



SHENZHEN COMPARE ELECTRONICS CO., LTD.

深圳市宝安区西乡街道固戍朱坳工业园中泰工业区D栋7楼

TEL: 0755-29063503

FAX: 0755-29063506

网址:www.szcompare.com

邮编:518040

Compare IEEE 802.11 b/g/n WLAN – USB Product Specifications

Model: CP318

VER:V2.2

DATE:2011/4



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1 Introduction

CP318 is a WLAN module supporting IEEE 802.11 b/g/n standards with PH connector supporting USB 2.0 signaling. This is a low cost compact WLAN module, designed in the product with embedded system for the wireless connectivity. CP318 both support RTL8188CUS

1.1 Scope:

CP318 WLAN Module is designed to operate in 2.4GHz ISM frequency band. This Module complies with IEEE 802.11b/g/n standards.

1.2 Features

- 1T1R mode with 150Mbps with PHY rates for both transmit and receiving
Dynamic data rate: Maximum data rate up to 150Mbps. 11n: Legacy, Mixed and Green Field modes, 11g: 54/48/36/24/12/9/6 Mbps (Auto Sensing); 11b:11/5.5/2/1 Mbps (Auto Sensing)
- support 20MHz/40MHz Bandwidth
- Security support for 64/128 bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK (TKIP/AES)
- Reverse Direction Grant Data Flow and Frame Aggregation
- Cisco CCX Support
- USB2.0
- Operating Frequency 2.412GHz~ 2.462GHz
- Transmit Output Power: 802.11g/n 14+/-1dBm 802.11b 14+/-1dBm
- Receive Sensitivity 11b: -75dBm @ 11Mbps (Typical); 11g: -65dBm @ 54Mbps (Typical)
- Antenna can choose external
- Operating Voltage 3.3VDC± 5%
- Antenna Port Impedance 50ohm



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2. General Specification

Model Name	CP 318
Standard	802.11b/g/n
Data Transfer Rate	1,2,5.5,6,11,12,18,22,24,30,36,48,54,60,90.120and maximum of 150Mbps
Modulation Method	BPSK/QPSK/16-QAM/64-QAM
Frequency Band	2.4GHz ISM Band
Spread Spectrum	IEE 802.11b:DSSS(Direct Sequence Spectrum) IEE802.11g/n:OFDM(Orthogonal Frequency Division Multiplexing)
RF Output Power	<15dBm@11n ,<15dBm @11g, <15dBm@11b
Operation Mode	Ad hoc, Infrastructure
Receiver Sensitivity	11Mbps-80dbm@8%,54Mbps-70dBm@10%, 130Mbps-64dbm@10%
Operation Range	Up to 180 meters in open space
LED	Power
OS Support	Windows xp/ vista/Win7/Mac /Linux
Security	WEP,TKIP,AES,WPA,WPA2
Interface	USB 2.0
Power Consumption	DC3.3V Transmit + Receive: average120mA(3.3V) power consumption 0.4W
Operating Temperature	0~55℃
Storage Temperature	-20℃~70℃
Operating Humidity	10%~90% non-condensing
Storage Humidity	5%~90% non-condensing
Dimensions	25x12x2.2mm(LxwxH)



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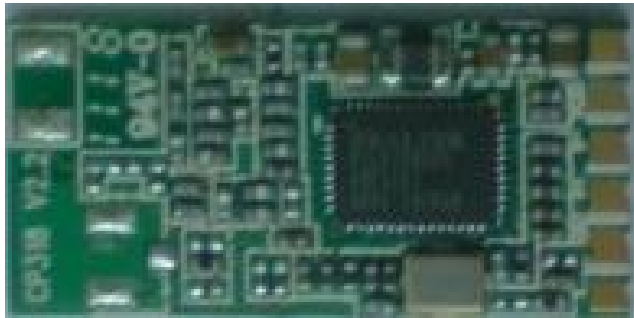
FAX: 0755-29063506

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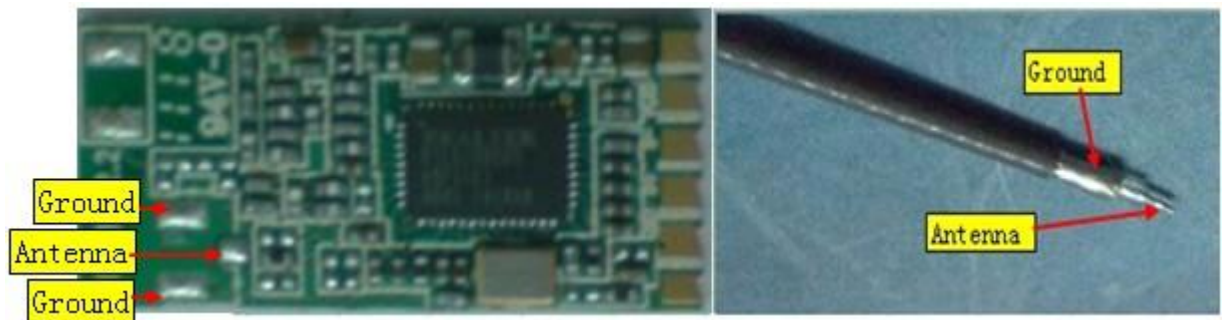
3.Pictures

CP318 V2.2



CP318 V2.2

3.3V external antenna



4. Hardware Information

Block Diagram

RTL8188CUS

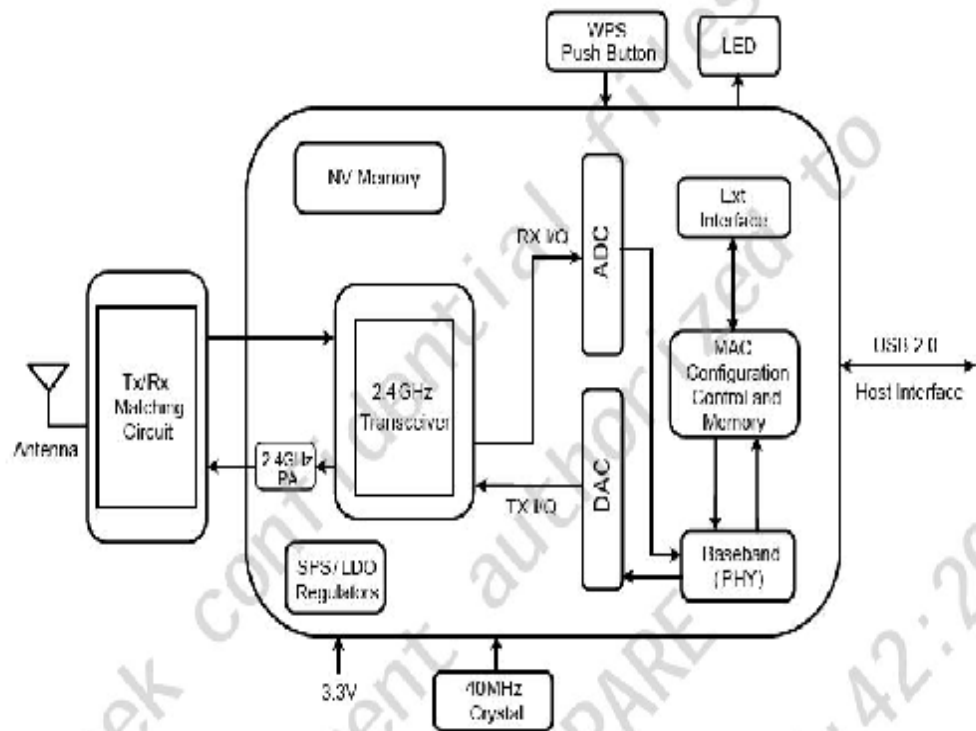


Figure 1. Single-Band 11n (1x1) Solution (11n 1x1 MAC/BB/RF+PA)

Figure 1: System Block Diagram of CP318 WLAN Module



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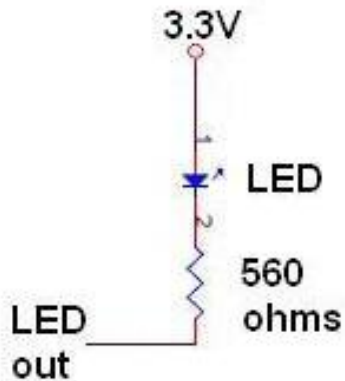
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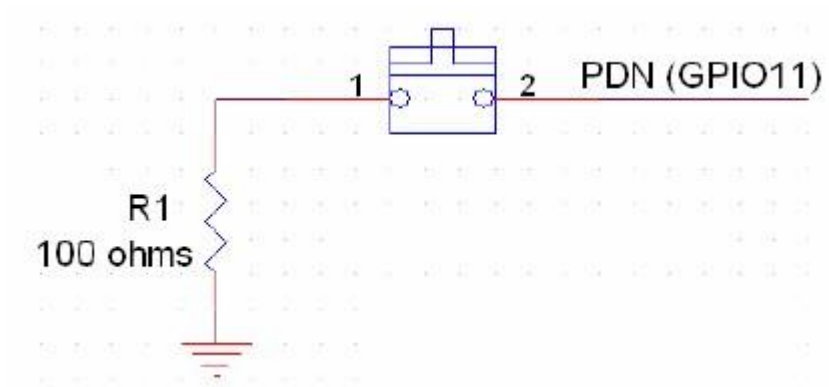
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5. 1 The external circuit for WiFi activity LED display



5.2 uses a push or toggle switch. r-down function input (optional)The external circuit for power



6. Antenna Connection Information

Antenna can choose external

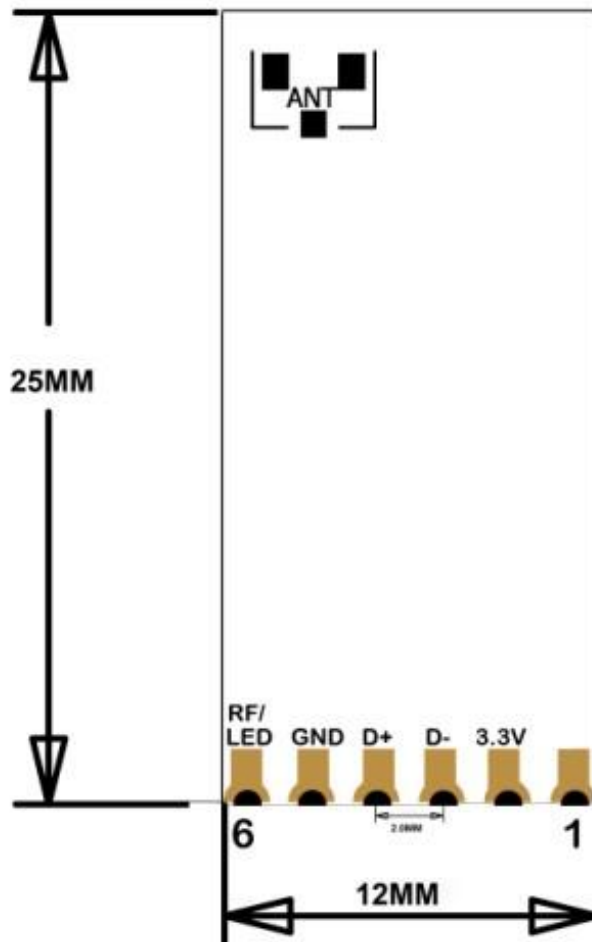


7. Mechanical Information

7.1 Dimensions

Size: 25mm(Length)x12mm (Width)

Mechanical Drawing:



Pin Definition

1		5	GND
2	3.3V	6	RF/LED
3	D-		
4	D+		

7.2 USB Connection Information

6 pin pin to pin=2.0mm

FCC STATEMENT

Part 15.19

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Part 15.21

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

Part 15.105

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.

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: A2TCP318

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

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. 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 like transmitters 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.

Regulatory Information

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. modular could be only used in mobile or fix device, and could not be used in any portable device.