Product Specifications

Product Name: IS-WF01

Model No.: IS-WF01

Version: 1.0

1. Introduction:

IS-WF01 is a new low-cost embedded UART-ETH-WIFI module (serial port - Ethernet - Wireless network).

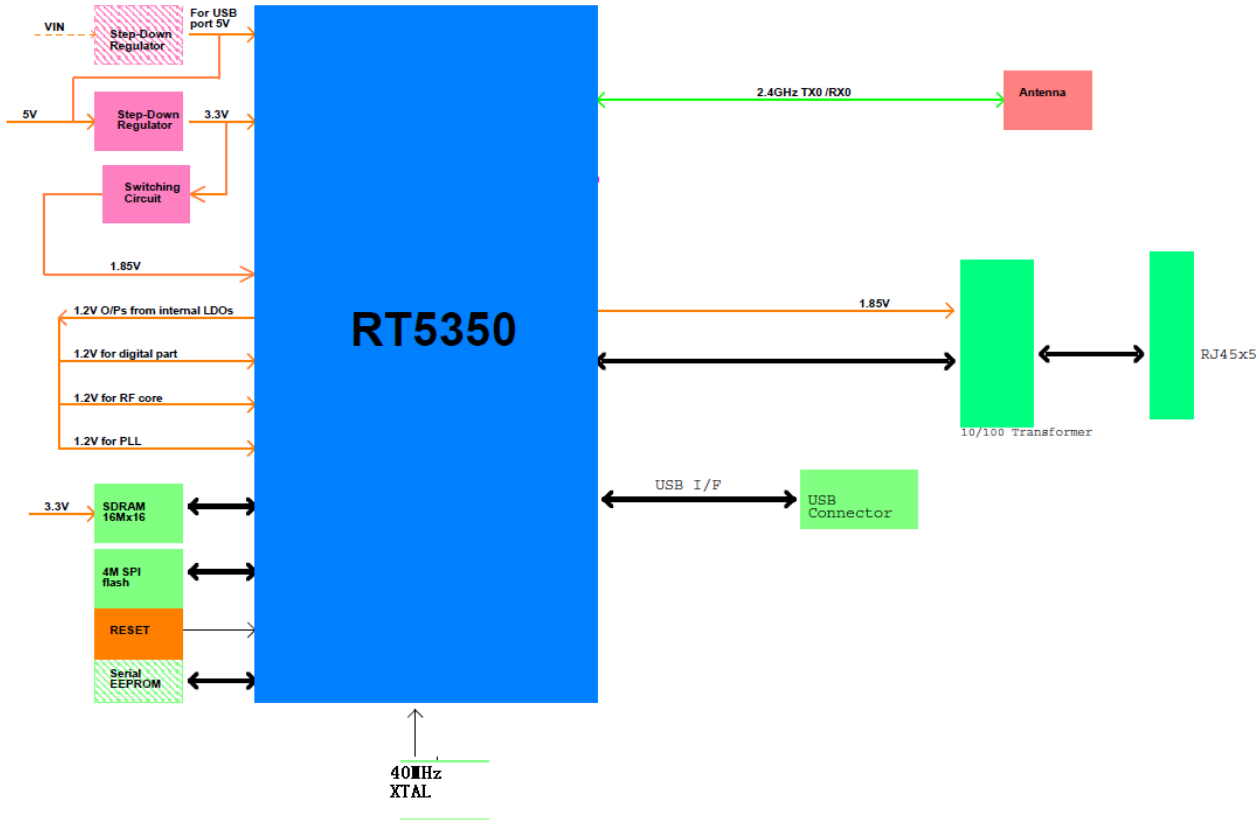
This product is an embedded module based on the universal serial interface network standard, built-in TCP / IP protocol stack, enabling the user serial port, Ethernet, wireless network (WIFI) interface between the conversions.

Through the IS-WF01 module, the traditional serial devices do not need to change any configuration; data can be transmitted through the Internet network. Provide a quick solution for the user's serial devices to transfer data via Ethernet.

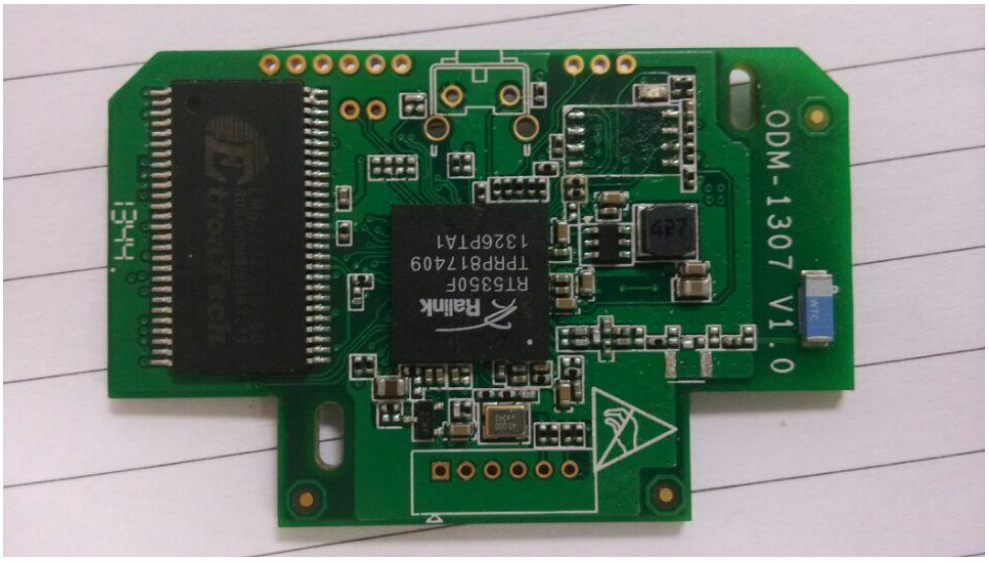
This module is mainly applied to the network camera, set-top boxes, car camera, WIFI audio equipment. The end product which equipped with this WIFI module may at least 20cm from the human when normal use.

2. Product information

2.1 Block diagram



2.2 Outline information



3. Parameters and characteristics

Interface and protocol	
WIFI protocol	2.4GHz, 802.11b/g/n(HT20/40) Max:150Mbps
	11n：135，121.5，108，81，54，40.5，27，13.5Mbps 11g：54，48，36，24，18，12，11，9，6，5.5，2 ，1 Mbps 11b： 11/5.5/2/1 Mbps
Characteristics:	
WLAN	Support 64/128WEP，WPA/WPA-PSK、WPA2/WPA2-PSK、IEEE 802.1X encryption Support SSIDbroadcast control and access control based on MAC address Operating channal:USA,1-11CH, UE,1-13, JP,1-14 Frequency range :2.4~2.4835GHz Spread-spectrum technique :DSSS Data modulation type :BPSK, QPSK, CCK and OFDM (BPSK/QPSK/16-QAM/ 64-QAM) Sensitivity @PER:54M：-68dBm@10%PER；11M：-85dBm@8% PER；6M：-88dBm@10% PER；1M：-90dBm@8% PER；256K：-105dBm@8% PER（Typical） Transmission distance: 100m (indoor)， 200m(outdoor)（depend upon different environment） Antenna type: Chip antenna,

Software characteristics	embedded NATfirewall with SPI，support PING、broadcast、multicast packets filtering and MACaddress、IPaddress、URL and content filtering of domain name。 support UPnP、DDNS functions； support virtual server 、 DMZhost, port triggering ； support VPN ： PPTP/IPSec/L2TP pass-through prevent DoS attack，provide virus isolation automatically。 Built-in DHCP Server and client Support ip and mac address binding；support ip address\PORT,MAC address filtering and MACaddress modifying and copying 。 Offer system log and traffic statistics Support remote and Web management，online WEB software upgrading Specific emergency software recovery，can ultimately avoids collaps due to failture of software upgrading

4.Environment

4.1 Temperature

4.1.1 Operating Temperature

Continuous reliable operation in ambient temperature: -10ºC to +50ºC.

4.1.2 Storage Temperature

The product is not damaged or degraded when keeping in -20ºC to +85ºC.

4.2 Humidity

4.2.1 Operating Humidity Conditions

The product should be capable of continuous reliable operation when subjected to relative humidity in the range of 10% to 90% (non-condensing) .

4.2.2 Non-Operating Humidity Conditions (including warehouse)

The product should not be damaged or degraded when kept in the place (where relative humidity range is in the range of 10% to 90%) for 36 hours.

5. Approvals and Certifications

RoHS and REACH process, FCC, CE undergoing.

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6、OEM Labeling Requirements

USERS MANUAL OF THE END PRODUCT:

In the user's manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. If the size of the end product is smaller than 8x10cm, then additional FCC part 15.19 statement is required to be available in the user's manual:

This device complies with Part 15 of 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.

FCC Caution: Any changes or modifications not expressly approved by the party Responsible for compliance could void the user’s authority to operate this equipment.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID:2AB2OIS-WF01 ". If the size of the end product is larger than 8x10cm, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of 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.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled Environment. This equipment should be installed and operated with minimum distance 20cm. Between the radiator & your body.

Attention

The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module. Appropriate measurements (e.g. 15 B compliance) and if applicable additional equipment authorizations (e.g. Verification , Doc) of the host device to be addressed by the integrator/manufacturer.

This RF Module does not have an own shielding, so that a Limited Modular Approval (LMA) was granted: This RF module is strictly limited to the integration by the Grantee himself or the dedicated OEM integrators under the control of the Grantee. and This LMA with a Integral antenna, antenna gain is 2.0dBi.

Proper measurements of the host device including this RF module (radiated spurious emissions and bandage) are required to assure compliance with the FCC regulations.

Any other integrator must contact the Grantee to determine necessary compliance measurements and/or additional equipment authorizations (e.g. Class II Permissive Change or New Equipment Authorization) for his configuration. This RF Module must not be sold to the general public.

IMPORTANT NOTE: In the event that these conditions cannot be met (for example: certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.