



Product Model: Z48-2100-1C

Versions: V1.0

产品规格书

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1. Review

1.1 Brief overview

This document describes the electrical characteristics, RF performance, dimensions and application environment of the WE826-T2. Under the introduction of this document, end users or developers can quickly understand the hardware functions of the WE826-T2.

1.2 Reference standard

Standard Specification:

- USB 2.0 bus standard
- TF Card interface standard
- SIM/USIM interface standard
- IEEE802.11n/g/b
- IEEE802.3/802.3u
- Mini PCI Express Card Electro mechanical Specification Revision 1.0-2003

2 Product Picture





3 Product Feature

- Using the MT7620A solution, with a MIPS24KEc architecture CPU and a maximum clock speed of 580 MHz.
- The MT7620A chip integrates 2.4G WIFI functionality with a speed of up to 300Mbps.
- Using high-speed 128MB DDR2, combined with 16MB Nor Flash
- 1 WAN and 4 LAN with 100M adaptive network ports, supporting automatic switching (Auto MDI/MDIX)
- Supports USB 2.0 and TF card storage interface, which can be used to expand the SMABA or FTP network storage functions.
- Support "one-click factory reset mode", that is, by long-pressing the reset button and then powering on, you can enter the rescue factory reset mode.
- External standard SIM card interface, supporting SIM/USIM cards
- External high-gain omnidirectional antenna, with wireless signal coverage providing 360-degree without any blind spots.



4 Hardware functions

4.1 hardware interface

Net Port	WAN port 1, supports 100Mbps with automatic switching (Auto MDI/MDIX) Complies with IEEE 802.3/802.3u
	4 LAN ports, supporting automatic switching (Auto MDI/MDIX) at 100Mbps Compliant with IEEE 802.3/802.3u
USB Interface	1 USB 2.0 interface
TF card Interface	Standard TF card interface: 1 piece
SIM card Interface	Standard SIM card (large card) interface 1, supporting SIM/USIM
Power Port	DC 5.0 * 2.1mm interface
Key	Reset button 1 piece
Antenna	Full-direction 5dbi 2.4G antenna - 2 units
PCIe Port	Built-in mini-PCIe interface, supporting USB 2.0 bus

4.2 Introduction to Indicator Light Function

LAN1 LED	The network port remains constantly lit when connected, and it flashes when there is data communication.
LAN2 LED	The network port remains constantly lit when connected, and it flashes when there is data communication.
LAN3 LED	The network port remains constantly lit when connected, and it flashes when there is data communication.
LAN4 LED	The network port remains constantly lit when connected, and it flashes when there is data communication.
WAN LED	The network port remains constantly lit when connected, and it flashes when there is data communication.
2.4G WIFI LED	The 2.4G WIFI function indicator lights up constantly when the function is enabled. It flashes when there is data communication. It does not light up when the 2.4G WIFI or the 2.4G WIFI function is not enabled or when there is a malfunction in the 2.4G WIFI function.



Power LED	It lights up when the power is connected, and does not light up when there is a power failure or when the power is not connected.
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4.3 Introduction to the Hardware Platform

Processor	MT7620A, a MIPS24KEc architecture CPU with a maximum clock speed of 580 MHz.
2.4G WIFI Chip	MT7620A integrates 2.4G WIFI function IEEE 802.11n/g/b, with the maximum speed of 300Mbps
Internal Storage	DDR2 128MB
Internal Storage	Nor Flash 16MB
	Does not support NAND Flash

5. Other characteristics

✓ (SIM Card Detection (Optional))

Power supply voltage: 3.4~4.5V, typical 3.8V

Operating temperature: -35 to +75 degrees Celsius

6 Power Supply and Power Consumption Explanation

	Test Condition	Least value	Rated value	Maximum	Unit
operating voltage	T A = 25° C	6	12	14	V
Absolute working voltage	T A = 25° C	5.5		16	V
operating current	VIN=12V, T A = 25° C	0.3	0.5	0.8	A

Please use the power adapter provided with ZBT to supply power to this product. If you do not use the power adapter provided by ZBT, please supply power to this product strictly in accordance with the above power specification parameters. Otherwise, the product may be damaged. If you use batteries or a vehicle power supply, please definitely take measures to prevent static electricity and surges.



7 Introduction to WIFI Wireless Parameters

Compatible with IEEE 802.11 b/g/n, supports IEEE 802.11 d/h/k; supports 20MHz, 40MHz, adopts 2T2R MIMO antenna technology, with the maximum connection rate reaching up to 300Mbps. The following are the explanations of the operating frequency, receiving sensitivity and transmitting power of 2.4G WIFI.

	Explain	maximum	rated value	least value	Unit
Operating Frequency		2484		2412	MHz
Receive Sensitivity	11 Mbps CCK	-86	-87.5	-89	dBm
	54 Mbps OFDM	-72	-74	-76	dBm
	BW=20MHz MCS 7	-70	-72	-74	dBm
	BW=40MHz MCS 7	-68	-70	-71	dBm
Transmitted Power	11 Mbps CCK	19	18	17	dBm
	54 Mbps OFDM	17	16	15	dBm
	BW=20MHz MCS 7	17	16	15	dBm
	BW=40MHz MCS 7	16	15	14	dBm

8 Introduction to Structural Parameters and Accessories

Weight (KG)	0.54KG	
Case Size	L*W*H=109MM*83MM*29MM	
Blendent	black	
Accessories	Power adapter	12V/1A 1PCS
	specification	1PCS



	certificate	1PCS
	reticle	1PCS
	SIM cutting ferrule	1PCS
	antenna	2.4G 5DB detachable black rod-shaped antenna 2 pieces

9 Product operating environment requirements

operating temperature	-20°C ~ 60°C
storage temperature	-40°C ~ 70°C
operating humidity	10%~90%RH noncondensing
Storage humidity	5%~90%RH noncondensing

10 Software configuration information

Default IP	192.168.1.1
Username / Password	root/admin
2.4G SSID	WIFI-XXXXXX (X represents the last 6 digits of the MAC address), default password-free
5.8G SSID	NA

WIFI-XXXXXX (X represents the last 6 digits of the MAC address), default no password. The above are the regular default configuration information of the product. Our OS firmware or OPENWRT firmware is used. The WIFI SSID may vary, but the default IP and WEB login name and password of this product remain unchanged. For other detailed software functions, please refer to the product manual.



11 FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.