1. General Description

The MA6221 is an encoder IC that can encode the data from the mouse optical sensor and sends these data via RF at 27 MHZ. The MA6221 is equipped with a complete set of FSK modulator that also provides single/dual RF channel solution. This will reduce the extra external component for RF interface. The two kinds of output from mouse optical sensor, namely quadrature and SPI (serial peripheral interface) are supported. Furthermore, the MA6221 has a DC/DC embedded. It can work with MOSART MA616x (mouse U+P receiver controller) to be a pair of RF mouse. Or it can work with MOSART MA615x (keyboard + mouse PS/2 receiver controller) to be a pair of RF keyboard + mouse solution.

2. Features

- 76.8KHz clock rate (low power consumption)
- Hi speed & 32.768KHz OSC supported (optional)
- Build-in data scrambler and error detection encoder
- Build-in single/dual channel RF oscillator, modulator and power amplifier
- 4.8k bps Baud rate in air.
- ID change solution (256 random IDs) to resist the interference from the same device
- 3V or 5V DC/DC embedded
- Battery low detection
- ID retention function when battery removed.
- X/Y axis support for both quadrature and SPI(serial peripheral interface) input
- Z axis supports for optical and mechanical inputs (Z/2,Z/4 can also be selected)
- Support Agilent 2000, 2030, 2051, 2610 and 2620 optical sensors.
- Support all kinds of Pixart sensors (PAN101, PAN201, PAN301)
- Support EEPROM to reserve ID and channel number