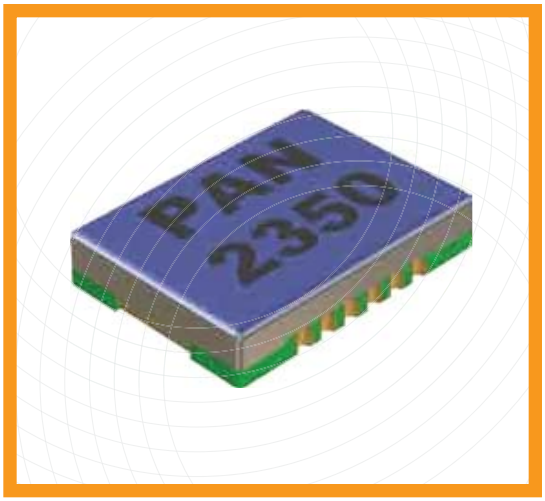
The PAN2350 is a low power UHF narrowband transceiver, specially designed for both ISM and SRD band frequencies. It is easily programmed for operation at a number of other frequencies. This small module offers a low cost, fully integrated solution for many wireless applications. The PAN2350 is made for applications where a narrow band bidirectional data transfer function is needed but can also be used in wide band bidirectional applications.



Product Performance:

- Maximum Data-rate Up To 153.6 kBaud (NRZ Mode)
- Low Power Consumption- Frequency Range 804 - 940 MHz or 402 - 470 MHz
- High Sensitivity, Up To 121 dBm For A 12.5 kHz Channel
- Programmable Output Power Up To 10 dBm
- Low Supply Voltage: 2.3 V to 3.6 V
- Small Size: 14.8mm x 20.3mm x 4.2mm
- Operating Temperature Range: -40°C to +85°C
- Digital RSSI and Carrier Sense Indicator
- Suitable For Frequency Hopping Systems
- Single Port Antenna Connection
- Complies With EN 300 220 And FCC CFR47 Part 15

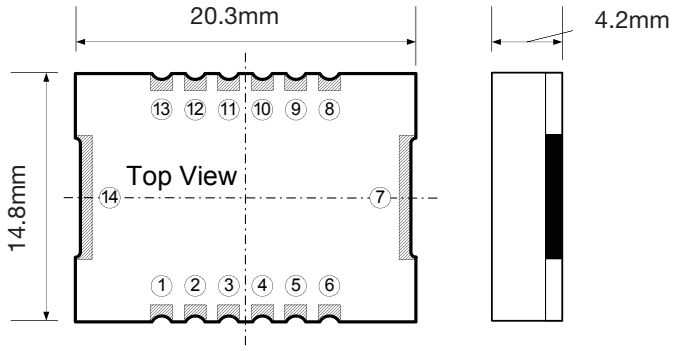
Applications:

- Wireless Alarm And Security Systems
- RKE - Two-Way Remote Keyless Entry
- Home Automation Systems
- Automated Meter Reading
- Low Power Telemetry
- Toys

Part Numbers:

Part Number	Description
ENW59604NC1	PAN2350, 868 MHz, 4.8KBPS, Tx 5 dBm
ENW59604NC2	PAN2350, 868 MHz, 153.6KBPS, Tx 5 dBm
ENW59604NC3	PAN2350, 433 MHz, 4.8KBPS, Tx 10 dBm
ENW59604NC4	PAN2350, 434 MHz, 156.8KBPS, Tx 5 dBm
EVAL_PAN2350	Evaluation Kit For The PAN2350 Module

Dimensions & Pin Layout:



Pin No.	Pin Name
1	LOCK
2,4,5,7,14	GND
3	ANT
6	VCC
8	PSEL
9	PCLK
10	PDI
11	PDO
12	DCLK
13	DIO

Technical Specifications:

Parameter	Value	Condition / Notes
Receiver Sensitivity (BER=10^{-3}) 433 MHz 868 MHz	 -117 dBm -116 dBm	12.5 kHz channel width, FSK@2kHz, 2.4kBaud, Manchester coded
Output Power 433 MHz 868 MHz	 -20 to +10 dBm -20 to +5 dBm	Delivered to 50 Ω load. The output power is programmable.
RSSI Dynamic Range	63 dBm range	Digital Output
PLL Lock Time (Rx/Tx turn time) 12.5 kHz channel width, 433 MHz 25 kHz channel width, 868 MHz	 1.3 ms 1.1 ms	Up to 1MHz frequency step to within $^{+}_{-}$1kHz
PLL turn-on time from power down mode with crystal oscillator running 12.5 kHz channel width, 433 MHz 25 kHz channel width, 868 MHz	 4.8 ms 2.5 ms	Time from writing to registers to PLL lock
Power Down Mode	0.2 μA typ.	Oscillator Core Off
Current Consumption (Receive Mode 433 / 868 MHz)	16.9 / 17.6 mA typ.	25 kHz channel width. Lower current can be achieved at other settings
Current Consumption (Transmit Mode 433 / 868 MHz) P=3mW (5dBm)	16.8 / 33.0 mA typ.	Delivered to 50 Ω load. The output power is programmable.
Operating Temperature Range	-40°C to +85°C	

Notes:
All parameters belong to VCC = 3.0V, Tamb = 25°C
Chipcon's CC1020 is used in this module.