General Description

The HM8350 Mouse Controller is specially designed to control mouse device. This single chip can interface three key-switches and four photo-couples directly to RS-232C. The HM8350 does not need any external power supply, so the mouse can go without a power line. And it is versatile with both microsoft and mouse system. Debouncing circuits were provided to prevent false entry and to improve the accuracy.
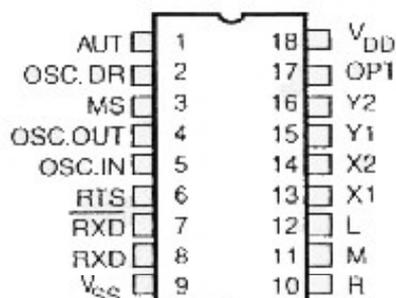
In 1200 baud rate non-auto speed with 200 DPI wheels and photo-couples, the scanning speed is 650 mm/sec without missing a dot in microsoft mode, and the scanning speed can up to 770 mm/sec in mouse system mode.

Using the auto-speed adjusting circuits, HM8350 promotes the power of the mouse in movement. If the mouse moves at low speed, it will be very smooth. While at high speed, HM8350 can change the scanning ability of the photo-couples and detects more dots than at low speed. It is said that horizontal and vertical counters acquire different dots in the same distance according to different speed.

Features

* Including buyer's testing mode.
* Built-in noise immunity circuits is HMC patent.
* Auto speed with dynamic resolutions is HMC patent.
* Low power dissipation.
* Use 32.768 KHz crystal.
* HM8350A is CMOS 18 pins DIP, HM8350M is 20 pins SOP.
* Oscillator circuits on-chip.
* Serial output in 1200 baud rate or 9600 baud rate.
* Can be powered directly from RS-232C.
* Three key-switches and four photo-couples inputs.
* Both key-in and key-release debounce interval 13 ms.
* Through three key-switches input, HM8350 can exert seven different output.
* The motion detector of the HM8350 could sense 8 m/sec maximum with 200 DPI wheels.
* The HM8350 exists in two versions:
    HM8350A ----- Tristate mode selection available.
    HM8350M ------ Tristate mode selection & 1200/9600 baud rate selection available.

Pin Assignment