

N533AS, CC1310 Module



N533AS Module Introduce

N533AS CC1310 transceiver module based TI wireless MCU **CC1310** and **PA LNA** chip, designed for 430M, 868M, 915MHz and 1200Mhz band. Up to **+30dBm** output power and down to -112 dBm sensitivity at **50kbps**.

N533AS is a low-cost and small size sub g transceiver module for transmitting and receiving digital data via radio frequency. All of the N533AS's electronics (don't including an antenna) reside on a single PCB, and all operational power is derived from a single supply voltage.

N533AS module design consists of a CC1310 low-power, integrated sub 1G transceiver RF chip, most IO pin of CC1310 are brought out. The module available frequency is from 410 to 960Mhz. The hardware is designed for maximum range, 5000m + Range (Line of Sight).

N533AS module based TI CC1310 transceiver. The module use SMD package. It has small size, the module is suitable for SMT production. Rapid development without understanding RF. The module supports WMBus and so on.

N533AS is suitable for ISM band in China, EU and USA at 868/915Mhz.

N533AS Module Parameter

Model	N533AS
Module Interface	SPI, UART
Frequency	160-960 Mhz, 1200Mhz
RF Data Rate	0-4000 kbps
868Mhz Transmitting Power	+30 dBm
868Mhz Receiving Sensitivity	-112 dBm at 50 kbps
868Mhz TX Current	900 mA (type)
868Mhz RX Current	12 mA
Frequency Deviation	+/- 10 khz, with TCXO
Communication Distance	10 – 5 000 m (Visual distance)
Antenna Interface	RF pin, IPEX
Installation Mode	SMD
Volume (mm)	36 mm x 24 mm x 3 mm
Operating Voltage	2 - 3.6 V
Working Temperature and Humidity Environment	Temperature: -30-70 °C; Humidity 10-95 %RH
Storage Temperature and Humidity Environment	Temperature: -40-80 °C; Humidity 10-95 %RH
Weight (kg)	≈10g

N533AS Module Pinout

Pin Number	Function	Describe
1	GND	
2	GND	
3	VCCPA	PA power supply, 4.5V -- 5.5V; MAX current: 800mA
4	VCCPA	PA power supply, 4.5V -- 5.5V; MAX current: 800mA
5	GND	GND
6	DIO2	MCU IO port
7	DIO3	MCU IO port
8	DIO5	MCU IO port

9	DIO6	MCU IO port
10	DIO7	MCU IO port
11	DIO8	MCU IO port
12	VCC	CC1311R3 power supply, 3V -- 3.6V
13	GND	MCU IO port
14	RESET	
15	TMS	TMS
16	TCK	TCK
17	DIO18	MCU IO port
18	DIO19	MCU IO port
19	DIO20	MCU IO port
20	DIO21	MCU IO port
21	DIO22	MCU IO port
22	DIO23	MCU IO port
23	DIO24	MCU IO port
24	DIO25	MCU IO port
25	RF	
26	GND	

Application Area

Ultra low-power wireless applications

Operating in the 315/430/868/915 MHz ISM/SRD bands

Wireless alarm and security systems

Industrial monitoring and control

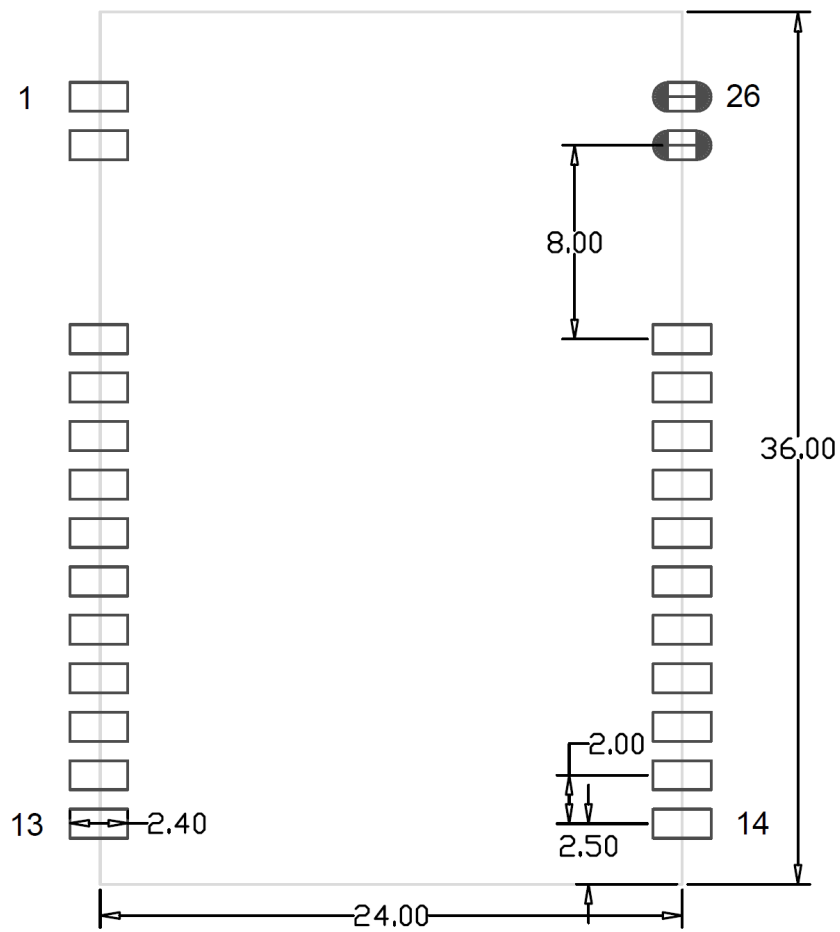
Wireless sensor networks

AMR – Automatic Meter Reading

Home and building automation

Wireless MBUS

N533AS Layout



Ordering Information

N533AS-CC1310-430M	RF Module	CC1310 30DBM	2000mW – 410-480Mhz
N533AS-CC1310-868M	RF Module	CC1310 30DBM	2000mW – 860-880Mhz
N533AS-CC1310-915M	RF Module	CC1310 30DBM	2000mW – 910-930Mhz