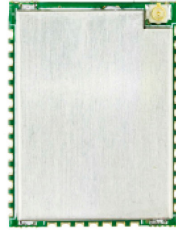


N628PA, CC1352R CC1190, CC2592 Module



N628PA Module Introduce

N628PA Radio module is a new product of Coral RF, the module based TI **CC1352R**, **CC1190** and **CC2592**. For 868MHz, 915MHz, up to 27dBm output power and down to -112dBm sensitivity. For 2.4Ghz, up to 22dBm output power and down to -102dBm sensitivity at 2400mhz. The part of the N628PA module below 1G supports 6LoWPAN, Amazon Sidewalk, IEEE 802.15.4, Wi-SUN, Wireless M-Bus, Thread and so on. N628PA module 2.4G supports Bluetooth low energy, IEEE 802.15.4, Thread, Zigbee and so on.

N628PA is a low-cost and small size sub g transceiver module for transmitting and receiving digital data via radio frequency. All of the N628PA's electronics (don't including an antenna) reside on a single PCB, and all operational power is derived from a single supply voltage.

The N628PA module design consists of a CC1352R CC1190 and CC2592, it is a low-power, integrated sub 1G transceiver RF chip, all IO pin of CC1352R are brought out. The module available frequency is from 820 to 1300Mhz. The hardware is designed for maximum range, 5000m + Range (Line of Sight).

N628PA module based TI CC1352R 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.

N628PA is suitable for ISM band in China, EU and USA at 868/915Mhz.

N628PA's CC1190 control Logic

IO	TX	RX	SLEEP
DIO28(HGM)	1	1	0
DIO29(LNAEN)	0	1	0
DIO30(PAEN)	1	0	0

N628PA's CC2592 control Logic

IO	TX	RX	SLEEP
DIO5(PAEN)	1	0	0
DIO6(LNAEN)	0	1	0
DIO7(HGM)	1	1	0

N628PA Module Parameter

Model	N628PA
Module Interface	SPI, UART
Frequency	860-960 Mhz, 1200Mhz, 2.4G
RF Data Rate	0-4000 kbps
868Mhz Transmitting Power	+27dBm at 868M/915M, +22dBm at 2400M;
868Mhz Receiving Sensitivity	-112dBm at 50kbps in 868M/915M, -102dBm at 250kbps in 2400M;
868Mhz TX Current	550 mA (type)
868Mhz RX Current	9 mA
Frequency Deviation	+/- 10 khz,with Crystal oscillator(TCXO optional)
Communication Distance	10 – 5 000 m(Visual distance)
Antenna Interface	Sub G IPEX and stamp hole optional 2.4 G IPEX and PCB antenna optional
Installation Mode	SMD
Volume (mm)	41 mm x 30 mm x 3 mm

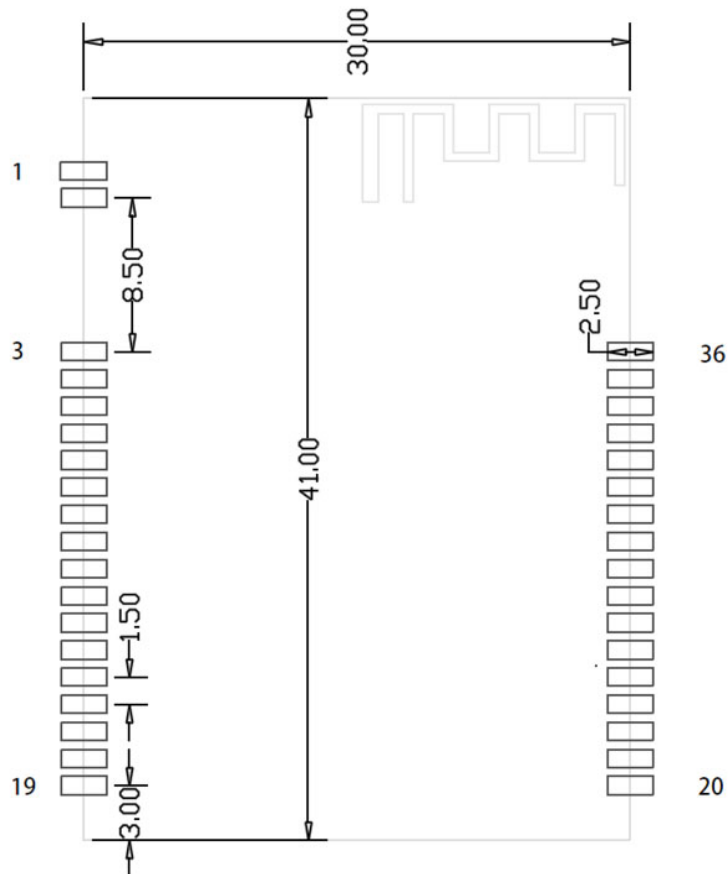
Operating Voltage	2.8 - 3.6 V
Working Temperature and Humidity Environment	Temperature: -30-70 °C; Humidity 10-95 %RH
Storage Temperature and Humidity Environment	Temperature: -40-80 °C; Humidity 10-95 %RH
Weight (kg)	≈10g

N628PA Module Pinout

Pin Number	Function	Describe
1	RF	
2	GND	
3	NC	
4	NC	
5	NC	
6	NC	
7	NC	
8	NC	
9	NC	
10	DIO8	MCU IO port
11	DIO9	MCU IO port
12	DIO10	MCU IO port
13	DIO11	MCU IO port
14	DIO12	MCU IO port
15	DIO13	MCU IO port
16	DIO14	MCU IO port

17	VCCPA	VCCPA, power of CC1190, 2.8-3.6V
18	VCC	VCC, power of CC1352, 2.8-3.6V
19	GND	GND
20	RESET	RESET Pin
21	DIO15	MCU IO port
22	TMS	TMS
23	TCK	TCK
24	DIO16	MCU IO port
25	DIO17	MCU IO port
26	DIO18	MCU IO port
27	DIO19	MCU IO port
28	DIO20	MCU IO port
29	DIO21	MCU IO port
30	DIO22	MCU IO port
31	DIO23	MCU IO port
32	DIO24	MCU IO port
33	DIO25	MCU IO port
34	DIO26	MCU IO port
35	DIO27	MCU IO port
36	GND	MCU IO port

N628PA's Package Description



Application Area

- Ultra low-power wireless applications
- Operating in the 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

Ordering Information

N628PA-868M	RF Module	CC1352R	N628PA-868M	500mW – 860-880Mhz
N628PA-915M	RF Module	CC1352R	N628PA-915M	500mW – 910-930Mhz