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BL-R8188EU8A

Product Specification

WLAN 11b/g/n USB MODULE

Version: 1.0

1. Product Introduction

The BL-R8188EU8 VER1.0 is a 150 USB wireless module with low power consumption, high linear output power, meets with IEEE802.11b/g/n standards, supports IEEE 802.11i security protocol and the IEEE 802.11e standard of QOS. It works well with other wireless devices that compatible with these standards, supports the latest 64/128 bit WEP data encryption and WPA-PSK/WPA2-PSK, WPA/WPA2 security mechanism. Wireless transfer rate rises up to 150M that is 10 times compared with the ordinary 11b products.

2. Application Fields

- ◆ Networking camera

3. Leading Features

- ◆ Comply with the 802.11n standard, wireless transfer rate up to 150Mbps;
- ◆ High integrated single-chip design, smaller volume, lower power consumption;
- ◆ Adaptive transmission power control;
- ◆ Adaptive connection rate regulation;

4. General specification

Hardware information	
Chipset	RTL8188EUS
Interface type	USB1.1/ USB 2.0
Antenna	External antenna on IPEX head
Product size	25.0mm(L)x 12.0mm (W) x 0.6mm (H)
Wireless parameters	
Protocol/standards	IEEE 802.11b, IEEE 802.11g, IEEE 802.n
Frequency range	2.412~2.462GHz
Channels	1-11
Modulation Mode	-802.11b: DSSS (CCK, DQPSK, DBPSK) -802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM)
Wireless Rate	802.11b 11, 5.5, 2, 1Mbps
	802.11g 54, 48, 36, 24, 18, 12, 9, 6Mbps
	802.11n 150Mbps (Max)
RF power	802.11b 11Mbps: 15±1dBm 802.11g 54Mbps: 14 ±1dBm 802.11n 135Mbps: 14 ±1dBm
Sensitivity @PER	135M: -74dBm@10% PER 108M: -74dBm@10% PER 54M: -73dBm@10% PER 11M: -85dBm@8% PER 6M: -88dBm@10% PER 1M: -95dBm@8% PER
Working Mode	Ad-Hoc, Infrastructure
Other	
Working Voltage	DC 3.3V ±0.2V
Wireless security	64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK (TKIP/AES)
Transmit distance	Indoor 100M, Outdoor 300M, according the local environment

System	WINXP/VISTA/LINUX/WINCE/WIN7
Environment	<ul style="list-style-type: none"> ·Working temperature: 0°C - 40°C ·Working humidity: 10% - 90% RH No condensation ; ·Storage temperature: -40°C - 70°C; ·Storage humidity: 5% - 90% RH No condensation.

5. Product design reference

5.1 Pin Description

Front panel:

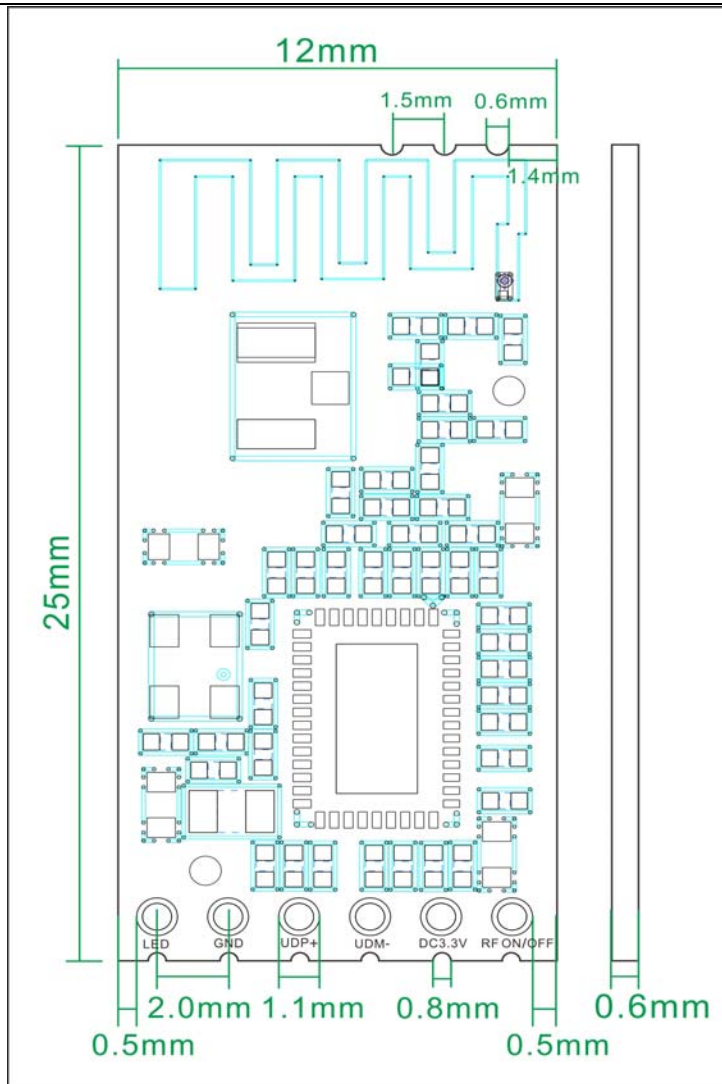


Rear panel:



PIN NO	TYPE	Description
1	O	LED
2	I/O	GND
3	I/O	UDP+
4	P	UDM-
5	P	DC3.3V
6	O	RF ON/OFF

5.2 The Structure and Size of product (unit: mm)



6. Product block diagram

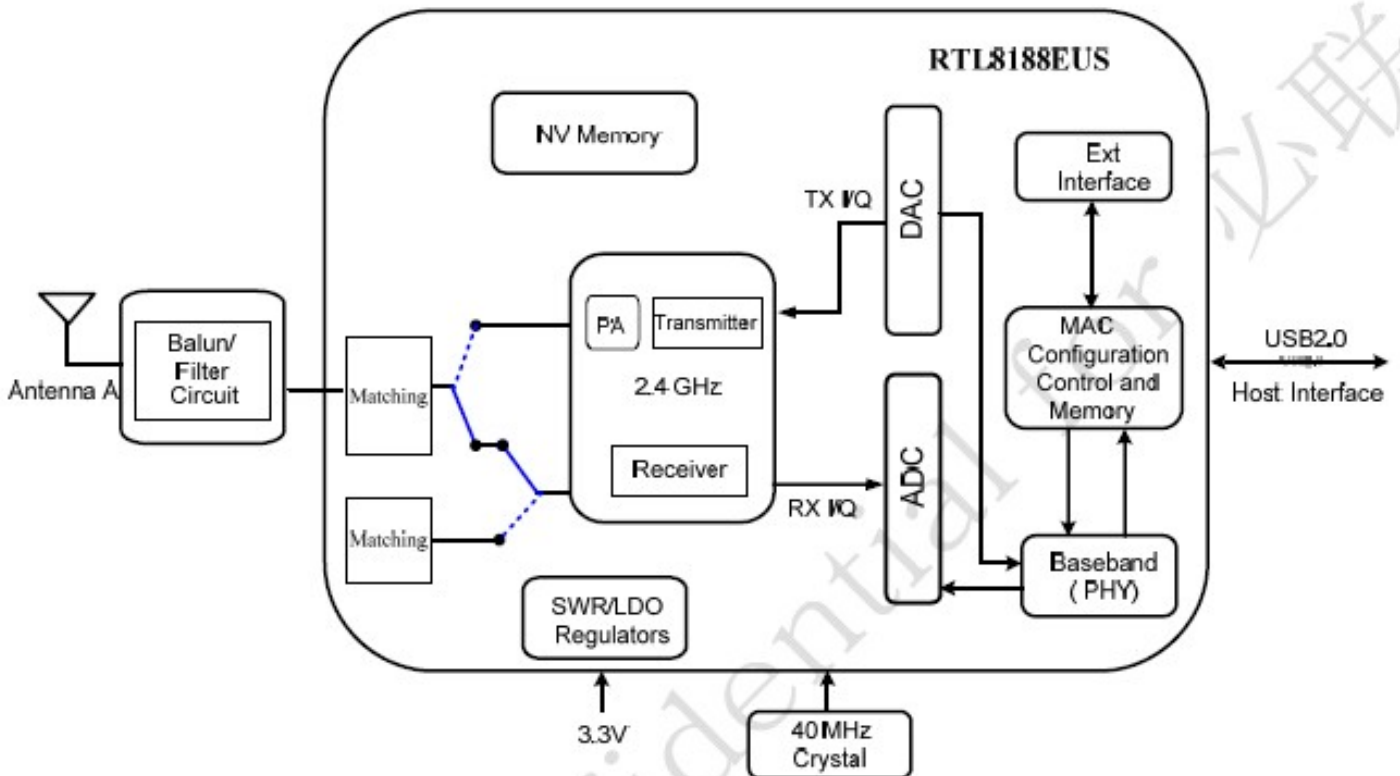


Figure 1. Single-Band 11n (1x1) Solution

7. FCC Warning

The devices must be installed and used in strict accordance with the instructions as described in the user documentation that comes with the product.

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.

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

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module.

This exterior label can use wording such as the following:
"Contains Transmitter Module FCC ID: S8JBLR8188EU8A"

When the module is installed inside another device, the user manual of this device must contain below warning statements:

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.

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

This modular could be installed in the fix or mobile devices only, installed in the portable device, like USB dongle is forbidden. This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This modular must be installed and operated with a minimum distance of 20 cm between the radiator and user body.

For manufacturer:

The end product into which the module will be installed should be the fix or mobile devices only, the portable device, like USB dongle is forbidden.

The end product into which the module will be installed should be installed and operated with a minimum distance of 20 cm between the radiator and user body.
