Description of the F8E825-USB Mouse Circuit's Operation Principle

This circuit is mainly consisted of DC-DC convertor (IC-U4), MCU (IC-U3), photoelectric processor (IC-U1) and RF FSK circuit (Q1).

Switching on the power controller SW6, IC-U4 provides the circuit with a stable 3.9V volts d.c. to keep the circuit working. When the mouse is moving on the desktop, photoelectric processor IC-U1 collect optical signals reflected by the desktop, and transfer them into electric signals, then input the electric signals into the MCU (IC-U3) to have these signals processed and managed. After that, these processed signals are outputted from the 4th feet of the IC-U3to meet a control simultaneous signal produced by the 3rd feet. Together, they are sent to the RF FSK circuit (Q1). to have transmitting modulation management. Similarly, when any key of the mouse is being operated, IC-U3 of MCU will make identification for the operation. Then, similarly, the 4th feet of IC-U3 in the MCU output data and control signal to the RF FSK circuit (Q1). to carry out transmitting modulation management. IC-U3 is an E-P ROM storage that makes sure the circuit will keep working, by the way of keeping the ID code unchanged, when being out of power, changing the battery or being re-electrified. SW5 is a switch for ID code varying.