pitch), combining 4x standard RS232 pins into a single connector.

Image	PIN	Definition	PIN	Definition
	1	COM3_DCD	2	COM3_RXD
	3	COM3_TXD	4	COM3_DTR
	5	GND	6	COM3_DSR
	7	COM3_RTS	8	COM3_CTS
	9	COM3-RI	10	/
	11	COM4_DCD	12	COM4_RXD
	13	COM4_TXD	14	COM4_DTR
	15	GND	16	COM4_DSR
	17	COM4_RTS	18	COM4_CTS
	19	COM4-RI	20	/
	21	COM5_DCD	22	COM5_RXD
	23	COM5_TXD	24	COM5_DTR
	25	GND	26	COM5_DSR
	27	COM5_RTS	28	COM5_CTS
	29	COM5-RI	30	/
	31	COM6_DCD	32	COM6_RXD
	33	COM6_TXD	34	COM6_DTR
	35	GND	36	COM6_DSR
	37	COM6_RTS	38	COM6_CTS
	39	COM6-RI	40	/

COM3 and COM4 are configured as RS232 by default.

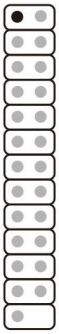
To use RS485 or RS422, hardware modification is required. Please contact our sales team before placing an order to arrange the necessary configuration.

JP_COM Setting (JC3)

Image	Status	Definition
 COM3	1-3	RS-232
	3-5	RS-485
 COM4	2-4	RS-232
	4-6	RS-485

Printer interface: LPT

The motherboard provides Printer Interface LPT pins (2*13-pin, 2.00 mm pitch)

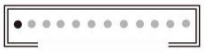
Image	PIN	Definition	PIN	Definition
	1	STB-	2	AFD-
	3	PD0	4	ERR-
	5	PD1	6	INIT-
	7	PD2	8	SLIN-
	9	PD3	10	GND
	11	PD4	12	GND
	13	PD5	14	GND
	15	PD6	16	GND
	17	PD7	18	GND
	19	ACK-	20	GND
	21	BUSY	22	GND
	23	PE	24	GND
	25	SLCT	26	/

Note: The **J_EDP1** and **LVDS** display headers are mutually exclusive and cannot be used simultaneously. **J_EDP2** and **J_HDMI** are mutually exclusive.

The default configuration is **LVDS** and **J_HDMI**.

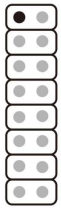
VGA Expansion pin: J_VGA

The motherboard provides J_VGA pins (1*12-pin, 2.00mm pitch)

Image	PIN	Definition	PIN	Definition
	1	N/C	2	VSync
	3	HSync	4	GND
	5	Red	6	GND
	7	Green	8	GND
	9	Blue	10	GND
	11	DCC_Data	12	DCC_Clk

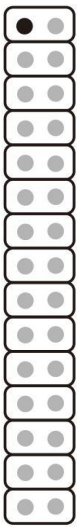
HDMI Expansion pin: JHDMI

The motherboard provides JHDMI pins (2*8-pin, 2.00mm pitch)

Image	PIN	Definition	PIN	Definition
	1	TMDS_TX2P	2	DCC_Clk
	3	TMDS_TX2N	4	DCC_Data
	5	TMDS_TX1P	6	N/A
	7	TMDS_TX1N	8	HPD_HDMI
	9	TMDS_TX0P	10	+5V
	11	TMDS_TX0N	12	GND
	13	TMDS_TXCP	14	GND
	15	TMDS_TXCN	16	GND

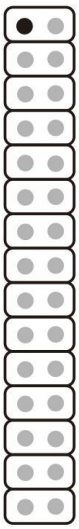
eDP Expansion pin: J_eDP

The motherboard provides eDP pins (2*15-pin, 2.00 mm pitch):

Image	PIN	Definition	PIN	Definition
	1	PVDD	2	PVDD
	3	NC	4	NC
	5	EDP_TX0+	6	EDP_TX0-
	7	GND	8	GND
	9	EDP_TX1+	10	EDP_TX1-
	11	GND	12	GND
	13	EDP_TX2+	14	EDP_TX2-
	15	GND	16	GND
	17	EDP_TX3+	18	EDP_TX3-
	19	GND	20	GND
	21	EDP_AUX+	22	EDP_AUX-
	23	GND	24	HPD_DET
	25	BKLT_PWM	26	BKLT_EN
	27	GND	28	GND
	29	INVERT_PWR	30	INVERT_PWR

LVDS Expansion pin: J_LVDS

The motherboard provides LVDS pins (2*15-pin, 2.00 mm pitch)

Image	PIN	Definition	PIN	Definition
	1	LCDVDD	2	LCDVDD
	3	LCDVDD	4	NC
	5	GND	6	GND
	7	LVDS_A0-	8	LVDS_A0+
	9	LVDS_A1-	10	LVDS_A1+
	11	LVDS_A2-	12	LVDS_A2+
	13	GND	14	GND
	15	LVDSA_CLK-	16	LVDSA_CLK+
	17	LVDS_A3-	18	LVDS_A3+
	19	LVDS_B0-	20	LVDS_B0+
	21	LVDS_B1-	22	LVDS_B1+
	23	LVDS_B2-	24	LVDS_B2+
	25	GND	26	GND
	27	LVDSB_CLK-	28	LVDSB_CLK+
	29	LVDS_B3-	30	LVDS_B3+

The board provides selectable panel operating voltages of **3.3V**, **5V**, and **12V**, as well as 5V or 12V backlight power options.

Before using the LVDS interface, ensure that you understand the required operating voltage of your LCD panel.

The panel will only function correctly when the selected LCD voltage matches the panel's rated voltage.

INVERT1 (Backlight Power Supply Interface)

The motherboard provides INVERT pins (1*6-pin, 2.00 mm pitch)

Image	PIN	Definition
	1	12V/5V is set via INVERT_PWR
	2	12V/5V is set via INVERT_PWR
	3	Backlight Enable
	4	Brightness Control
	5	GND
	6	GND

INVERT_PWR Setting (Screen Backlight Power Supply)

Image	PIN	Definition
	1-2	12V
	2-3	5V

JLVDS_PWR Setting (Screen Operating Voltage)

Image	PIN	Definition
	1-2	3.3V (Default)
	3-4	5V
	5-6	12V

JSW1 Setting (Screen Brightness Adjustment)

Image	PIN	Definition
	1	BLU+ Brightness increase
	2	BLU - Brightness decreases
	3	Backlight Enable
	4	GND

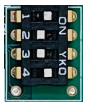
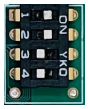
LVDS function jumper (LVDS_EN1)

The motherboard provides LVDS_EN pins (1*3-pin, 2.54 mm pitch)

Image	PIN	Definition
	1-2	Turn off LVDS
	2-3	Open LVDS

SW1 Settings (LVDS Resolution Adjustment)

The motherboard includes SW1 DIP switch for configuring the LVDS resolution

SN	DIP SW Method	Resolution / Bit depth	SN	DIP SW Method	Resolution / Bit depth	SN	DIP SW Method	Resolution / Bit depth
1		800*600 Single 6	2		1024*768 Single 6	3		1280*768 Single 6
4		1280*800 Single 6	5		1280*960 Single 6	6		1280*1024 Double 8
7		1366*768 Single 6	8		1366*768 Single 8	9		1440*900 Double 8
10		1024*600 Single 6	11		1920*1080 Dual 6 15.6-inch	12		1920*1080 Dual 8 21.5-inch
13		1920x1080 Dual 8 42-inch	14		1280*1024 Double 8	15		1280*800 Single 8
16		1024*768 Single 8						

USB Expansion pin: F_USB

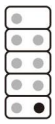
Before connecting the USB expansion board, be sure to turn off the computer and unplug the power cord from the socket to avoid damaging the USB expansion board.

The **F_USB**[3] and **USB**[1] interfaces are mutually exclusive and cannot be used at the same time.

On **Dual-LAN** motherboard versions, F_USB[3] supports USB 2.0 functionality.

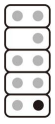
The **F_USB**[4] header provides **one** USB 2.0 port by default.

The motherboard provides F_USB pins (2*5-pin, 2.54 mm pitch, 9th pin is empty)

Image	PIN	Definition	PIN	Definition
	1	+5V	2	+5V
	3	USB1_DATA-	4	USB2_DATA-
	5	USB1_DATA+	6	USB2_DATA+
	7	GND	8	GND
			10	GND

Front Audio Expansion pin: F_AUDIO

The motherboard provides AUDIO pins (2*5-pin, 2.54 mm pitch)

Image	PIN	Definition	PIN	Definition
	1	MIC-L	2	GND
	3	MIC-R	4	NC
	5	Line out-R	6	Sense Return1
	7	GND	8	NC
	9	Line OUT-L	10	Sense Return2

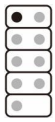
Audio Power Amplifier pin: JSPKR1

The motherboard provides JSPKR pins (1*4-pin, 2.00 mm pitch) Supports 2Ω 5W dual-channel audio.

Image	PIN	Definition
	1	SPKL-
	2	SPKL+
	3	SPKR-
	4	SPKR+

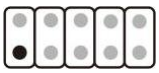
Front panel pin: F_PANEL

The motherboard provides F_PANEL pins (2*5-pin, 2.54 mm pitch)

Image	PIN	Definition	PIN	Definition
	1	HDD LED+	2	PWR LED+
	3	HDD LED-	4	PWR LED-
	5	GND	6	PWR BTN#
	7	RESET BTN#	8	GND
	9	NC	10	

JP_GPIO (Programmable Input/Output)

The motherboard provides GPIO pins (2*5-pin, 2.54mm pitch)

Image	PIN	Definition	PIN	Definition
	1	GND	2	+5V
	3	GPO1	4	GPI1
	5	GPO2	6	GPI2
	7	GPO3	8	GPI3
	9	GPO4	10	GPI4

Processor cooling fan power socket: CPU_FAN

The motherboard provides Cooling fan power socket (1*4-pin)

Image	PIN	Definition
	1	Ground
	2	+12V
	3	DET
	4	PWM

Power socket (ATX powered)

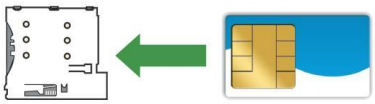
The motherboard provides ATX power socket (2*2-pin)

Image	PIN	Definition
	1	GND
	2	GND
	3	+12V
	4	+12V

SIM card slot (SIMB)

The motherboard provides SIM card slot for installing an LTE SIM card

Located on the back of the motherboard.



Note: When inserting the SIM card, make sure the chip is facing downwards (the chip faces the motherboard).

BIOS User Guide

BIOS Description

This motherboard uses AMI BIOS. BIOS stands for (Basic Input Output System). It is a set of programs stored on a ROM (Read Only Memory) chip on the computer's motherboard. It stores the computer's most important basic I/O programs, the power-on self-test program, and the system startup program. It can read and write specific information about system settings from the CMOS. Its primary function is to provide the most basic and immediate hardware settings and control for the computer.

When you turn on your computer, the BIOS is the first program to run. It has the following main functions:

- The Power-On Self-Test (POST) checks whether the computer is functioning properly.
- It initializes and tests some external devices and loads your operating system.
- It provides the lowest-level, most basic control of your computer hardware.
- You manage your computer through the SETUP function in the BIOS.

The BIOS data is stored in a CMOS/R RAM chip on the motherboard, maintained by a 3.3V button battery. It contains important system information and the BIOS Setup program for setting system parameters. When the system is operating normally, the BIOS does not need to be modified. However, if the CMOS data is lost due to other reasons, the BIOS must be reset.

Note:

Incorrect BIOS settings can directly damage the computer hardware and even burn out the motherboard. Those unfamiliar with the system are advised to modify the settings with caution. Because the motherboard BIOS is constantly being updated, the BIOS information in this manual is for reference only. We cannot guarantee that the BIOS information in this manual will be consistent with the actual BIOS information on the motherboard.

BIOS Settings

When the motherboard is powered on or the system is restarted, the following prompt will appear on the display screen in the Post interface. Press "DEL" on the keyboard to enter BIOS Setup.

If this message disappears before you respond, you can press <Ctrl> + <Alt> + <Del> at the same time to restart the computer, or shut down and then restart the computer, or press the power button on the case to restart the computer.

Keyboard keys	Functional Description
← / →	Move the Left and Right arrows to select the screen.
↑ / ↓	Move the Up and Down arrows to select the item.
+ / -	Increase/Decrease value or Change selection
<Enter>	Select, Confirm this option or Enter the submenu
<ESC>	Return to Main page, or End the setup process from Main page
<F1>	Show related Help instructions
<F2>	Restore previous settings
<F9>	Load the optimized settings (BIOS defaults)
<F10>	Save the changed settings and reboot

Common fault analysis and solutions

We have compiled some frequently asked questions for your reference. Please check https://bkminipc.com/frequently-asked-questions-and-answers/

Error	Inspection Method
Unable to start after power on	Make sure the power cord is properly connected. Make sure that the power supply you are using meets the power supply requirements of the motherboard. Try to reinsert the Memory Stick. Try to replace the Memory Stick. Try to clear the CMOS of the main board. Please confirm if there is an external expansion card and if it is normal after removing the external card.
Unable to display after power on	Make sure the monitor is turned on. Make sure the monitor and host power cables are properly connected. Make sure the monitor and host cables are properly connected. Check to see if the monitor is in "Sleep" mode. Try changing the monitor interface or replacing the monitor.
BIOS Setup cannot be saved	Check that the CMOS battery is installed Try to replace the CMOS battery (CR2032) Adjust the time and date in BIOS setup
Unable to find a bootable device	Make sure the drive's power and data cables are properly connected. Make sure the operating system is installed on the drive. Make sure the hard drive is not physically damaged.
Blue screen or freeze when logging on to the system	Check if the Memory Stick and External Card are loose. Try removing the newly installed hardware and uninstalling the newly installed driver or software. Try replacing the memory with a different specification.
Slow entry into the operating system	Check if the CPU cooling fan is running normally. Check if the remaining space of the system partition is insufficient. Use software to check for bad sectors on the hard drive.
System restarts automatically	Confirm that the CPU cooling fan is rotating normally. Confirm that the switch/reset button has not been accidentally touched. Confirm that the Memory Stick and external card are loose. Confirm that the power supply has sufficient load capacity, try to replace the power supply Check if the system is infected with viruses.
Unable to detect USB device	Confirm that the USB device requires separate power. Confirm that the USB interface has poor contact. Confirm that the USB controller is enabled in the BIOS setup.

Useful Links

Submit your suggestions and ideas in the community	https://www.reddit.com/r/bkminipc/	
Watch our new product demos	https://www.youtube.com/@BKHD-PCs	
Corporate News and Cooperation	https://www.linkedin.com/company/beikong/	
Get our latest news on Meta	https://www.facebook.com/people/%E5%80%8D%E6%8E%A7/61558406109357/	

