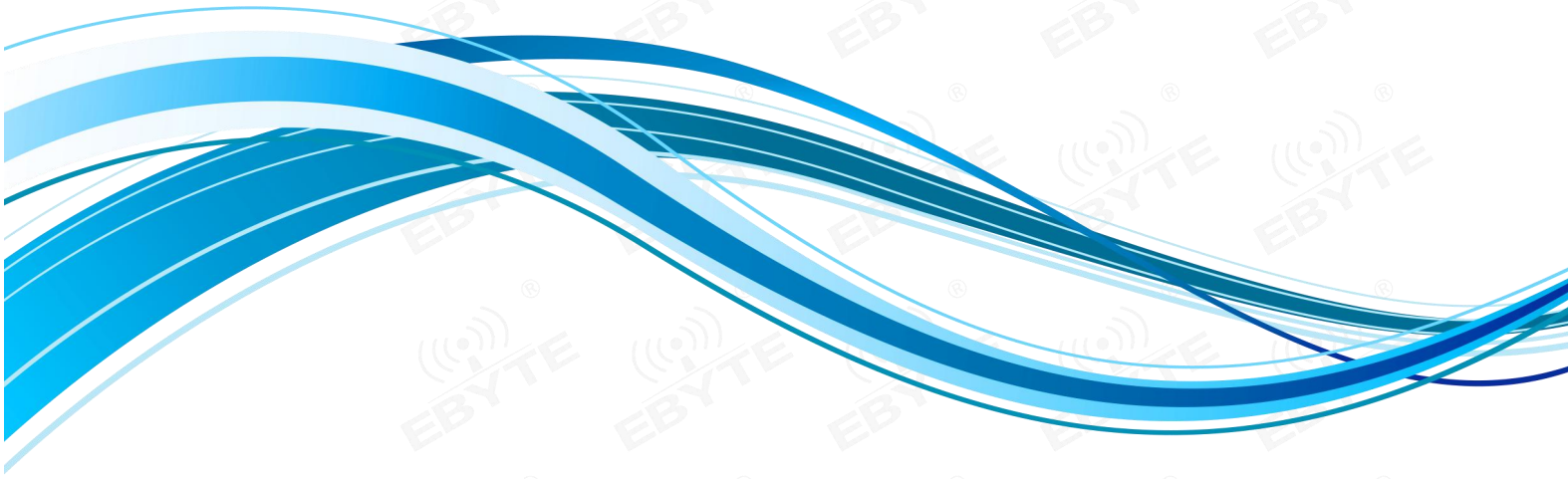
E15-LW-T1 User Manual



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The test data obtained in this article are all obtained from Ebyte laboratory testing, and the actual results may be slightly different.

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1. Module introduction

1.1 Feature introduction

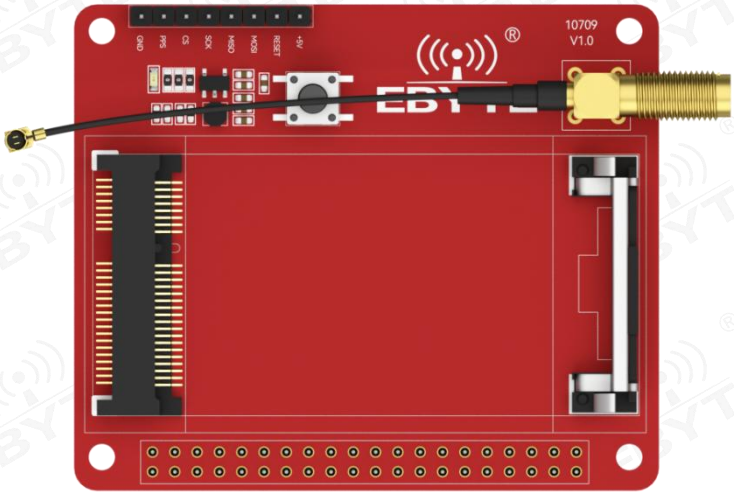


Figure 1 Actual picture of the module

E15-LW-T1 is a test board specially developed by Chengdu Ebyte Electronic Technology for the mini PCI-e interface module. It is mainly aimed at the embedded application of the E106 series LoRa gateway module launched by our company , and is equipped with ESD protection. Supports multiple systems and multiple baud rates. Developers can easily connect a variety of peripheral devices through jumpers according to actual needs.

1.2 Parameter introduction

serial number	parameter name	Parameter value	Comment
1	Support module	E106-433G27P2 E106-868G27P2	LoRa gateway module

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		E106-470G27P2 E106-915G27P2	
2	Test board size	64.5 * 56mm	Error ±0.2mm
3	Production Process	Lead-free process, machine-mounted	Wireless products must be machine-mounted to ensure batch consistency and reliability.
6	Operating temperature	-40 ~ +85℃	Industrial grade
7	Working humidity	10%~90%	Relative humidity, no condensation
8	Storage temperature	-40 ~ +125℃	Industrial grade

2. Brief description of functions

2.1 Component introduction

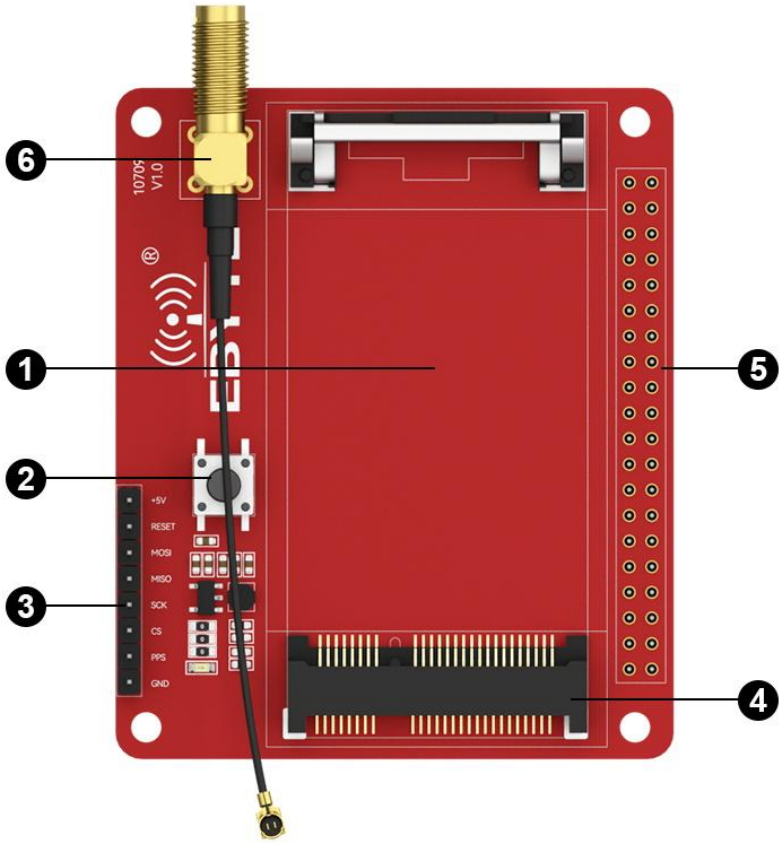


Figure 2 Main component diagram

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serial number	Main firmware	introduce
1	E106-433G27P2 E106-868G27P2 E106-470G27P2 E106-915G27P2	E106 series module is a LoRa gateway radio frequency module designed based on the SX1302 chip solution. It adopts standard Mini PCI-e form packaging, SPI interface, built-in PA and LNA in the module, and half-duplex design to facilitate users to quickly develop LoRa gateway devices. SX1302 is a new generation LoRa gateway baseband chip launched by Semtech. It is equipped with front-end SX1250 and can support spreading factors SF5~SF12.
2	RESET button	Reset button.
3	Pin	All available GPIO pins are routed to the development board's pin headers.
4	PCIE port	Adapted to mini PCI-e interface module.
5	Female socket	2×20-2.54mm
6	SMA	SMA antenna base

Note: For specific function details , please refer to the E106-433G27P2 , E106-868G27P2, E106-470G27P2, and E106-915G27P2 module user manuals.

2.2 Pin definition

The following figure shows the dimensions and pin definitions of E15-LW-T1:

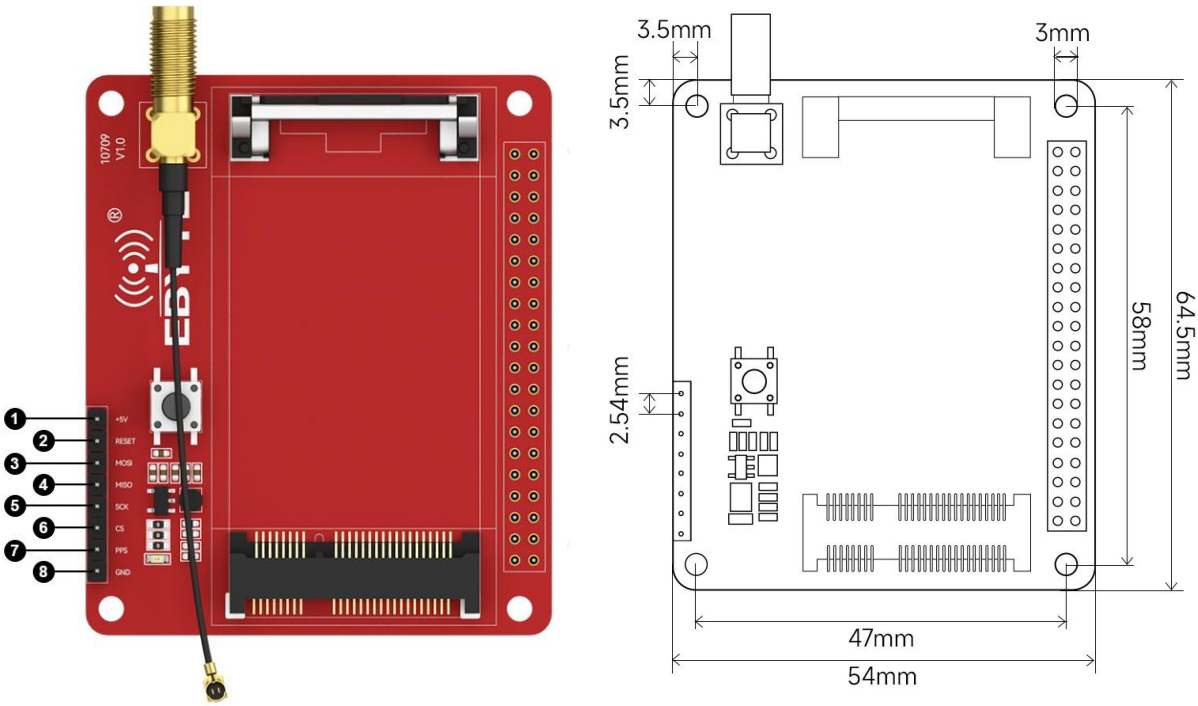


Figure 3 Current test interface diagram

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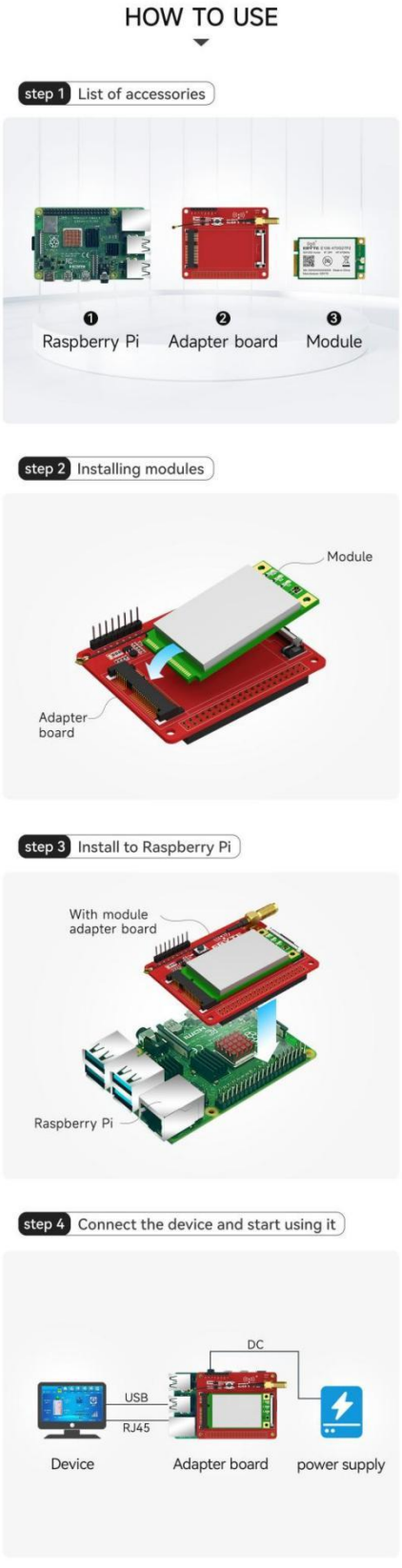
Pin number	Pin name	type	Pin usage
1	+5V	enter	power input
2	RESET	enter	reset button
3	MOSI	enter	SPI data input
4	MISO	output	SPI data output
5	SCK	enter	SPI clock signal input
6	CS	enter	SPI chip select input
7	PPS	-	No use
8	GND	-	ground
13	GND	-	ground

Note: The official website of EBYTE has the corresponding design schematic diagram, which can be downloaded for reference.

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3. Installation Instruction



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4. Version information

Version	Revision date	Revision Notes	Maintenance man
1.0	2024-4-10	initial version	Hao
1.1	2025-9-28	Supplement size diagram	Hao

5.About US

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