

RMWIFIC User Manual

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1. Overview:

1.1 Modem Overview:

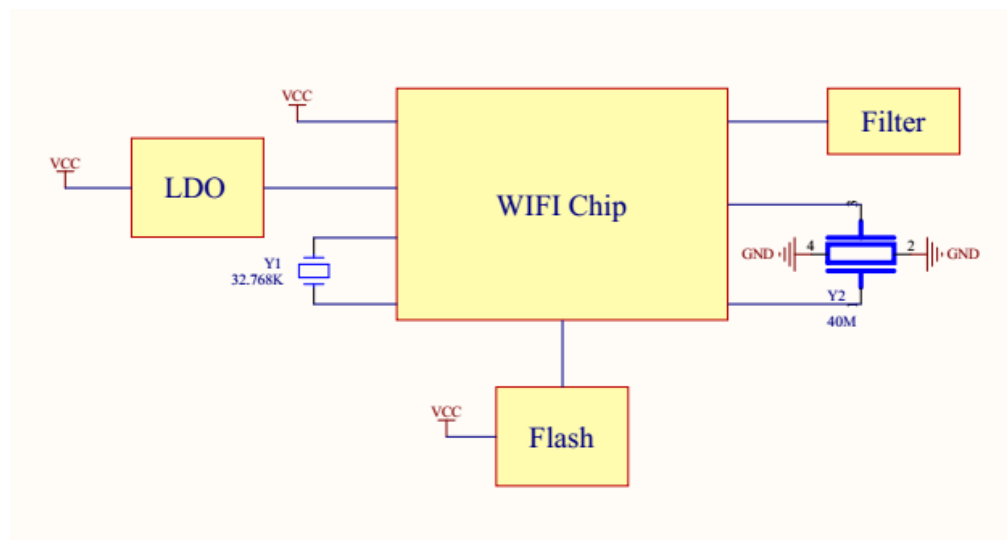
The RMWIFIC is a highly-integrated WIFI module, which offers a complete solution containing all hardware features necessary for development of wireless application. The RMWIFIC is a device with the feature of 802.11b/g/n that works with most of the wireless router in market.

1.2 Key Features:

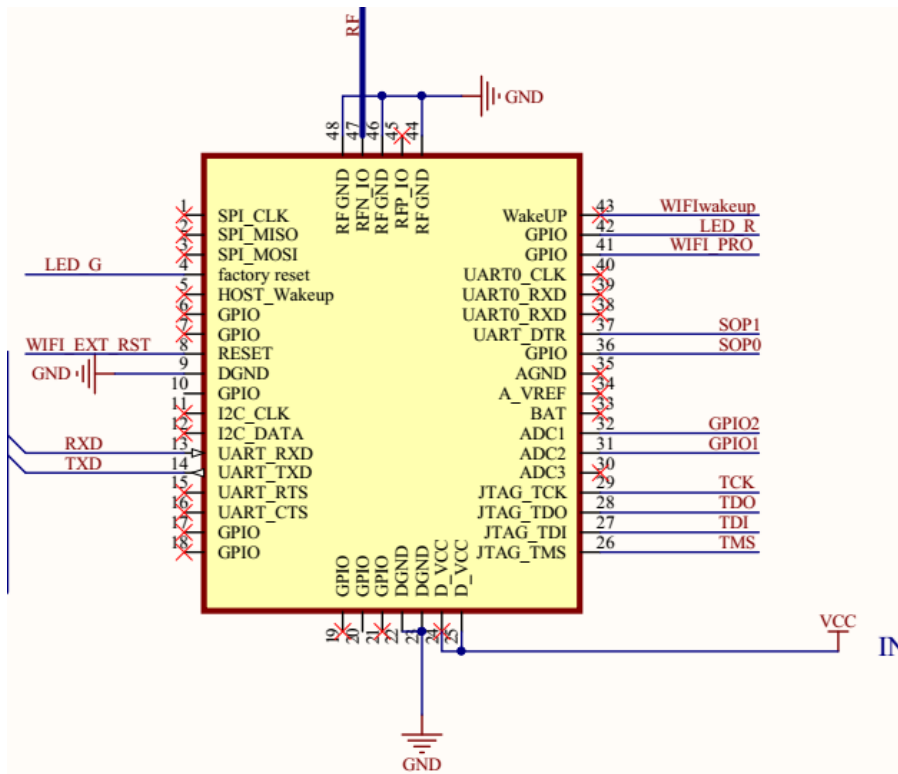
- Ultra-compact size (18.8 x 13.5mm)
- UART interfaces
- High data rate
- DSSS; CCK and OFDM modulation for 802.11b/g/n
- RoHS compliant

2. Modem Pin Definitions:

2.1 Block Diagram:



2.2 Pin map:

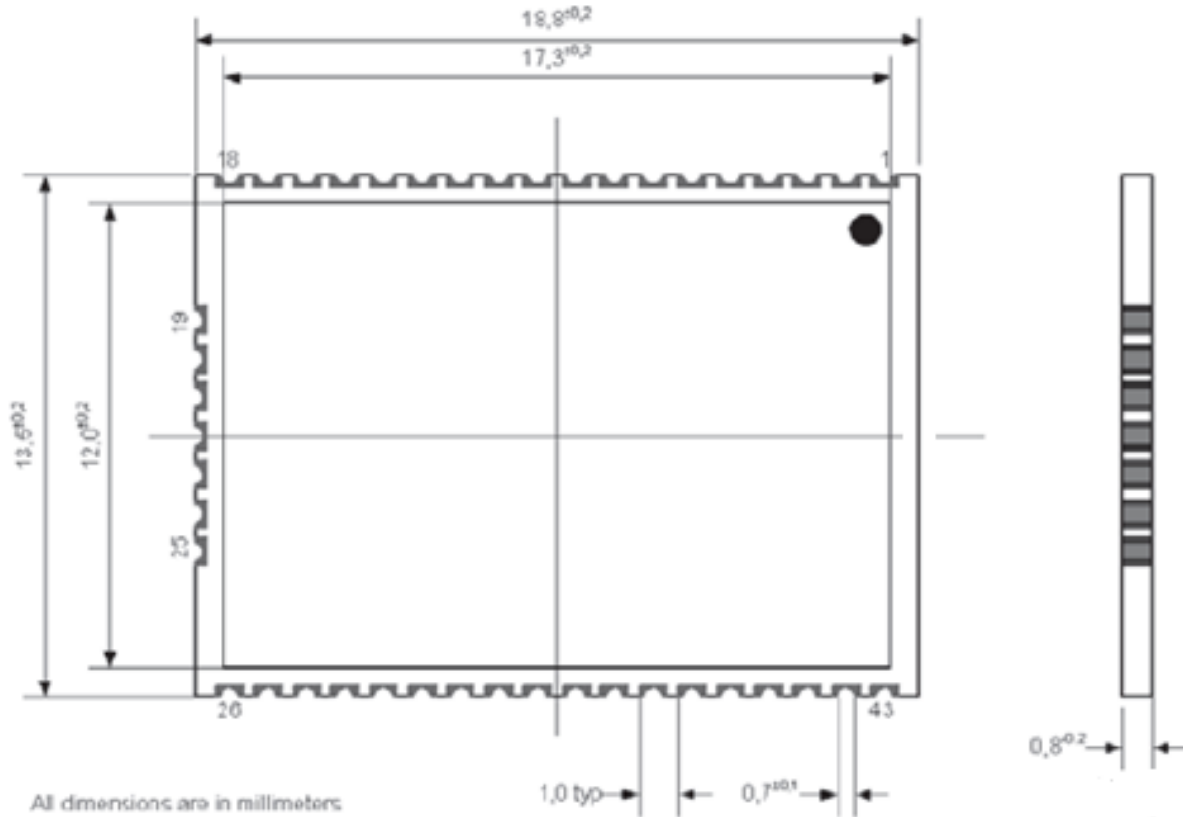


3. Specifications

3.1 Physical Characteristics:

	Parameter	Unit
Dimension	18.8*13.5	mm
Operation temperature	-40 to +55	°C

Below diagram shows the PCB layout.



3.2 Power supplier (powered by host PCBAs):

Symbol	Min	Typ	Max	Unit
1.9V	1.85	1.9	2.0	V

3.3 RF specification:

	Test condition	Min	typ	Max	Unit
Frequency Range		2412		2462	MHz
TX power			18		dBm
Rx sensitivity	802.11b:8% PER		-96		dBm
	802.11g:10% PER		-90.5		dBm
	802.11n:10% PER		-74.5		dBm
Bandwidth			20		MHz

4. Regulatory

Caution:

This device complies with Part 15 of the FCC Rules / Industry Canada licence-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

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.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.