

## Operational Principle

- 1. CPU,EM28A have an 8-bit microprocessor with low-power and high-speed CMOS technology. Opration frequency is 4MHz.It needs an external 12MHz crystal for reference frequency; this crystal is also used for RF module. This chip is responsible to control RF-Baseband Transceiver (198810).
- 2. E2PROM,24C02,2048 bits of serial electrically erasable and programmable read\_only memory(EEPROM) organized as 256 words of 8 bits each. The device is optimized for use in many industrial and commercial applications where low-power operation are essential.
- 3. 2.4 GHz ISM Band Transceiver/Framer,EM8713 which is a low-cost,fully inegrated CMOS radio frequency(RF) transceiver block,combined with a 64-byte buffered framer block.It contains transmit,receive,VCO and PLL functions,including an on-chip channel filter and resonator.
- 4. OPTICAL SENSOR, with DSP integration chip that serves as a non-mechanical motion estimation engine for implementing a comuputer wrreless mouse.
- 5. ANTENNA, The antenna is typically fed from the end of the monopole section by a plated through-hole via which is in turn connected to the RF output on the 2.4GHz band.

## RF產品m/k/r)过頻捷

1.	童網 <u>无线鼠标 . </u> 螺 <u>SR-8309</u>
2.	電輸額值 DC <u>3</u> V, <u>23 m</u> A;
3.	Frequency Band: 2.4GHz ISM band
	Carrier Frequency: 2402~2480 MHz
4.	Number of Channel: 39 channels
5.	Channel Spacing: 2MHz
6.	RF Output Power (ERP or EIRP) :0_dB
7.	Modulation Type: GFSK
8.	Mode of operation (duplex, simplex, half duplex) : half duplex
9.	Bit Rate of Transmission: 1Mbps
10.	Antenna Type: <u>integral Antenna</u>
11.	Antenna gain: 2.42 dBi
12.	Operating Temperature Range:40~85°C
13.	Hopping Type: 16 frequency, Active Hopping
14.	Air-protocol length: <u>14~26 Bytes</u>
15.	ID:Length= 32bit
16.	Bandwidth: 1MHz _
17.	RF output Power: +1dBm
18.	Transceiver Distance:10m
19.	Mouse MCU Oscillator : 4MHz
20.	I.F: <u>5</u> KHz L.O: <u>2737.142</u> MHz