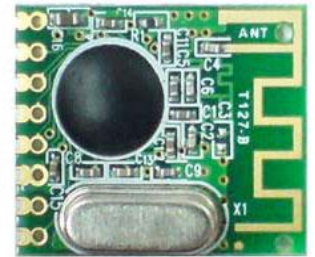


RF Transceiver 2.4 Ghz, SPI Interface, 30 meters range

This is an FSK Transceiver module, which is designed using the Chipcon IC(CC2500). It is a true single-chip transceiver, It is based on 3 wire digital serial interface and an entire Phase-Locked Loop (PLL) for precise local oscillator generation .so the frequency could be setting. It can use in UART / NRZ / Manchester encoding / decoding. It is a high performance and low cost module.



It gives 30 meters range with onboard antenna. In a typical system, this trans-receiver will be used together with a microcontroller. It provides extensive hardware support for packet handling, data buffering, burst transmissions ,clear channel assessment, link quality indication and wake on radio . It can be used in 2400-2483.5 MHz ISM/SRD band systems. (eg. RKE-two way Remote Keyless Entry, wireless alarm and security systems, AMR-automatic Meter Reading, Consumer Electronics, Industrial monitoring and control, Wireless Game Controllers, Wireless Audio/Keyboard/Mouse). It could easily to design product requiring wireless connectivity. It can be used on wireless security system or specific remote-control function and others wireless system.

Operating Range is 30 meters without requiring any external antenna.

Features

- Low power consumption.
- Integrated bit synchronizer.
- Integrated IF and data filters.
- High sensitivity (type -104dBm)
- Programmable output power -20dBm~1dBm
- Operation temperature range : -40~+85 deg C
- Operation voltage: 1.8~3.6 Volts.
- Available frequency at : 2.4~2.483 GHz
- Digital RSSI

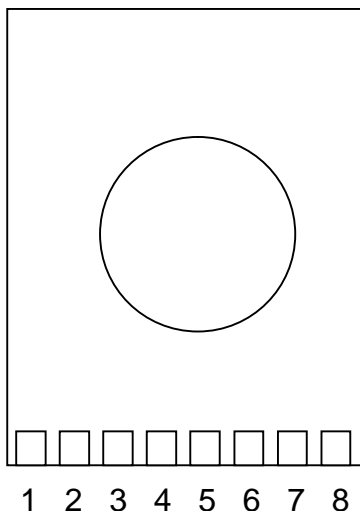
Applications

- Car & Home security system
- Remote keyless entry / Garage door controller
- Wireless game controllers/mouse/keyboard/audio
- Automation system

For internal working and specification see Texas Instruments Chipcon IC (CC2500) datasheet <http://focus.ti.com/docs/prod/folders/print/cc2500.html>



Pin Details



Pin1: VCC
 Pin2: SI
 Pin3: SCLK
 Pin4: SO
 Pin5: GDO2
 Pin6: GND
 Pin7: GDO0
 Pin8: CSn

Pin #	Pin name	Pin Type	Description
1	VCC	Power	1.8~3.6V power supply
2	SI	Digital Input	Serial configuration interface, data input
3	SCLK	Digital Input	Serial configuration interface, clock input
4	SO	Digital Output	Serial configuration interface, clock input Optional general output pin when CSn is high
5	GDO2	Digital I/O	Digital output pin for general use >Test signals >FIFO status signals >Clear Channel indicator >Clock output, down-divided from Xosc >Serial output RX data
6	GND	Ground	
7	GDO0	Digital I/O	Digital output pin for general use: >Test signals >FIFO status signals >Clear Channel indicator >Clock output RX data >Serial output RX data >Serial input TX data Also used as analog test I/O for prototype/production testing
8	CSn	Digital Input	Serial configuration interface ,chip select

Dimensions (mm)

