

# N513 Narrowband Module

CC1120 FSK Narrowband Uart RF Module 162-174Mhz, 384-464Mhz, 860-960Mhz, 24dbm



## INTRODUCTION

N513 is a low-cost and small size narrowband RF module for transmitting and receiving digital data via radio frequency. All of the N513's electronics (don't including an antenna) reside on a single PCB, and all operational power is derived from a single supply voltage.

The narrowband transceiver module design consists of a CC1120 low-power, integrated sub 1G transceiver RF chip and ST MCU, all IO pin are brought out. The module available frequency is from 162-174Mhz, 384-464Mhz, 860-960Mhz, The hardware is designed for maximum range. The module isual distance up to 3000m.

## Technical specifications

### Hardware Information

Interfaces: SPI, IIC, UART  
Dimension: 36 x 24mm x 3mm  
Operating voltage: 2 - 3.6V  
PA Operating voltage: 3 - 5V  
Operating temperature: -30°C to +80°C

Consumption(Sleep) : 2uA  
Consumption (RX): 35mA  
Consumption (TX): 400mA  
RF chip: CC1120  
Mounting: SMD

### Software

Asynchronous Transparent mode  
Low Power mode  
Secure mode

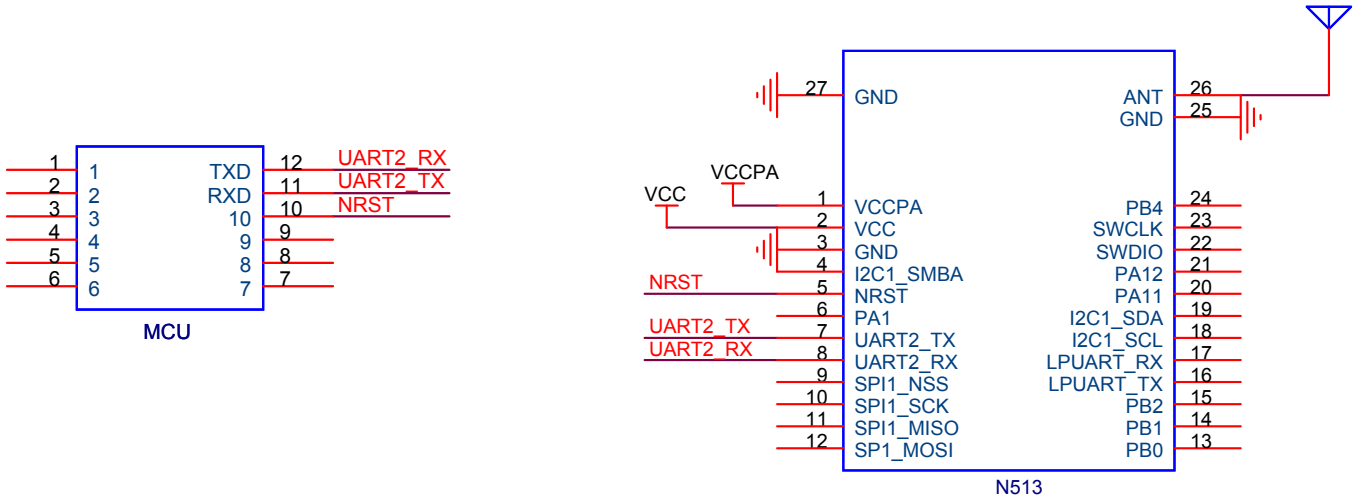
RSSI mode  
Serial bootloader  
Adjustable packet size

### Wireless Interface

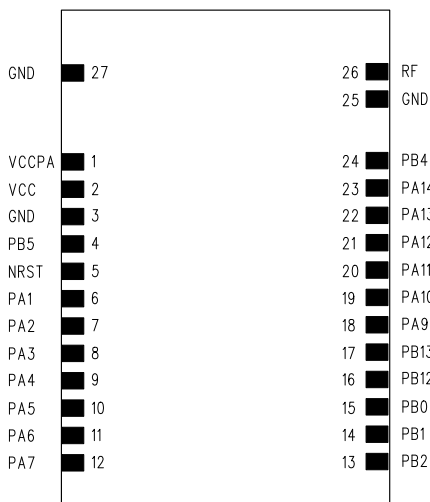
RF pin  
Frequency: 162-174Mhz, 384-464Mhz, 860-960Mhz  
Modulation: narrowband FSK  
RF deviation:  $\pm 1$  KHz

RF data rate: 1 - 200Kbps  
RF output power: up to 24dBm(3.3V)  
RF sensitivity: -122dBm

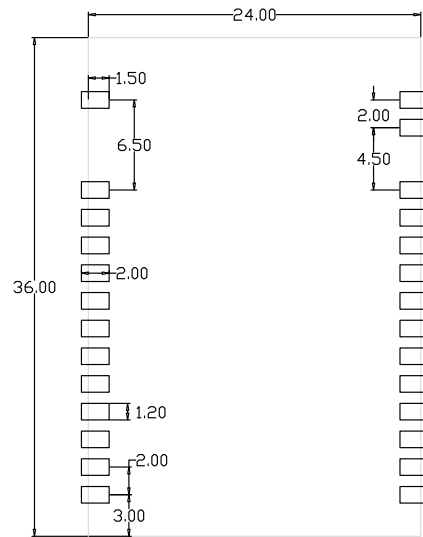
## Debug interface



## Pin configuration & Dimensions



PIN define



PCB LAYOUT(mm)

## **Part numbers**

N513-A-S-434M    RF Module N513-A-S-434M – 200mW – 410-480Mhz

## **OTHER MODULES OF BANDS RANGE**

N513-A-S-868M    RF Module N513-A-S-868M – 200mW – 860-960Mhz

N513-A-S-169M    RF Module N513-A-S-169M – 200mW – 162-174Mhz

## **Manufacturer**

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## **Contact with us**

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