



AiPi-Eyes-S1 User Manual Version V1.0 Copyright ©2023



Version	Date	Formulate/revise content	Formulate	Approve
V1.0	2023.06.15	First Edition	Zekai Qian	

Document formulation/revision/revocation resume



1. Flashing preparation

1.1 Hardware preparation

Hardware list:

Hardware	QTY
AiPi-Eyes-S1	1
USB to TTL module	1
DuPont Line	several

Wiring Instruction:

Ai-M61EVB-S1	USB to TTL module
3V3	3V3
GND	GND
RXD	TXD
TXD	RXD

Board wiring diagram:



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Board connect TTL:



1.2 Software preparation

1.2.1 Flash software, prepare firmware

The software compression package is as follows:

BouffaloLabDevCube-v1.8.3.zip	2023/6/15 12:01	WinRAR ZIP 压缩	270, <mark>4</mark> 04 KB

The directory after software decompression is as follows:

늘 chips	2023/2/20 14:44	文件夹	
adocs	2023/2/20 11:06	文件夹	
📒 log	2023/6/15 13:34	文件夹	
늘 utils	2023/2/20 11:06	文件夹	
<pre>bflb_iot_tool.exe</pre>	2023/2/23 13:56	应用程序	15,799 KB
bflb_iot_tool-macos	2023/2/20 11:16	文件	11,826 KB
bflb_iot_tool-ubuntu	2023/2/23 14:14	文件	15,529 KB
BLDevCube.exe	2023/2/23 14:20	应用程序	38,787 KB
BLDevCube-macos-arm64	2023/2/23 13:48	文件	30,016 KB
BLDevCube-macos-x86_64	2023/2/23 14:02	文件	40,050 KB
BLDevCube-ubuntu	2023/2/23 14:21	文件	62,792 KB
💿 clear.bat	2023/2/17 14:17	Windows 批处理	3 KB
C config.toml	2023/6/15 13:34	TOML文件	1 KB



The software version used in this fixed frequency test is 1.8.3



The firmware is as follows:

M61_S1_display_whole_V1.1.bin	2023/6/15 15:06	BIN 文件	2,267 KB
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1.2.2 Firmware burning

Run "BLDevCube.exe", select BL616/618 in Chip Type, click Finish, and enter the programming interface as follows.





👕 Bouffalo Lab Dev Cube 1.8.3 - BL616/618	- 0 X
Eile View Help	
Firmware Options	Basic Options
partition table Brow	se Interface Uart 👻
aes-encrypt key (16 bytes) iv (16 bytes)	Port/SN 👻
ecc-signature public key Browse private key Bro	wse Uart Rate 921600
Single Download Options	JLink Rate 1000
✓ Enable 0x0 E:/Work/固件定制确认砂/M61测试/S1/M61_S1_display_whole(1).bin Brow	rse Refresh
	Clear
	Log
	Open Uart
	Create & Download
0%	
0%	
	6

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)

irmware Options 1. Choose loT p	age			Basic Options	
partition table			Browse	Interface	Uart 👻
aes-encrypt key (16 bytes)		iv (16 bytes)		Port/SN	COM3 -
ecc-signature public key	Browse	private key	Browse	Uart Rate	921600
ngle Download Options				JLink Rate	1000
✓ Enable 0x0	E:/Work/固件定制确认函/M61测试/S1/M61_S1_d	display_whole(1).bin	Browse		Refresh
					Clear
2. Choose Enable			3. Choose the firmware that you want		Log
			to flash	C)pen Uart
				- Creat	e & Download
			4. Check serial port and baud rate ar	d click this butto	n

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:

👕 Bouffalo Lab Dev Cube 1.8.3 - BL6	16/618			- 🗆 X
<u>File View H</u> elp				
IOT MCU MFG				
Firmware Options			Basic Options	
partition table		Browse	Interface	Uart 👻
aes-encrypt key (16 bytes)	iv (16 bytes)		Port/SN	COM3 👻
ecc-signature public key	Browse private key	Browse	Uart Rate	921600
Single Download Options			JLink Rate	1000
✓ Enable 0x0	E:/Work/固件定制确认函/M61测试/S1/M61_S1_display_whole(1).bin	Browse		Refresh
				Clear
				Log
			0	pen Uart
			Create	e & Download
	100%			
[14:00:12.00/] - F1850 1080 LIME	LUSL(MS): 12240.0203/4000000			
[14:35:12.338] - Finished [14:35:12.356] - Sha caled by hos	t: d4d4098324425d339d775c25a9d0674915e8532ec31f6085e67fd8e630db5183			<u>_</u>
[14:35:12.357] - xip mode Verify [14:35:14.278] - Read Sha256/2320	768			
[14:35:14.279] - Flash xip readsh				
	: d4d4098324425d339d775c25a9d0674915e8532ec31f6085e67fd8e630db5183			
[14:35:14.282] - Verify success [14:35:14.287] - Program Finished				
[14:35:14.287] - All time cost(ms				
[14:35:14.404] - close interface [14:35:14.405] - [All Success]				.

1.3 AiPi-Eyes-S1 function test

Hardware preparation

Hardware	QTY
AiPi-Eyes-S1	1
Type-C cable	1
GC9307N,	1
3.5inch SPI interface	
capacitive touch screen	
speaker	1





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

1.3.1 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:







1.3.2 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.



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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.



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1.3.3 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.







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