EWT71-2G4M10S1A User Manual



Chengdu Ebyte Electronic Technology Co.,Ltd.

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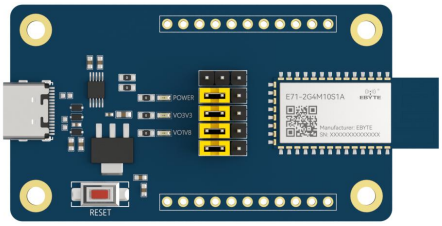
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1.Overview

1.1 Product Introduction

EWT71-2G4M10S1A is a test kit designed by Ebyte based on the E71-2G4M10S1A module, which significantly shortens the user's development cycle.For detailed information regarding the E71-2G4M10S1A module, please visit the official website to download the related documentation.



EWT71-2G4M10S1A

1.2 Product Features

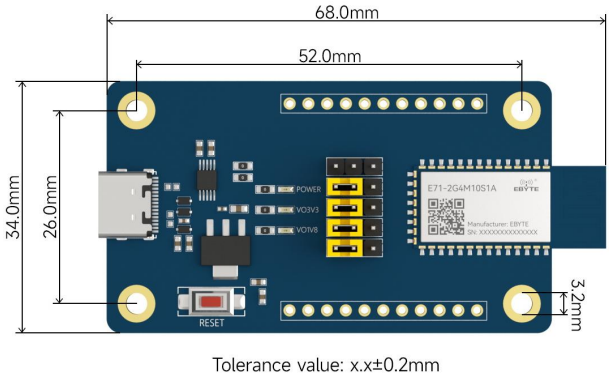
- Standard Type-C interface for plug-and-play use；
- Equipped with rich peripherals for convenient operation；
- Integrated high-performance CH340X USB-to-UART chip；

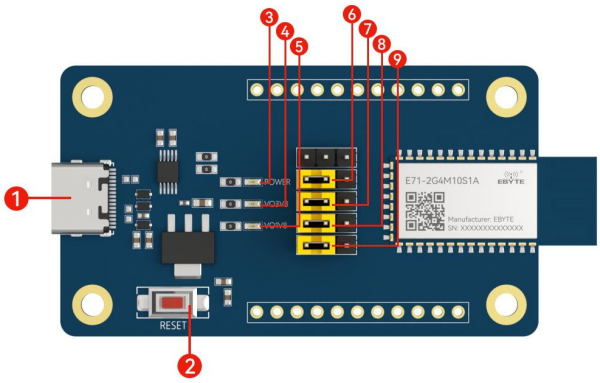
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2.Hardware Description

2.1 Product Dimensions and Interface Definition



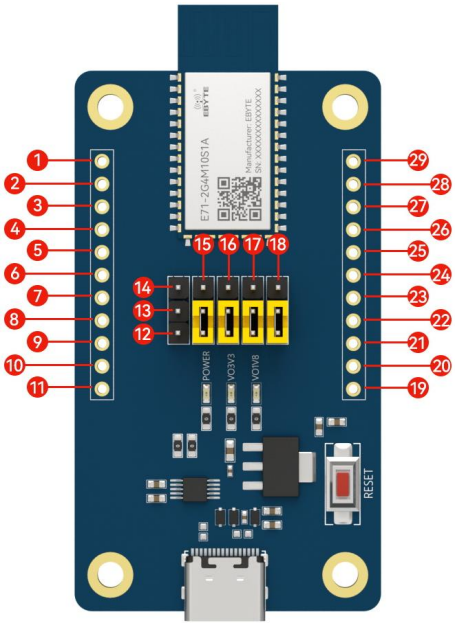


No.	Definition	Description	Remarks
1	Type-C	DC 5.0V power supply and communication interface	Standard Type-C interface, plug and play
2	RESET	Reset button	-
3	PWR	Power indicator LED	Always on when power is normal
4	VO3V3	VO3V3 power indicator LED	Always on when power is normal
5	VO1V8	VO1V8 power indicator LED	Always on when power is normal
6	VBAT	Module VBAT power jumper	Default supply: DC 3.3V
7	VIO_PE	Module VIO_PE power jumper	Default supply: DC 3.3V
8	VIO_PD	Module VIO_PD power jumper	Default supply: DC 3.3V
9	VIO_PB	Module VIO_PB power jumper	Default supply: DC 3.3V

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2.2 Pin Definition



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Pin No.	Pin Name	Pin Direction	Description
1	PA4	I/O	Configurable general-purpose I/O (see TL721X datasheet)
2	PA3	I/O	Configurable general-purpose I/O (see TL721X datasheet)
3	PA2	I/O	Configurable general-purpose I/O (see TL721X datasheet)
4	PE7	I/O	Configurable general-purpose I/O (see TL721X datasheet)
5	PE5	I/O	Configurable general-purpose I/O (see TL721X datasheet)
6	PE4	I/O	Configurable general-purpose I/O (see TL721X datasheet)
7	PE3	I/O	Configurable general-purpose I/O (see TL721X datasheet)
8	PE2	I/O	Configurable general-purpose I/O (see TL721X datasheet)
9	PE1	I/O	Configurable general-purpose I/O (see TL721X datasheet)
10	PA5	I/O	Configurable GPIO / USB_DM (see TL721X datasheet)
11	PA6	I/O	Configurable GPIO / USB_DP (see TL721X datasheet)
12	+5V	Output	5.0V output pin
13	VBUS	Input	Module VBUS power input pin
14、15	NC	-	-
16~18	VO1V8	Output	Module 1.8V output pins
19	GND	-	Ground
20	PA7	I/O	Configurable GPIO / SWS (see TL721X datasheet)
21	PB4	I/O	Configurable general-purpose I/O (see TL721X datasheet)
22	PB5	I/O	Configurable general-purpose I/O (see TL721X datasheet)
23	PB6	I/O	Configurable general-purpose I/O (see TL721X datasheet)
24	PB7	I/O	Configurable general-purpose I/O (see TL721X datasheet)

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25	PC0	I/O	Configurable general-purpose I/O (see TL721X datasheet)
26	PD0	I/O	Configurable general-purpose I/O (see TL721X datasheet)
27	PD2	I/O	Configurable general-purpose I/O (see TL721X datasheet)
28	PD3	I/O	Configurable general-purpose I/O (see TL721X datasheet)
29	GND	-	Ground

3. Common Issues

3.1 Transmission Distance Is Not Ideal

- Temperature, humidity, and co-channel interference may increase packet loss；
- The ground surface absorbs and reflects radio waves; performance is reduced near the ground；
- Seawater strongly absorbs RF signals; testing near the sea results in poor performance；
- Metal objects around the antenna or installation inside a metal enclosure cause severe signal attenuation；
- Low supply voltage results in reduced transmit power；
- Poor antenna matching or low antenna quality will reduce the communication distance.

3.2 Module Easily Damaged

- Ensure the power supply voltage is within the recommended range; exceeding the maximum value will cause permanent damage；
- Ensure power stability; large or frequent voltage fluctuations may damage the module；
- Follow anti-static precautions during installation; RF components are sensitive to ESD；
- Avoid high-humidity environments; some components are humidity-sensitive；
- Avoid extremely high or low temperatures unless specially required.

3.3 Bit Error Rate Too High

- Nearby co-channel interference—move away or change frequency/channel；
- Poor power quality may cause garbled data—ensure stable power supply；
- Poor-quality or overly long extension cables or feeders may result in high BER.

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Revision History

Version	Revision Date	Revision Notes	Maintainer
1.0	2025-11-12	Initial release	Bin

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Thank you for using Ebyte products! Please contact us with any questions or suggestions: info@cdebyte.com

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