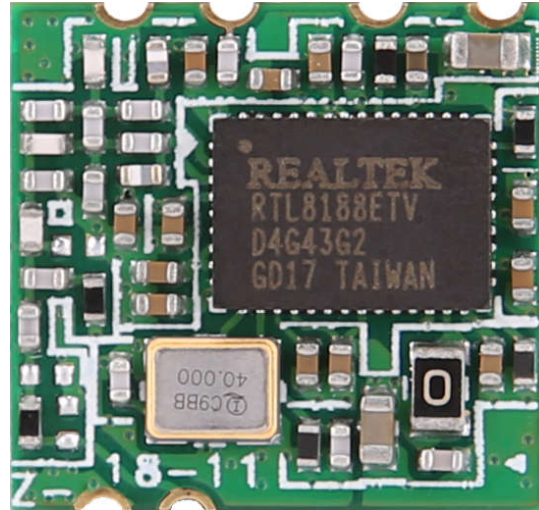


WIFI 模块 RTL8188ETV

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



1. Overview

RTL8188ETV is a WLAN 11n USB module, which fully supports the features and Functional compliance of IEEE 802.11n, e and i standards. It supports up to 150Mbps high-speed wireless network connections. It is designed to provide excellent performance 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.

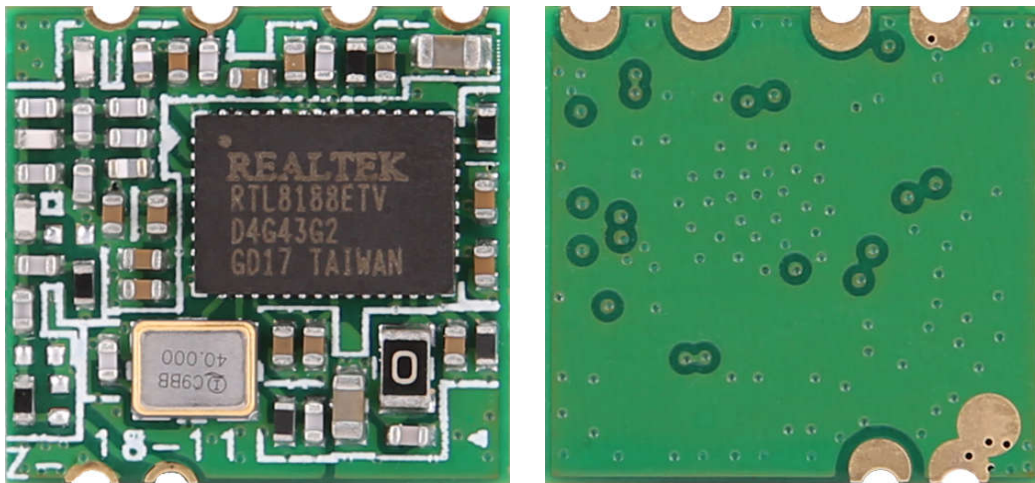
2. Features

- Operates in 2.4 GHz frequency bands
- 1x1 MIMO technology improves effective throughput and range existing 802.11 b/g 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

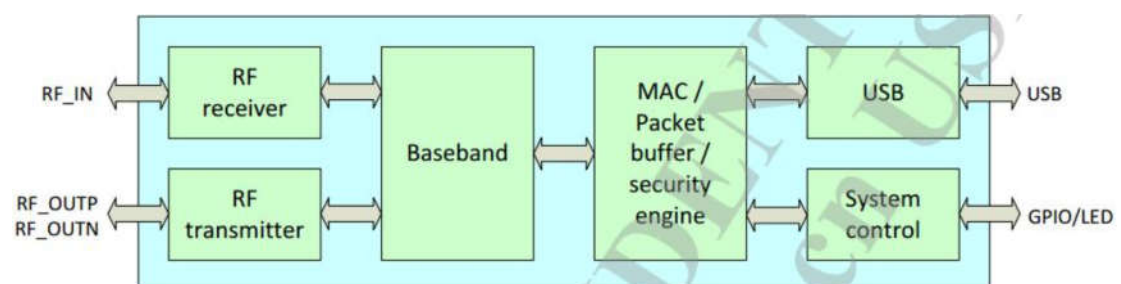
3. Applications

- Desk-Top PC
- Note-book
- TV
- Blue-ray Disk
- Tablet PC
- Set-top box

4. Peripheral principle diagram reference



5. Block Diagram



6. General Specification

Model	RTL8188ETV
Product Name	WLAN 11n USB module
Major Chipset	Realtek RTL8188ETV
Standard	802.11b/g/n, 802.3, 802.3u
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	2.4~2.4835 GHz ISM Band
Spread Spectrum	IEEE 802.11b: DSSS (Direct Sequence Spread Spectrum) IEEE 802.11g/n:OFDM (Orthogonal Frequency Division Multiplexing)
RFOutputPower	$13 \pm 1.5\text{dBm}@11\text{n}$, $17 \pm 1.5\text{dBm}@11\text{b}$, $15 \pm 1.5\text{dBm}@11\text{g}$
Network Architecture	WiFi:Ad-hoc mode (Peer-to-Peer)
Receiver Sensitivity	11Mbps -86dBm@8%,54Mbps -73dBm@10%,130Mbps -66dBm@10%
Operation Range	Up to 180 meters in open space
LED	
OS Support	Windows XP32-64,Vista 32/64,Win7 32/64,Linux,Mac, Android,WIN CE
Security	WEP, TKIP, AES, WPA, WPA2
Interface	USB 2.0
Power Consumption	DC3.3V Maximum power dissipation in 80MA
Operating Temperature	0° ~ 60° Cambienttemperature
Storage Temperature	-55° ~125° Cambienttemperature
Humidity	5 to 90 % maximum (non-condensing)
Dimension	12. 2x12.9x1.6mm(LxWxH)+-0.2MM

7. Electrical Specifications

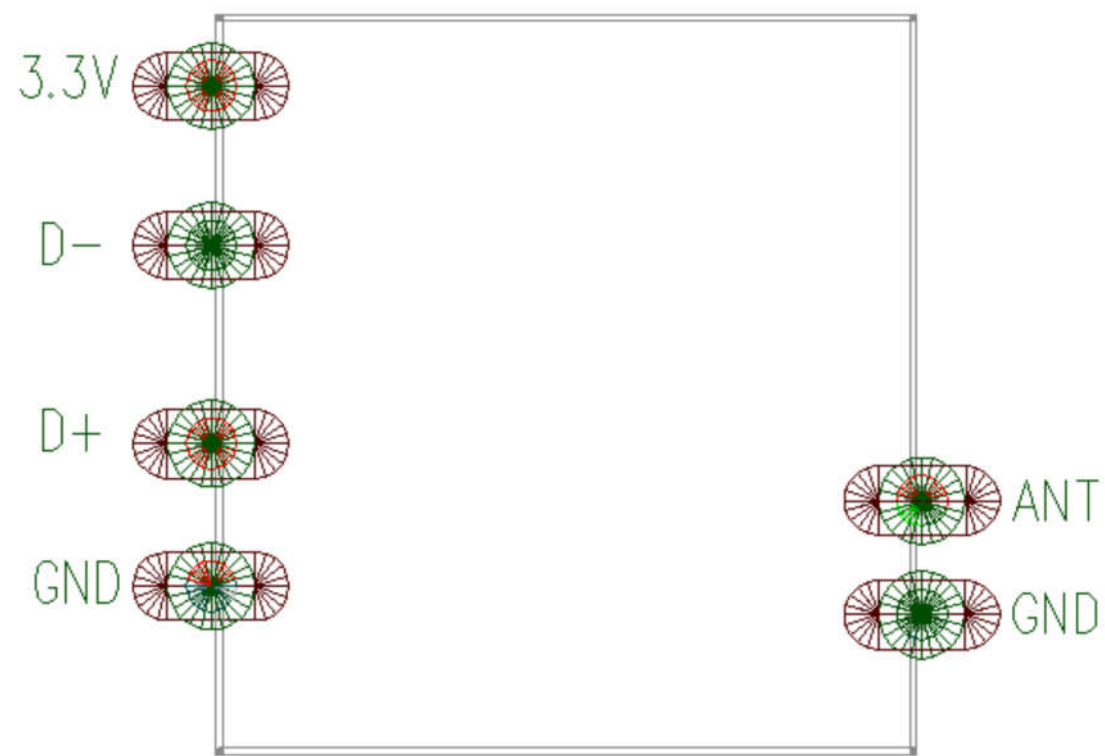
1) DC Characteristics

Symbol	Parameter	Minimum	Typical	Maximum	Units
VD33A, VD33D	3.3V I/O Supply Voltage	3.1	3.3	3.5	V
VD15A, VD15D	1.5V Supply Voltage	1.4	1.5	1.6	V
IDD33	3.3V Rating Current	-	-	400	mA

2) Power Consumption

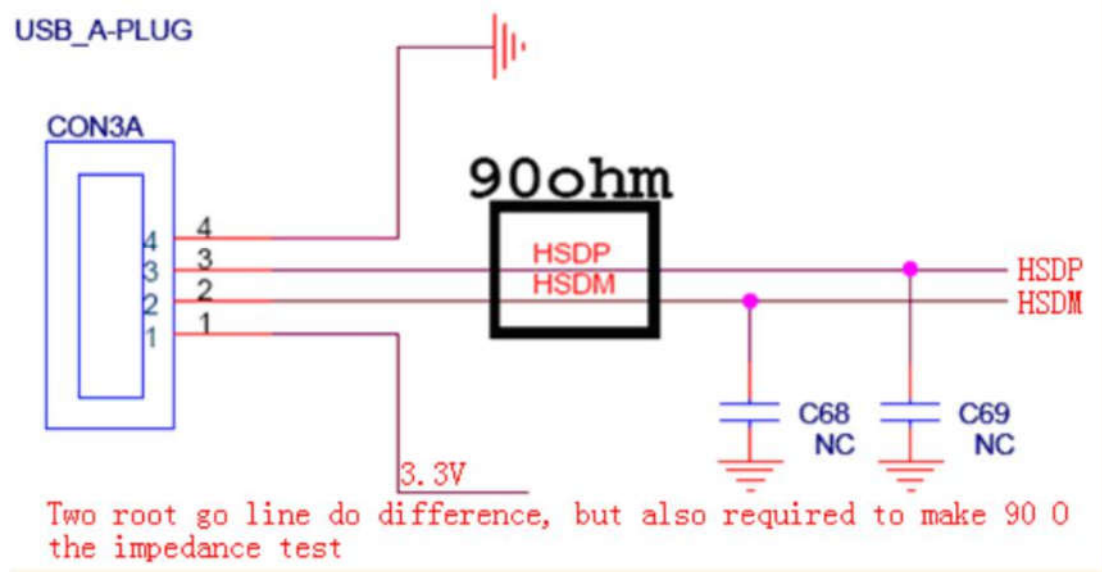
Parameters	Sym	Conditions	Min	Typ	Max	Unit
3.3V Supply Voltage	Vc33		3.1	3.3	3.5	V
1.5V Supply Voltage	Vc15		1.4	1.5	1.6	V
Receiving Tests the biggest receive						
3.3V Current Consumption	Icc33rx	H40MCS7		65		MA
3.3V Current Consumption	Icc33rx	OFDM 54M		70		MA
Transmission Biggest transmission test						
3.3V Current Consumption	Icc33tx	H40 MCS7		80		MA
3.3V Current Consumption	Icc33tx	OFDM 54M		85		MA
The depth waits for an opportunity	Icc33tx/rx					MA
Deep sleep	Ic33tx/rx					MA

8.Pin Definition

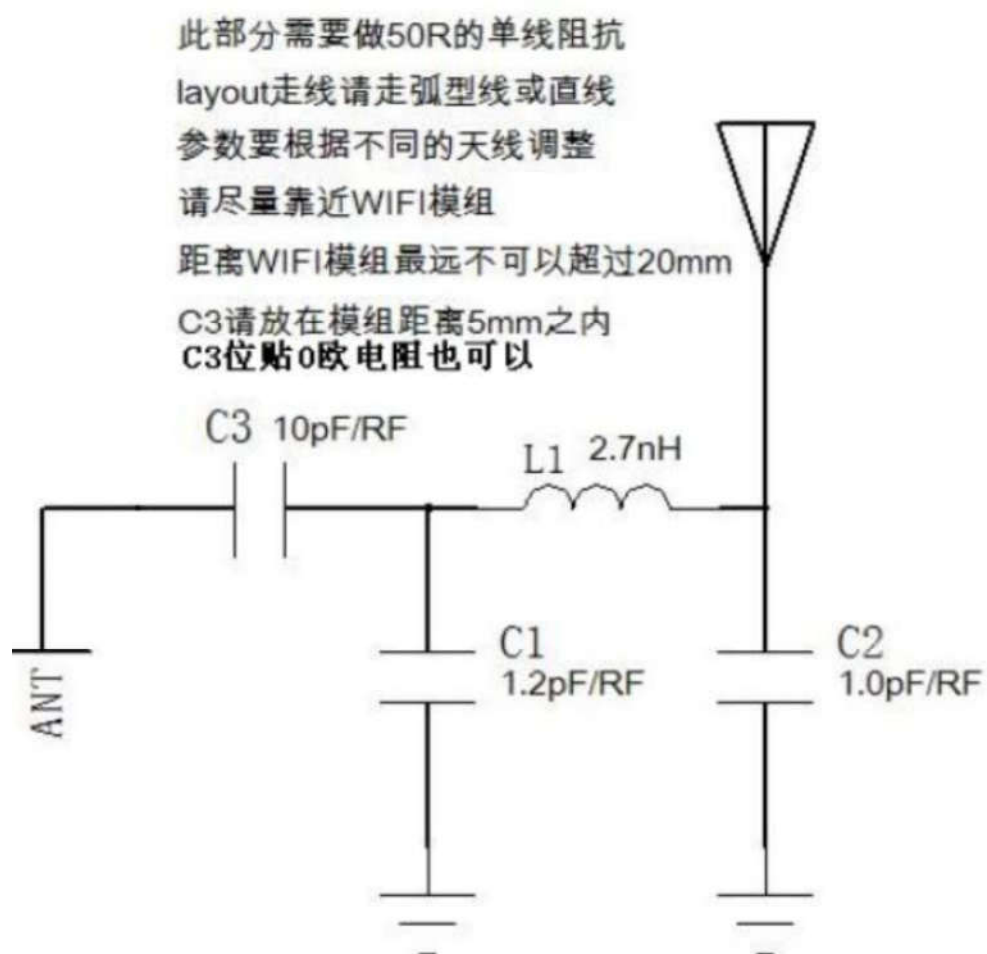


Pin	Definition	I/O	Power	Description
1	3.3V			VDD3.3V±0.1V
2	D-			USB D-
3	D+			USB D+
4	GND			Groud
5	GND			Groud
6	ANT			WIFI ANT OUTPUT

USB interface electrical characteristics



注：建议在电源输入端留一个电源开关，每次开关卡时可以做一个上电断电的作用，可以使 WIFI 复位，就不会有打开 WIFI 时出错的现象了。



9. Size reference

Mechanical

