Operational Description
SF-MW205

TX Frequency: 27.045MHz
Modulation Type: ASK
Mouse SF-MW205 is a modern device with multi-functions.It is a wire mouse but also a wireless mouse.It contains 2 pieces of rechargeable battery and may be charged from USB port.

The mouse is designed with 4 ICs: Optical sensor U1(A2030),RF MCU U2(MA6221S7K),Wire mouse U4(MA6162)and EEPROM U5(93C46B). Q1,Q2 and SWID etc.form circuits of charging and RF automatic stop function.

RF MCU D1 integrates a DC-DC converter to convert battery voltage to a stable DC 3V for supplying the mouse.D1 receives signals of SWR,SWL and SWM when working.When the mouse moved by a user,Optical sensor U1 detects the movement and send a signal to U2. All signals are processed in U2 and encoded.X2 is an oscillator of RF generator with frequency 27.042MHz.The frequency is modulated to frequency 27.045MHz±3KHz,then amplified and transmitted by an antenna.

When the mouse is connected to a computer at USB port,U4 bridges the computer and RF MCU U4.SWID switches off RF transmission.Signals are sent to the computer via wire.U4 can memory the working status so that communication can be recovered when the computer reset.

Q1 and Q2 etc.form a charging circuit to charge batteries when their voltage less than 2.9V.Charging is stop automatically when batteries are fully charged.If LED2 flashes when the mouse in use, it means batteries should be charged.

The receiver can be inserted to the transmitter unit of the mouse when wire connected to a computer.If the mouse works at wireless,the transmitter is changed to standby status once the receiver is inserted to it.