| Search keyword   Search

Home   About Us   News   Products   Joint RD Center   Join Us

Products

Products

2.4G wireless mouse solution   Home -> Products -> 2.4G wireless mouse solution

Products

- 2.4G RF chip
- Sub-1G RF chip
- Multi-Touch screen controller chip
- Single-Touch screen controller chip

Applications

- 2.4G wireless mouse solution
- 2.4G wireless audio solution
- Mobile phone touch screen COF module solution
- 433/905MHz remote control toys solution

2.4G wireless mouse solution

High performance Low cost

     Wireless mouse is divided into two types in the market, one is international brands which is of high-performance but high cost, another is domestic brands which is of lower cost but lower performance. Due to the use of radio frequency chips of lower performance for lower cost ,the cursor and Cross is not smooth. XN297 is 2.4GHz RF chip, which can provide high performance and low cost solutions. Because of XN297 have several advantages including 11dBm Output power,-88dBm Sensitivity, 20 meters wireless communication distance, accurate digital Received Signal-Strength Indicator(RSSI) and compact multiple packet.
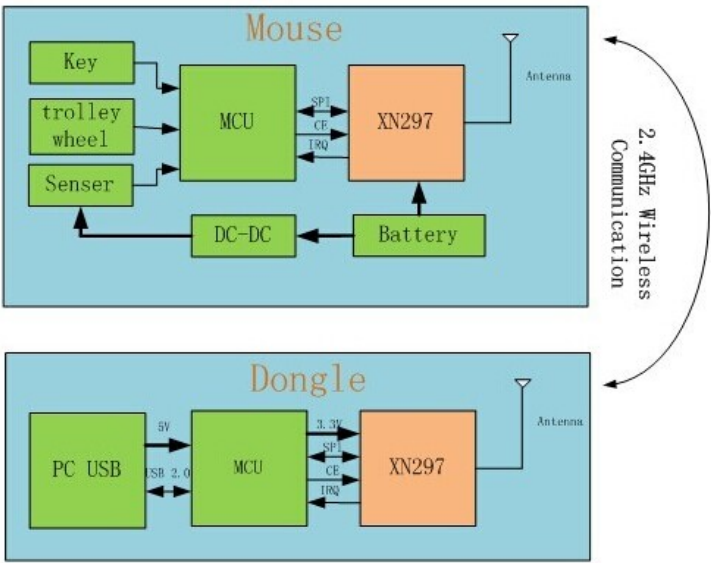

Figure 1：wireless mouse block diagram of XN297

Figure 1 show wireless-mouse block diagram of XN297, which have two parts, mouse used in the hand and USB Dongle. The mouse consist of XN297, MCU, DC-DC, rollers, sensor, various buttons, a battery, and the microstrip antenna etc. The following is the workflow of the mouse. The related imformation of operation which contain moving the mouse, pressing the buttons and scrolling wheel is collected , processed and sent to XN297 by MCU .XN297 convert the digital signal into GFSK modulated RF signal. RF signal is radiated by the microstrip antenna. The Dongle consist of XN297, MCU with USB protocol, and microstrip antennas etc. The

following is the workflow of the dongle. The microstrip antenna receive RF modulated signal radiation mouse by XN297 ,XN297 Convert RF modulated signal into data information and send to the MCU, MCU upload information to the PC through USB, so as to achieve cursor control operations on the computer.

The feature of wireless mouse
ü Reported a stable rate of 125 per second
ü Communication distance is greater than 20 m
ü Low cost MCU and BOM
ü Ultra-low power consumption, two batteries cruise over 1 year
ü Adaptive bi-hopping technology, anti-jamming
ü Supports sleep and wake patterns
ü Supports up to 9 keys
ü Support USB1.1 and USB2.0
ü Support Windows: Windows @ XP/Vista/Win7/Win8

Home　|　About　|　News　|　Products　|　R&D Center　|　Join us