

CS-NM-Y1WT/CS-WK-N150A

Wi-Fi Module

Product Manual

Version: 1.0

FEATHERS

- IEEE802.11b/g/n wireless standard
- WPA&WPA
- 5GPIOs
- STA\AP\AP+STA
- TLS\SSL protocol
- 3.3V supply
- Wi-Fi
 - 802.11b/g/n, 20M Band With
 - Station, Soft AP
 - Balun/PA/LNA
 - special IoT TCP/IP protocols
 - PCB Antenna
- Peripheral:
 - 5GPIOs

1. Product introduction

Cs-nm-y1wt is a cost-effective embedded WiFi module launched by fluorite Internet, which supports 802.11b/g/n. The module integrates RF transceiver, MAC, baseband processing, all WiFi protocols, configuration information and network protocol stack. It can be widely used in smart home equipment, remote monitoring equipment, medical devices and other fields.

The module is embedded with low-power 32-bit CPU, 2mbyte flash memory, 50kb SRAM, and 2MB flash. Users can develop embedded Wi Fi products to meet their own needs based on these. The functional block diagram of cs-nm-y1wt / cs-wk-n150a is shown in Figure 1.

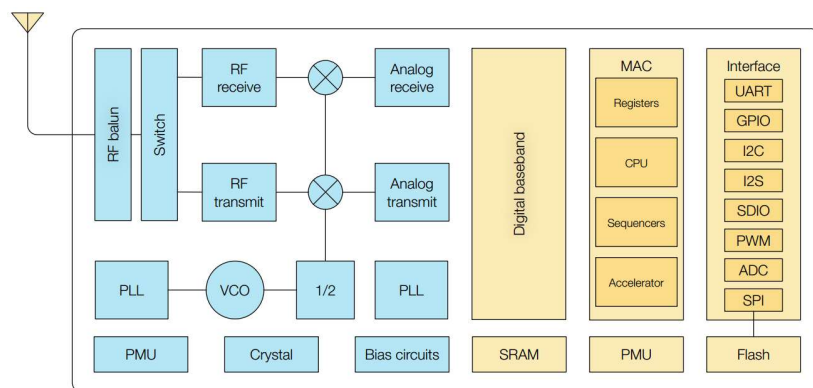


fig1 module function

2. Electrical parameters

2.1 Power consumption parameters

table 1 modules Power consumption parameters

Specifications	Min.	Typ.	Max.	Units
VDD ¹	3.0	3.3	3.6	V
VIL(input low voltage)	-0.3		0.25VCC	V

VIH(input high voltage)	0.75VCC		VCC	V
VOL(output low voltage)		0	0.1VCC	V
VOH(output high voltage)	0.8VCC		VCC	V
Io			12	mA
Standby (SP mini)		80	85	mA
pulse current @TX 11b @17dBm 11Mbps			220	mA
pulse current @TX 11g @15dBm 54Mbps			110	mA
pulse current @TX 11n @14dBm 65Mbps			100	mA
Link			58.5	mA

2.2 working environment

table 2 modules working environment

Symbol	Description	Min.	Max.	Units
Ts	Storage temperature	-40	125	°C
TA	Ambient operating temperature	-20	90	°C
Vdd	Supply voltage	3.3	3.6	V
Vio	Voltage on IO pin	0	VCC	V
ESD	HBM	1000	2000	V

RF parameters

table 3 modules RF parameters

frequency range	2.412 GHz - 2.472 GHz (For US:2412MHz-2462MHz)
RF standard	IEEE 802.11 b/g/n
RF Power consumption	802.11b:17dBm ± 1dBm 802.11g:17dBm ± 1dBm 802.11n:17dBm ± 1dBm
Antenna	Embedded: PCB Antenna IPEX: NONE
Receiving sensitivity	802.11b<-85dBm@11Mbps 802.11g<-74dBm@54Mbps 802.11n<-72dBm@MCS7

Protocol	IPv4/IPv6, TCP/UDP/FTP/HTTP/HTTPS/Mdns/CoAP
Maximum rate	11M@802.11b, 54M@802.11g, MCS7@802.11n
Security	Open/WEP-Open/WPA/WPA2 WEP/TKIP/AES
Network type	STA/AP/STA+AP/WIFI Direct

4. CS-NM-Y1W/CS-WK-N150A

4.1 Pin arrangement

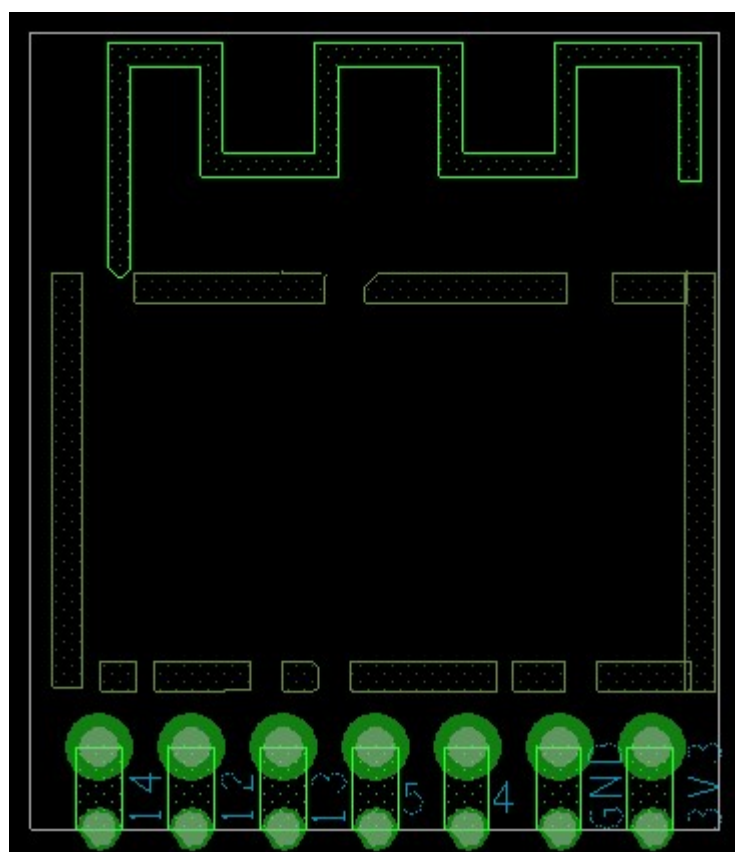


fig 1 Modules Pin arrangement

4.2 Pin definition

Table 4 Modules Pin arrangement

PIN	FUNC1	FUNC2	FUNC3	FUNC4	FUNC5	STATES
1	GPIO14	PWM2				UP
2	GPIO12	PWM0				UP
3	GPIO13	PWM				UP
4	GPIO5	PWM				UP
5	GPIO4	PWM3				UP
6	GND					
7	VCC					

Regulatory Information

EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Radio Equipment Directive 2014/53/EU, the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU.

EC DECLARATION OF CONFORMITY

Hereby, Hangzhou EZVIZ software Co., Ltd declares that the radio equipment type [CS-NM-Y1WT、CS-WK-N150A] is in compliance with Directive 2014/53/EU.

The full text of the EC DECLARATION OF CONFORMITY is available at the following web link: <http://www.ezvizlife.com/declaration-of-conformity>.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info



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FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance:

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.

FCC Conditions

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.

The module is limited to OEM installation ONLY

The OEM integrator is responsible for ensuring that the end-user has no manual instruction to remove or install module.

When the FCC identification number or ISED certification 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 FCC ID: XXXXX-YYYYYYYY” and the information should be also contained in the devices’ user manual.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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. This device is intended only for OEM integrators under the following conditions: 1) The antenna must be installed such that 20 cm is maintained between the antenna and user. 2) The transmitter module may not be co-located with any other transmitter or antenna.

Copyright description

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More information , open.ys7.com