

BL-M8800MT1-40B User Manual

1. Build a debugging environment

hardware:

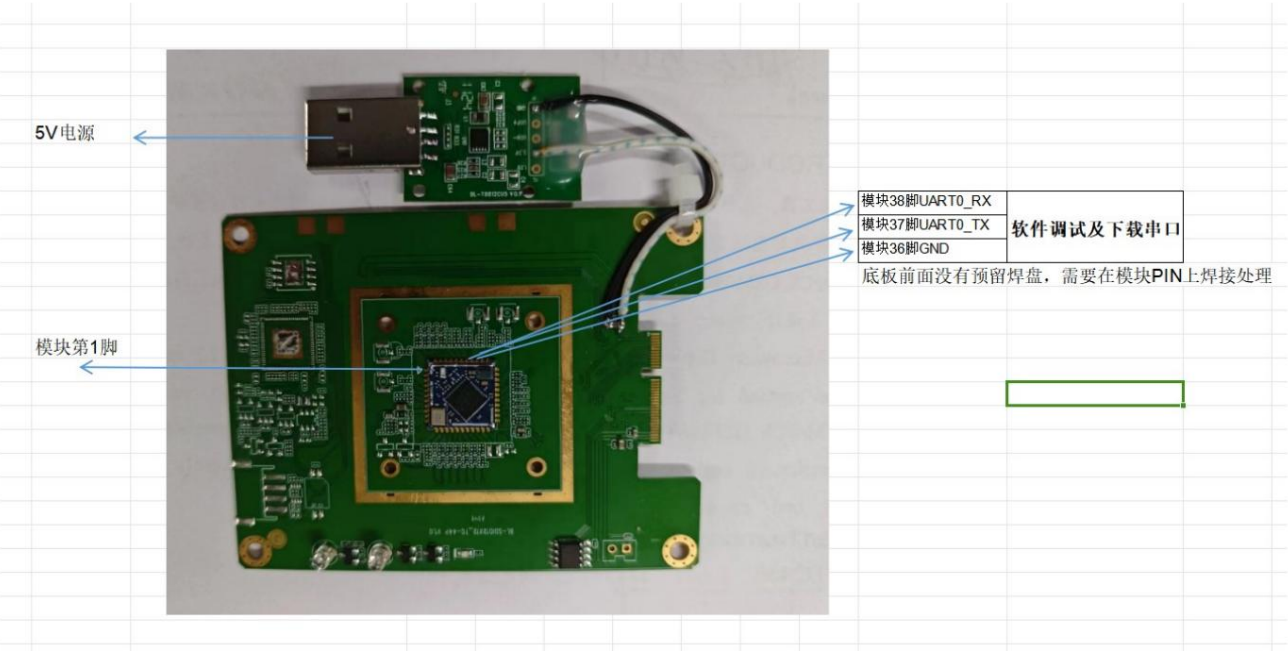
A: Module

B:BL-SDIO 12*12_TC-44P

C: Debug serial board

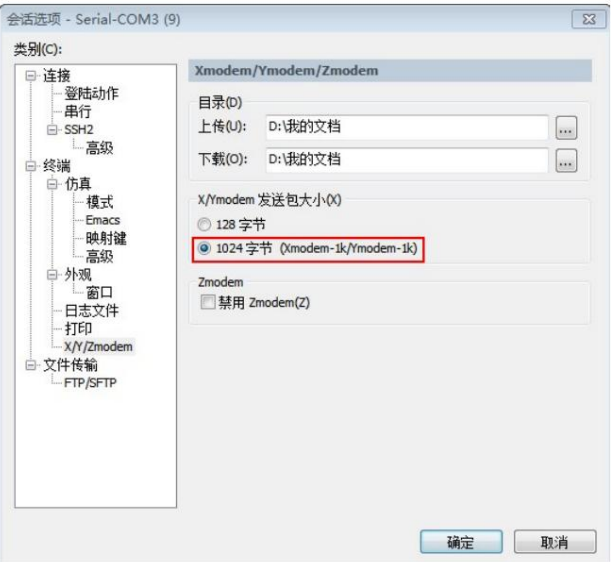
module burning and downloading wiring method: as shown

in the figure, if an external module PIN is required, it is recommended to weld it on the oil mark hole of the module (*)



Second firmware burning instructions:

1. Serial port settings: baud rate 921600; x/ymodem set to 1024 bytes, connect the serial port, enter MCU mode; 2. Note that when you power on for the second time, keep pressing the enter key to enter the burning mode



```
Serial-COM3 (9)

aic>
aic>
Bootrom [Mar  4 2023, ga48655e]
Copyright (c) 2018-2023 AICsemi Ltd.

RstCause:0000,c0,Boot:e1,0
Mcu mode
count=4

Boot >
Boot >Boot abort

Boot >
Boot >
```

3. Enter f 3 to enter store UsrCfg

```
Boot >
Boot >f 3

Boot >Store UsrCfg
Boot >
```

4. Input x 8000000 200000

```
Boot >x 8000000 100000

Boot >Receiving xModem (921600 bps) data to 0x08000000
cccccccccccccccc
```

```
Serial-COM3 (9) - SecureCRT
文件(F) 编辑(E) 查看(V) 选项(O) 传输(T) 脚本(S) 工具(L) 帮助(H)
发送ASCII(S)...
接收ASCII(R)...
发送二进制(B)...
发送Xmodem(N)...
接收Xmodem(C)...
发送Ymodem(D)...
接收Ymodem(Y)...
Zmodem上传列表(Z)...
开始Zmodem上传(U)

Serial-COM3 (9)

aic>
aic>
Bootrom [Mar  4 2023, ga48655e]
Copyright (c) 2018-2023 AICsemi Ltd.

RstCause:0000,c0,Boot:e1,0
Mcu mode
count=4

Boot >
```

开始 xmodem 传输。 按 Ctrl+C 取消。

8% 121 KB 40 KB/s 00:00:36 ETA 0 Errors

After burning is complete, enter g 8000000 (*)

Three module PIN pin definition:

No	Pin Name	Type	I/O Level	Module Pin Description
1	GND	RF	/	RF Ground connections
2	ANT0	RF	/	RF Pad for 2.4G WLAN/5G WLAN/2.4G BT ANT
3	GND	RF	/	RF Ground connections
4	NC	/	/	NC Reserved BT_RF PAD for BT ANT
5	NC	/	/	NC
6	GPIOA0	I/O	SAW	General Purpose Input / Output Pin GPIOA0
7	GPIOA1	I/O	SAW	General Purpose Input / Output Pin GPIOA1
8	NC	/	/	NC
9	VDD33	P	/	3.3V Main power supply
10	USB_DM	AI/O	/	1. General Purpose Input / Output Pin GPIOA17 2. USB 2.0 Device High Speed Interface differential pair
11	USB_DP	AI/O	/	1. General Purpose Input / Output Pin GPIOA16 2. USB 2.0 Device High Speed Interface differential pair
12	PWR_WF	.	VDD33	Enable signal input, it can externally shut down the module by pulled low. (internal pull up to VDD33 by 47K and pull down to GND by 200K resistors)
13	GPIOB4	I/O	SAW	General Purpose Input / Output Pin GPIOB4
14	GPIOA15	I/O	SAW	General Purpose Input / Output Pin GPIOA15
15	GPIOA14	I/O	SAW	General Purpose Input / Output Pin GPIOA14
16	GPIOA13	I/O	SAW	General Purpose Input / Output Pin GPIOA13
17	GPIOA12	I/O	SAW	General Purpose Input / Output Pin GPIOA12
18	GPIOA11	I/O	SAW	General Purpose Input / Output Pin GPIOA11
19	GPIOA10	I/O	SAW	General Purpose Input / Output Pin GPIOA10
20	GND	P	/	Ground connections
21	NC	/	/	NC
22	SAW	P	/	3.3V or 1.8V power supply for digital I/O

23 NC	/	/	NC
24 NC	/	/	NC
25 GPIOB3	I/O	SAW	General Purpose Input / Output Pin GPIOB3
26 GPIOB1	I/O	SAW	General Purpose Input / Output Pin GPIOB1
27 GPIOB2	I/O	SAW	General Purpose Input / Output Pin GPIOB2
28 GPIOB0	I/O	SAW	General Purpose Input / Output Pin GPIOB0
29 UART1_TX	.	SAW	1. General Purpose Input / Output Pin GPIOA3 2. High-Speed UART data TX (Debug pin)
30 UART1_RX	THE	SAW	1. General Purpose Input / Output Pin GPIOA2 2. High-Speed UART data RX (Debug pin)
31 GND	P	/	Ground connections
32 NC	/	/	NC
33 GND	P	/	Ground connections
34 GND	P	/	BT system enable.
35 NC	/	/	NC
36 GND	P	/	Ground connections
37 UART0_TX	.	SAW	1. General Purpose Input / Output Pin GPIOA9 2. Software debugging and download UART port data TX
38 UART0_RX	THE	SAW	1. General Purpose Input / Output Pin GPIOA8 2. Software debugging and download UART port data RX
39 NC	/	/	NC
40 NC	/	/	NC
41 UART_RTS	THE	SAW	1. General Purpose Input / Output Pin GPIOA7 2. Bluetooth UART interface RTS
42 UART_TX	THE	SAW	1. General Purpose Input / Output Pin GPIOA5 2. Bluetooth UART interface TX
43 UART_RX	.	SAW	1. General Purpose Input / Output Pin GPIOA4 2. Bluetooth UART interface RX
44 UART_CTS	.	SAW	1. General Purpose Input / Output Pin GPIOA6 2. Bluetooth UART interface CTS

Four GPIO multiplexing instructions:

Bank	PAD Name			Function Mode				
		Ext. Func		Function 0	Function 1	Function 2	Function 3	Function 4
GPIOA (1.8V/3.3V)	GPIOA0			swclk	gpioa 0	i2cm scl	wf ext pa ctrl	pcm fsync
	GPIOA1			swd	gpioa 1	i2cm sda	wf ext pa ctrl	pcm clk
	GPIOA2			gpioa 2	uart0 rx	uart1rx	wf ext pa ctrl	pcm din
	GPIOA3			gpioa 3	uart0 tx	uart1 tx	wf ext pa ctrl	pcm dout
	GPIOA4			gpioa 4	uart0 cts	uart1 cts	uart1 rx	bt uart rx
	GPIOA5			gpioa 5	uart0 rts	uart1 rts	uart1 tx	bt uart tx
	GPIOA6			gpioa 6	i2cm scl	uart2 rx	uart1 cts	bt uart cts
	GPIOA7			gpioa 7	i2cm sda	uart2 tx	uart1 rts	bt uart rts
	GPIOA8		Burning and RF test UART port	uart0_rx	gpioa_8	uart2_cts		
	GPIOA9		Burning and RF test UART port	uart0 tx	gpioa 9	uart2 rts		aon pwm 1
	GPIOA10	sdio data 1		gpioa 10	uart1 rx	bt uart rx	spi lcd sck	bt uart cts
	GPIOA11	sdio data 0		gpioa 11	uart1 tx	bt uart tx	spi lcd csn 0	bt uart rts
	GPIOA12	sdio clk		gpioa 12	uart1 cts	bt uart cts	spi lcd di	aon pwm 2
	GPIOA13	sdio cmd		gpioa 13	uart1 rts	bt uart rts	spi lcd do	pwm 0
	GPIOA14	sdio data 3		gpioa 14	i2cm scl		spi lcd cd	pwm 1
	GPIOA15	sdio data 2		gpioa 15	i2cm sda		spi lcd fmark	pwm 2
Bank	PAD Name			Function Mode				
		Ext.Func	ANA Function	Function 0	Function 1	Function 2	Function 3	Function 4
GPIOB (1.8V/3.3V)	GPIOB0	host wake wl		gpiob 0	pcm fsync	i2cm scl	spi lcd sck	aon pwm 0
	GPIOB1	wl wake host		gpiob 1	pcm clk	i2cm sda	spi lcd csn 0	aon pwm 1
	GPIOB2	bt wake host	adc(0-1.1v)	gpiob 2	pcm din		spi lcd di	aon pwm 2
	GPIOB3	host wake bt	adc(0-1.1v)	gpiob 3	pcm dout		spi lcd do	
	GPIOB4			gpiob 4	pwm 0	i2s lrck 0	bt uart rx	
Bank	PAD Name			Function Mode				
		Ext. Func		Function 0	Function 1	Function 2	Function 3	Function 4
USB (3.3V)	USB DP	gpioa 16						
	USB DM	gpioa 17						