

Applicant: Eastern Times Technology Co., Ltd.

FCC ID: TUVDS-2375A

Operation Description

This mouse uses System-On-a-Chip (SOC). Transmitting frequency range is 2408-2474MHz.

It's composed of (DC-DC) U3, (SENSOR) U4, MCU, RF two-in-one part U1, information storage U2 and (TOUCH) U2.

U3 is a processor AVR microchip which works at BOOT status, it can provide a stable voltage for mouse and ensure the mouse work normally.

There is a chipset U4 in circuit, it can detect the move direction and move speed of the mouse. The detect speed and direction will be encoded to data and sent to U1. So it also controlled by U1. It makes mouse sleeping, working and awaking.

U1 is the most important part in emitter, because it uses new technology, U1 contains MCU part and RF part. These two parts simplify the circuit and improve the circuit performance.

12MHz' clock is formed with X3 crystal oscillator and the inner circuit of U1, it is used for inner RF system.

32.768kHz's clock is formed with X2 crystal oscillator and the inner circuit of U1, it is used for inner clock system.

In the other PCB board, there is a touch circuit which is comprised of U2 (MA89P01), it can perceive touch location and move by capacitive sensing principle. These signals spread to U1 through CN1 port, thus it makes mouse have right key, left key, page turning, four five key and sway function.

The detection movement will be encoded to data by U1. After internal processing of U1, such as modulation and amplifying circuit, data output from U1's 62PIN finally, then launch to the air after it matches with C16, C31.

Antenna is formed by a copper trace on the PCB. Common grounding on PCB is not connected to real external ground. Power supply is DC 3V by two "AAA" batteries.