

Circuit's Operation Description for 2253-B

Operation Frequency: 2402.8 – 2478 MHz

Modulation Type: FSK

The 2253 TX of the wireless mouse mainly consists of MCU (U1 MA2631), RF module (U3 RFM5011) and optical sensor (U4 A7530). U5 is a ID memory IC. U6 manages power supply. CQ1 etc. are for battery charging.

U6 and BATT provide the circuit with a stable DC 3 V. U1, X1 and X2 provide time oscillating. U1 is the MCU which also processes signals from keys of SWR, SWL, SWM and coder SWZ. When the mouse is moving on the desktop, optical sensor IC-U4 collects optical signals reflected by the desktop. The signals are input to U1 to be processed and then sent to RF module U3.

RF module (U3 RFM5011) consists of RF8903. X1 and its around circuit provide 26 MHz time oscillating. RF8903 processes signals from U1 and transmits out by antenna via matching circuit of pin 13 and pin 14.

U5 is a ID memory IC. Each ID is stored in U5 when SWID is pressed. It can be recalled when system is restarted.

CQ1 is for battery charging, CQ2 outputs 2.5V for CQ1.