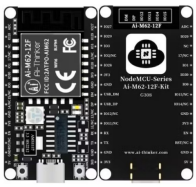

Ai-Thinker Ai-M61EVB-S2 Open Source Hardware WiFi6 Multi-Functional Development Board User Manual

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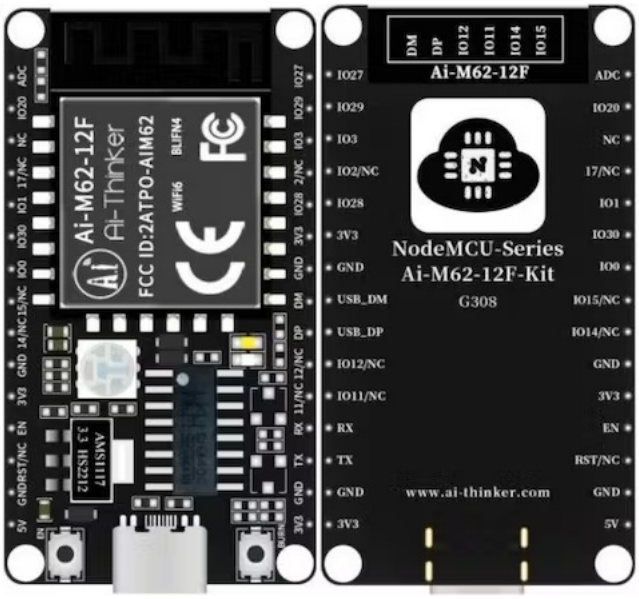


Product Information

Version	Date	Formulation/Revision	Author	Approved by
V1.0	2023.06.15	First Edition	Zekai Qian	–

Product Usage Instructions

Flashing preparation

- **Hardware preparation:**
  Hardware list:
  - Ai-M61EVB-S2 board
  - USB to TTL module
  - DuPont Line (several)
- Hardware Wiring Instruction:

Hardware	Ai-M61EVB-S2	USB to TTL module
QTY	1	1
Wiring	3V3 GND RXD TXD	USB TTL 3V3 GND TXD RXD

Software preparation:

- Flash software, prepare firmware:
- The software compression package is provided. After decompression, the directory structure is as follows:
- The software version used in this fixed frequency test is 1.8.3. The firmware is provided.

Firmware burning:

- **To burn the firmware:**

- Run BLDevCube.exe
- Select BL616/618 in Chip Type
- Click Finish
- Enter the programming interface

- **Flashing steps:**
  - Connect the TTL connected to the module to the computer.
  - After confirming the power on, set the module to the burning mode.
  - Specific operation process:
    - Long press the S2 button (BURN) without releasing it.
    - Press the S1 button (RST).
    - Release the S2 button (BURN).
  - Select the COM port number connected to the chip.
  - Select 921600 for Uart Rate.
  - Click the Create & Download button to start downloading the firmware.
  - When ALL Success is displayed, it means that the firmware download is complete.

AiPi-Eyes-S2 function test:

1. **Hardware preparation:**
   Hardware list:
   - AiPi-Eyes-S2
   - Type-C cable
   - GC9307N, 3.5inch SPI interface capacitive touch screen
   - Speaker

   Connect the screen, speaker, and Type-C cable to the board.
2. **Power-on test:**
   Power on the module using the Type-C interface with a 5V power supply. After power on, the startup screen will be displayed.
3. **Configure WiFi:**
   - Swipe down from the top of the screen and click Network to enter the WiFi configuration interface.
   - Enter the WiFi name and password, and click Connect.
   - The status will display the connection status (OK means success, Fail means failure).
   - After successfully connecting to WiFi, the time will be updated to Beijing time synchronously. Note: Restarting the module will require re-timing, and WiFi needs to be re-entered.
4. **Button function test:**
   Swipe down from the top of the screen and there will be three buttons: Network, Restore, and Info. The corresponding functions are as follows:
   - Network: Configure network
   - Restore: Restart
   - Info: Display system information

Flashing preparation

Hardware preparation

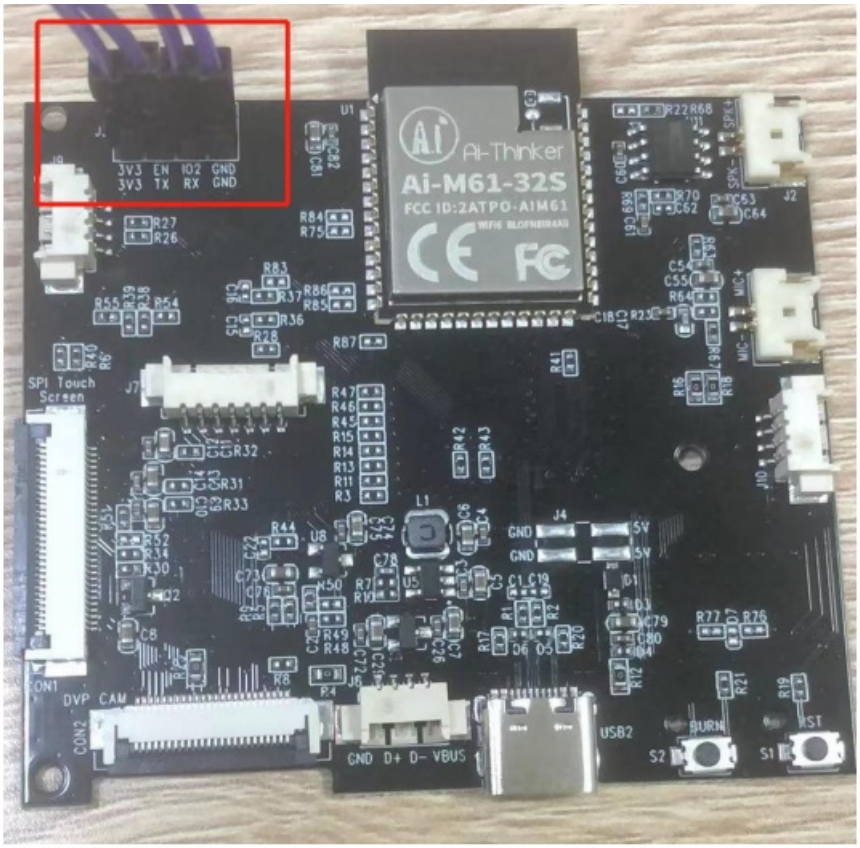
Hardware list

Hardware	QTY
Ai-M61EVB-S2	1
USB to TTL module	1
DuPont Line	several

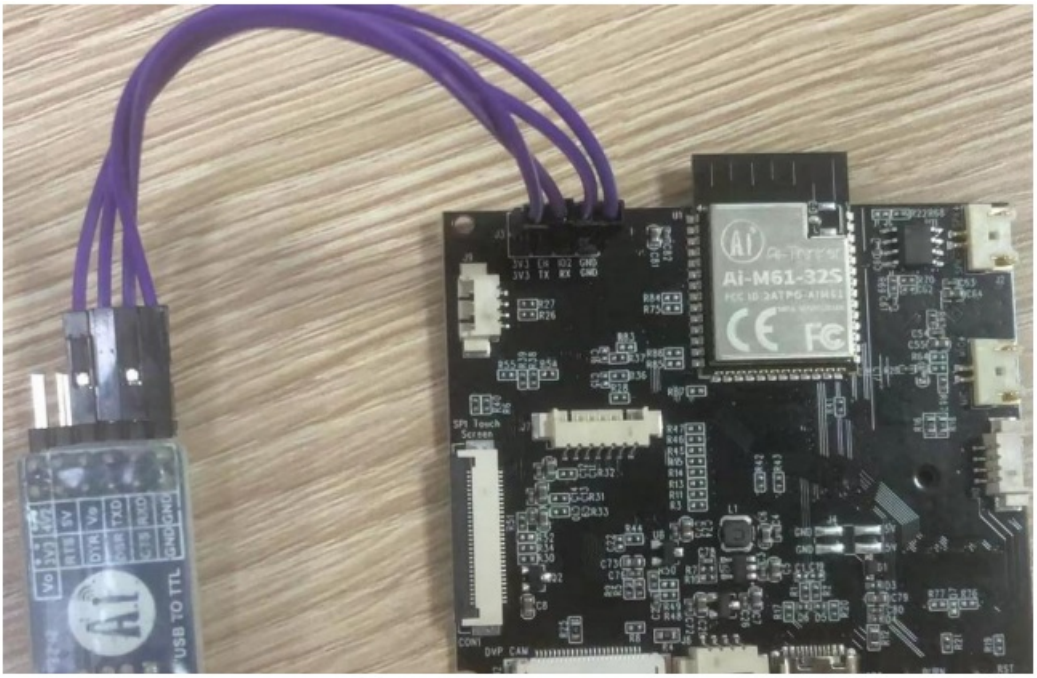
Wiring Instruction

Ai-M61EVB-S2	USB　TTL
3V3	3V3
GND	GND
RXD	TXD
TXD	RXD

Board wiring diagram



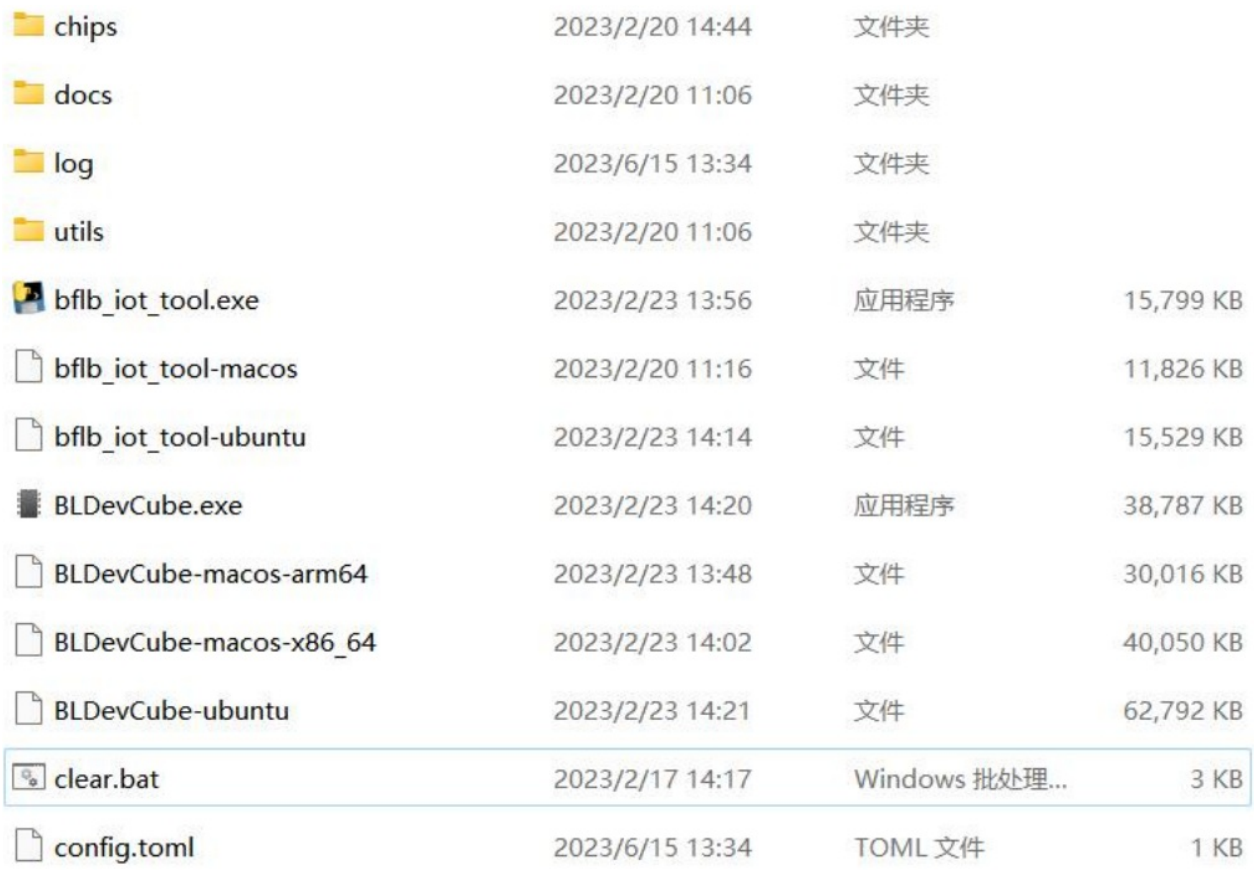
Board connect TTL



Software preparation

1. **Flash software, prepare firmware**
   - The software compression package is as follows:

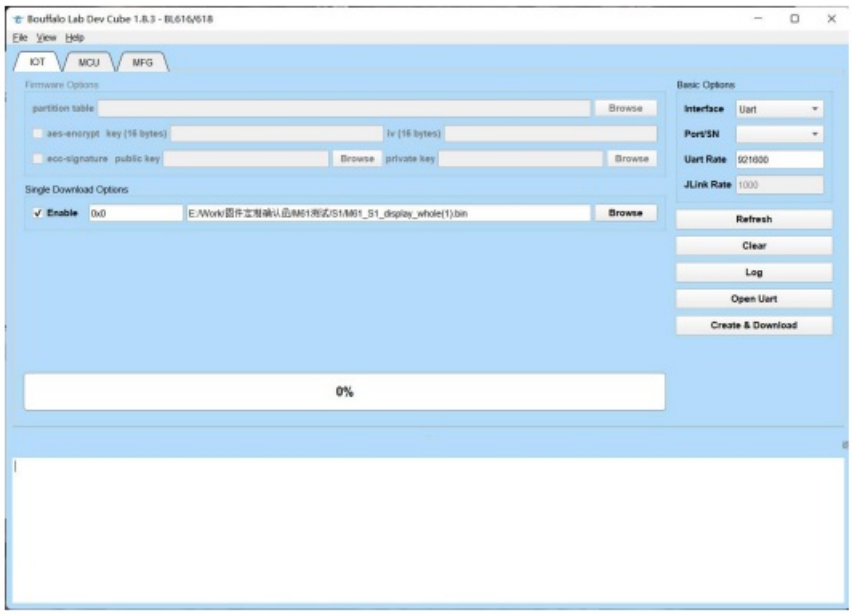
   - The directory after software decompression is as follows:



   - The software version used in this fixed frequency test is 1.8.3

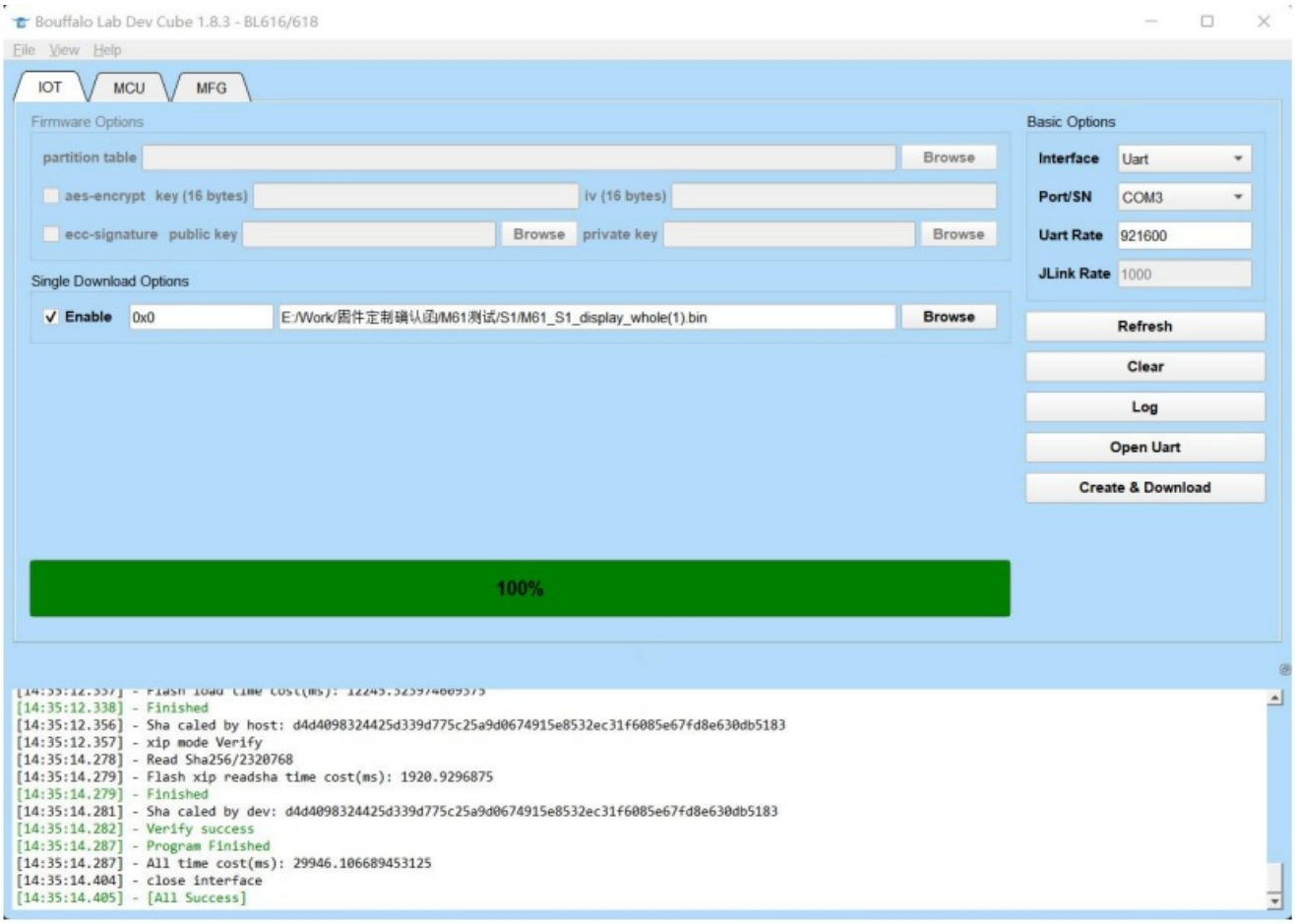
- The firmware is as follows:

2. **Firmware burning**
   Run “BLDevCube.exe”, select BL616/618 in Chip Type, click Finish, and enter the programming interface as follows.



Flashing steps:

- Connect the TTL connected to the module to the computer. After confirming the power on, you need to set the module to the burning mode. The specific operation process is Long press the S2 button (BURN) without releasing it, press the S1 button (RST), and then release the S2 button (BURN)
- **COM Port** Select the COM port number connected to the chip (if there is no COM port displayed, click the “Refresh” button to refresh the COM port option), select 921600 for Uart Rate, click the “Create & Download” button to start downloading the firmware, when “ALL Success” is displayed, It means that the firmware download is complete.
- The flashing success interface is as follows:



AIPi-Eyes-S2 function test

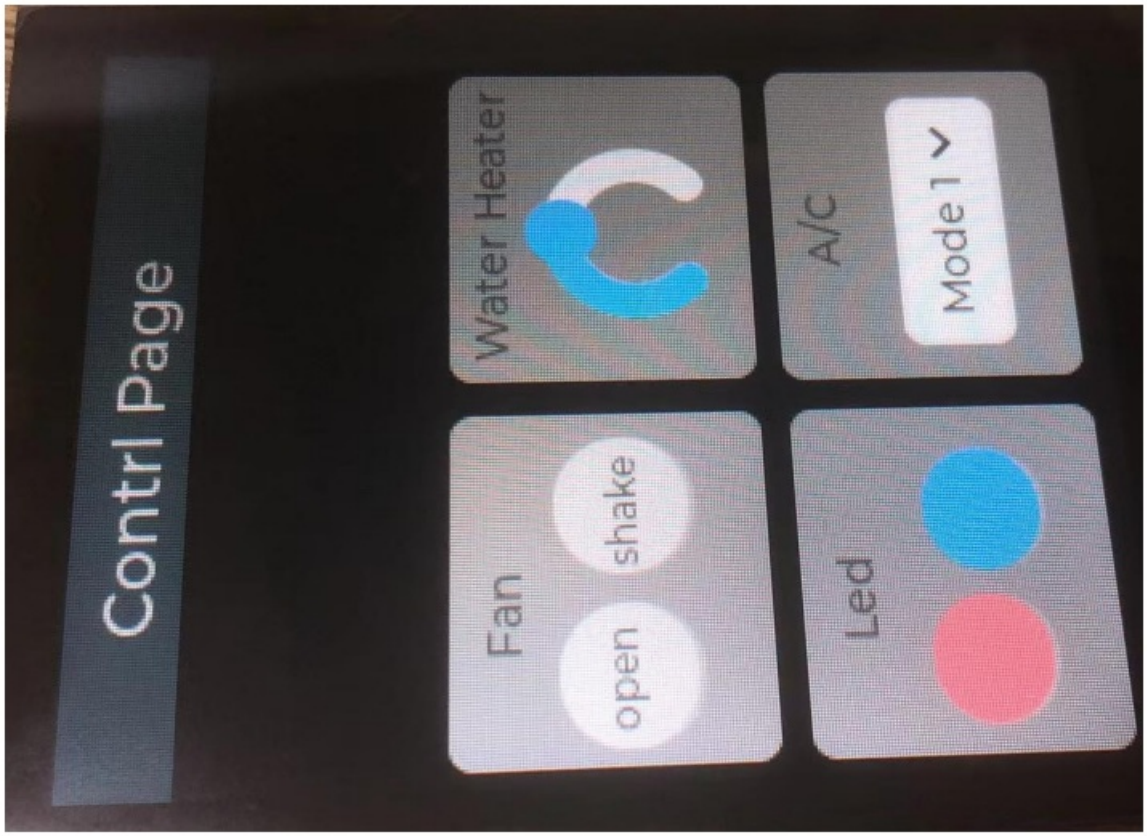
- **Hardware preparation**

Hardware	QTY
AIPi-Eyes-S2	1
Type-C cable	1
GC9307N, 3.5inch SPI interface capacitive touch screen	1
speaker	1

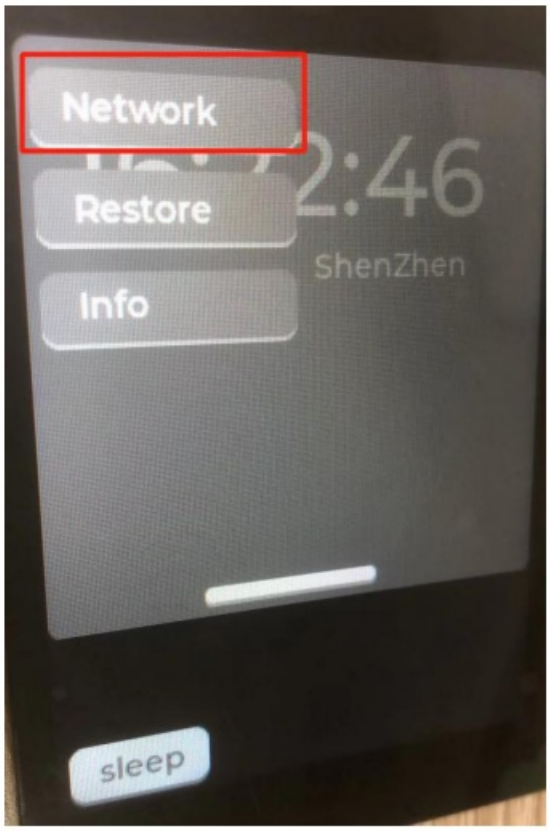
- Connect the screen, speaker, Type-C cable to the board.

1. **Power-on test**
   - Power on the Type-C interface that supplies power to the module, and the module uses 5V for power supply. After power on, the startup screen is as follows:

   - The main interface is as follows:

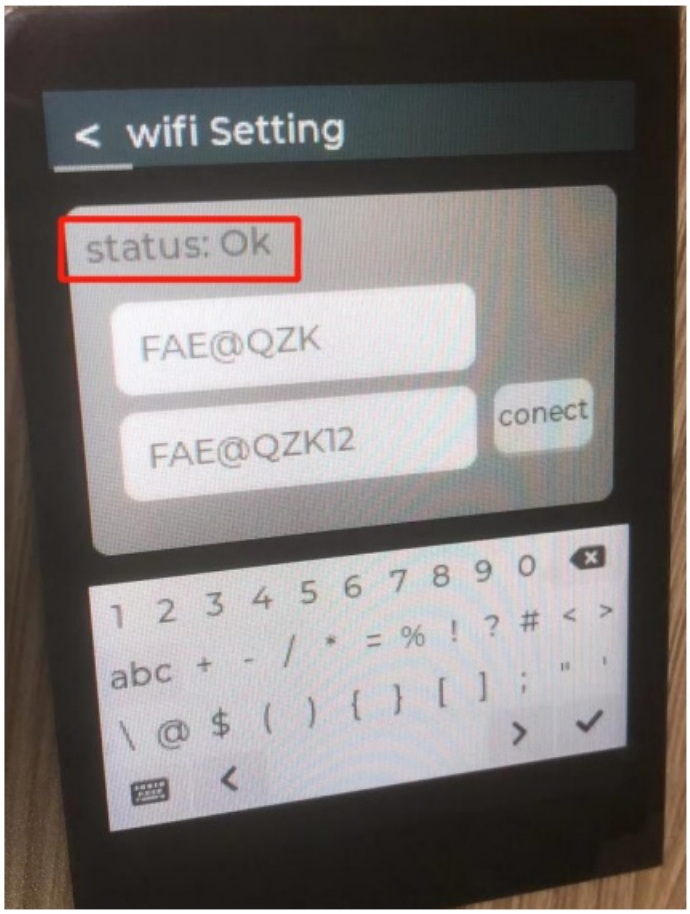


2. **Configure WiFi**
    - Swipe down from the top of the screen with your finger, you can see three buttons, click Network to enter the WiFi configuration interface.



- Enter the WiFi name and password, and click Connect.

- After entering the correct WiFi name and password, the status will display the status of the connection, OK means success, and Fail means failure.



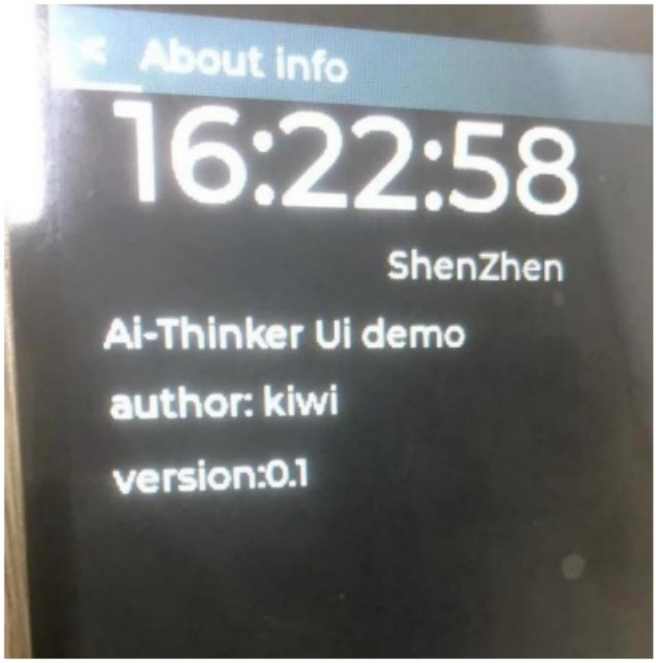
- After successfully connecting to WiFi, the time will be updated to Beijing time synchronously. Note: the time required to restart the module will be re-timed, and WiFi needs to be re-entered.

3. **Button function test**
    - Two buttons are provided in the main interface, which are switch and button. At present, the buttons have no redundant functions. Only the speaker responds to the state of the button after being pressed, and the

voice broadcasts “turn on the switch” and “turn off the switch”.

- When the sleep button in the lower right corner is pressed, the screen will enter sleep mode. The screen will automatically enter sleep mode if there is no touch for 30s.
- In sleep mode, the brightness of the screen is low and only the time is displayed.

- Swipe down from the top of the screen with your finger and there will be three buttons, namely Network, Restore, and Info. The corresponding functions are, configure network, restart, and system information. After clicking info, the following information appears.



Contact us

- **Official website** https://www.ai-thinker.com
- **Development DOCS** https://docs.ai-thinker.com

- **Official Forums** http://bbs.ai-thinker.com
- **Purchase sample** https://ai-thinker.en.alibaba.com/
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- **Tel** 0755-29162996

Documents / Resources

	Ai-Thinker Ai-M61EVB-S2 Open Source Hardware WiFi6 Multi-Functional Development Board [pdf] User Manual Ai-M61EVB-S2 Open Source Hardware WiFi6 Multi-Functional Development Board, Ai-M61EVB-S2, Open Source Hardware WiFi6 Multi-Functional Development Board, Hardware WiFi6 Multi-Functional Development Board, WiFi6 Multi-Functional Development Board, Multi-Functional Development Board, Development Board, Board

References

- -
- Shenzhen Anxinke Technology Co., Ltd. - IoT wireless module, ESP8266/ESP32 modules
- Hotspots |