

# TL8188EUB1

## Product Specifications

WLAN 11b/g/n USB module (1T1R)

Version:V1.0

深圳市创凌智联科技有限公司

工厂地址：深圳市宝安区固戍三围华丰第一科技园 A 区石街 B 栋厂房二楼

联系方式：0755-88828355/83224500

公司网站：[www.trolink.cn](http://www.trolink.cn)

联系邮箱：[frankai@trolink.cn](mailto:frankai@trolink.cn)

## Overview

**TL8188EUB1** is a WLAN 11n USB module, which fully supports the Features and Functional compliance of IEEE 802.11n, e and is tandards. It supports up to 150Mbps high-speed wireless network connections. It is designed to provide excellent perfaormance with low power Consumption and enhance the advantages of robust system and cost-effective. It is targeted at competitive superior performance, better power Management applications.

## Features

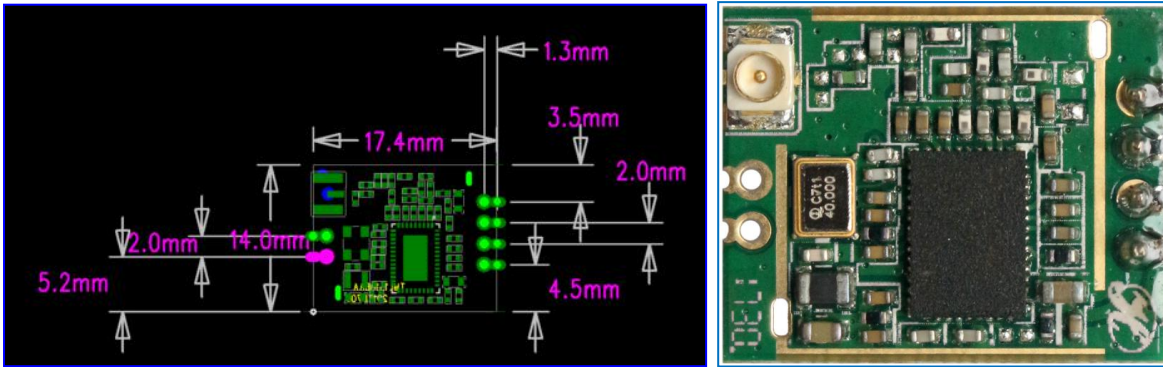
- \* Operates in 2.4GHz frequency bands
- \* 1X1 MIMO technology improves effective throughput and range existing 802.11b/g/n products
- \* Data rates: up to 150Mbps
- \* 802.11e-compatible bursting and I standards
- \* BPSK, QPSK, 16 QAM, 64 QAM modulation schemes
- \* WEP, TKIP, and AES, WPA, WPA2 hardware encryption schemes

## General Specification

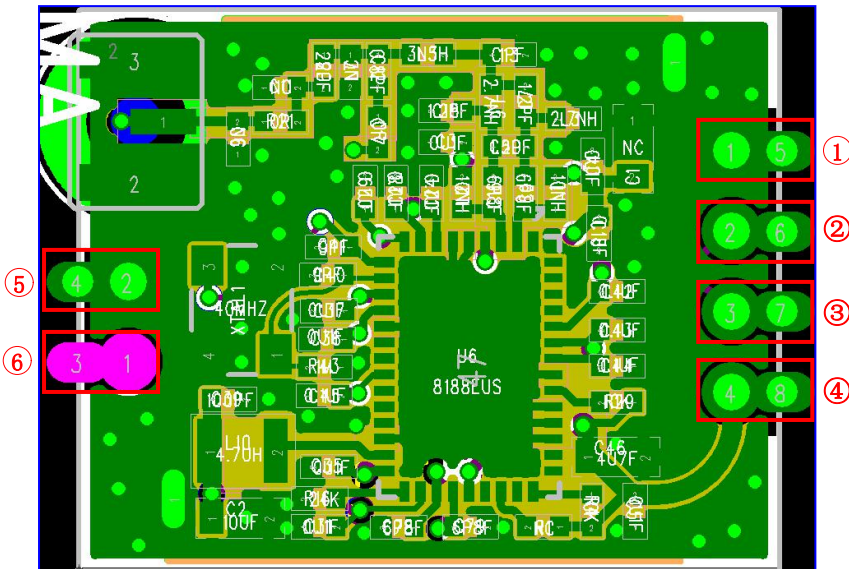
Model	TL8188EUB1
Product Name	WLAN 11n USB module
Major Chipset	Realtek RTL8188EUS
Standards	WiFi: 802.11b, 802.11g, 802.11n.
Data Transfer Rate	1, 2, 5.5, 6, 11, 12, 18, 22, 24, 30, 36, 48, 54, 60, 90, 120 and maximum of 150Mbps
Modulation Method	BPSK/ QPSK/ 16-QAM/ 64-QAM
Frequency Band	2.400~2.4835 GHz ISM Band
Spread Spectrum	IEEE 802.11b:DSSS(Direct Sequence Spread Spectrum) IEEE 802.11g/n:OFDM(Orthogonal Frequency Division Multiplexing)1.5dBm
RFOutputPower	802.11b/11Mbps: $18 \pm 1.5$ dBm 802.11g/54Mbps: $16 \pm 1.5$ dBm 802.11n/65Mbps: $16 \pm 1.5$ dBm
EVM	802.11b/11Mbps:EVM<-18dB 802.11g/54Mbps:EVM<-28dB 802.11n/65Mbps:EVM<-28dB
NetworkArchitecture	WiFi:Ad-hocmode (Peer-to-Peer)
Receiver Sensitivity	802.11b/11Mbps:-85dBm@8%PER 802.11g/54Mbps:-75dBm@10%PER

	802.11n/65Mbps: -70dBm@10%PER
Freq	802.11b/11Mbps: $\pm 10$ ppm 802.11g/11Mbps: $\pm 10$ ppm 802.11n/11Mbps: $\pm 10$ ppm
Operation Range	Up to 180 meters in open space
LED	/
OS Support	Windows 2000, XP32-64, Vista 32/64, Win7 32/64, Linux, Mac, Android, WIN CE
Security	WEP, TKIP, AES, WPA, WPA2
Interface	USB 2.0
Power	DC3.3V
Consumption	Maximum power dissipation in 80mA
Operating Temperature	-10~70° Cambienttemperature
Storage Temperature	-20~80° Cambienttemperature
Humidity	5 to90% maximum (non-condensing)
Dimension	17.4x14mm (LxW) $\pm 0.2$ mm

Dimensions:



The PCB tolerances within  $\pm 0.2$  or so PIN Definition



Pin#	Name	Description
①	GND	Ground
②	DP+	USB Data DP
③	DM-	USB Data DN
④	VCC	3.3V DC power supply input
⑤	GND	Ground
⑥	NC	/

## DC Characreristics

Symbol	Parameter	Minimum	Typical	Maximum	Units
VD33A, VD33D	3.3V I/O Supply Voltage	3.1	3.3	3.5	V
IDD33	3.3V Rating Current	–	–	400	mA