P7301 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 4^{th} feet of the IC-U3to meet a control simultaneous signal produced by the 3^{rd} 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 4^{th} 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.