



NF-02-PA Specification

Version V1.0

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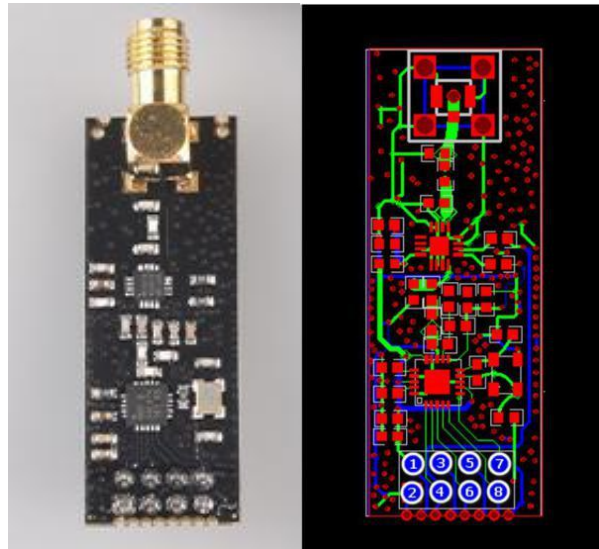
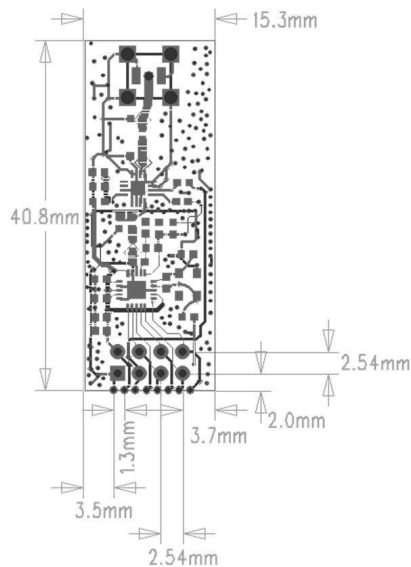
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Overview

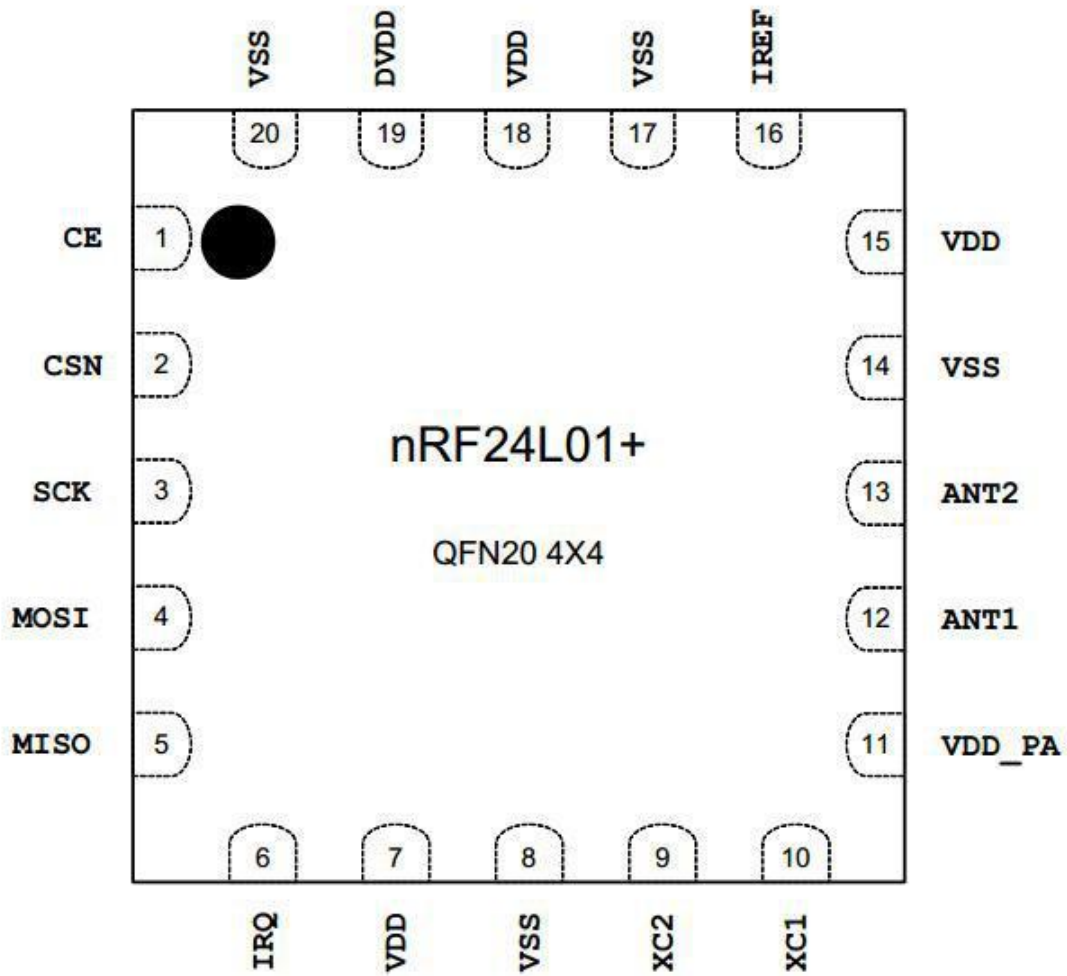
NF-02-PA is a 100 mW power wireless transceiver integrated 2.4G module, embedded nRF24L01 RF chip and RFX2401C power amplifier chips, improved reception sensitivity; DIP-8 packaging, fast docking to existing products; high wireless rate (up to 2 Mbps), using SPI interface, high stability, high performance-to-price ratio. NF-02-PA applies to a wide range of applications Internet of things, widely used in wireless mouse, wireless remote control, somatosensory devices, active RFID,NFC, low-power ad hoc networks

Wireless sensor nodes are ideal products for Internet of things applications.

Appearance dimensions



NF-02-PA Module image



Chip image

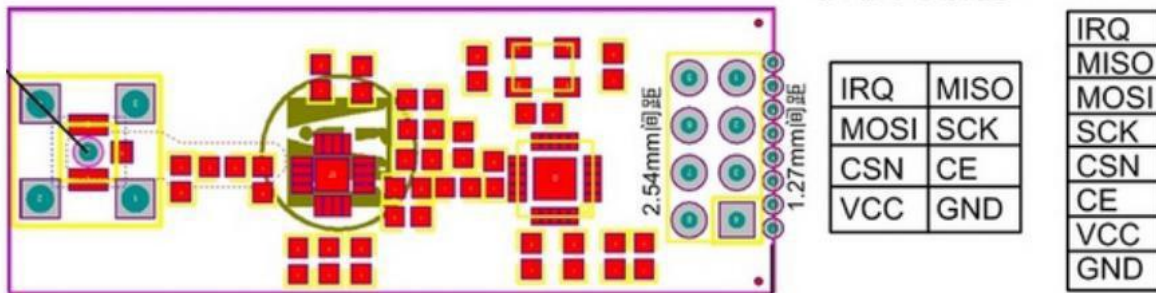
No.	Parameter Name	Parameters	Note
01	RF chip	nRF24L01+ Nordic	
02	Power amplifier chip	RFX2401C Power amplifier, Increase gain	
03	module size	40.8*15.3 unit:mm	
04	Modulation mode	GFSK modulation mode Gaussian frequency shift keying	
05	Package	DIP-8	
06	Interface	Adopt four-wire SPI interface, SPI port Maximum rate not greater than 10 M	
07	Transmission power	Maximum is 20 dBm about 100 mW	
08	RSSI support	Support , signal received strength detection	
09	Operating frequency	2.4GHz ~ 2.525GHz Adjustable, 1MHz	
10	Voltage range	1.9 ~ 3.6V, typical value 3.3V, Excessive voltage would damage the module	
11	Data rate	support 2Mbps/1Mbps/250Kbps detail refer to chip datasheet	

12	Channel	126 RF Channel /Each channel is separated 1MHz
13	Test range	1000m sunny, no barrier , maximum transmit power
14	Receiving sensitivity	-94dBm@250Kbps other details refer to chip datasheet
15	Antenna interface	Rod antenna SMA
16	Emission length	Single packet 1~32 byte 3class FIFO
17	Received length	Single packet 1~32 byte 3class FIFO
18	Operating temperature	-20 ~ + 70 °C excessive temperature would damage the module
19	Storage temperature	-40 ~ +125 °C excessive temperature would damage the module
20	Standby current	26μA , Other details are chip manual
21	Receiver Current	23 mA (2Mbps) Other details are shown in the Chip Manual
22	Emission current	250mA(20dBm) 250 mA (20 dBm) for other details see the chip manual

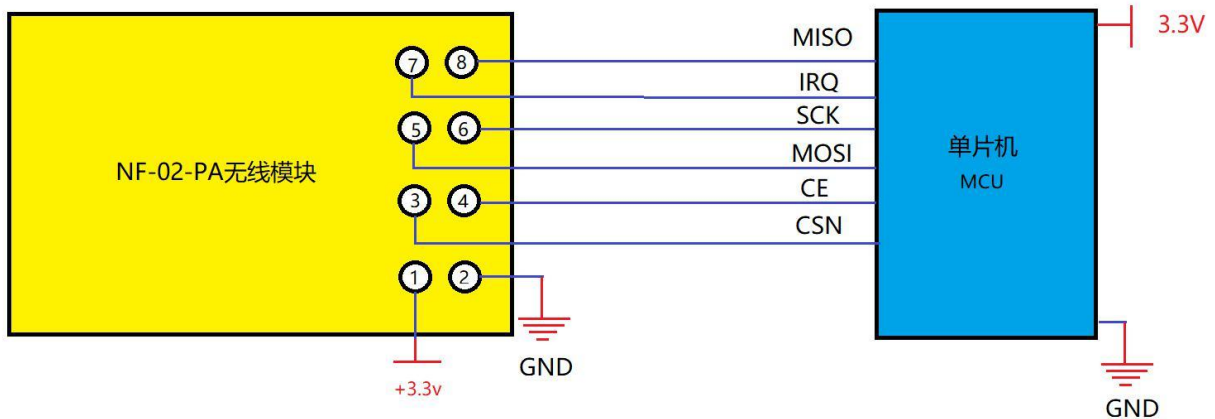
Pin definition

Name	Direction	Purpose
VCC	-	power supply must be between 1.9~3.6 V
GND	-	ground wire, connected to power reference ground
CSN	input	module chip select pin for starting a SPI communication
CE	input	module enables control foot, CE low level is in standby mode
MOSI	input	module SPI data input pin
SCK	input	module SPI bus clock
IRQ	output	module interrupt signal output, low level effective
MISO	output	module SPI data output pin

Pin definition image



Typical circuit



schematic diagram of the connection between MCU and NF-02-PA

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