

Product Information

Micropower Hall-Effect Latch for Scrolling Applications

MLX92213

The MLX92213 features an ultra-sensitive Hall-effect Latch operating from 1.6V to 3.6V. The output is a "Push-Pull" type so that an external pull-up resistor is not needed for proper operation, hence reducing PCB component count.

The device is primarily targeting battery-operated applications. As the famous Melexis Hall-Effect Omnipolar Switch MLX90248, the MLX92213 employs an awake/sleep strategy to reduce its power consumption versus a standard Hall-Effect latch sensor.

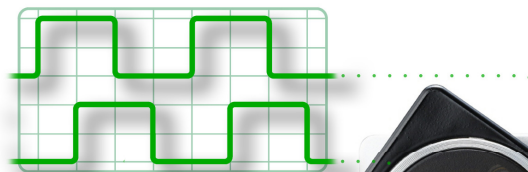
This Micropower Hall-effect Latch is an ideal solution for use in speed and direction detection application based on multipole magnet assembly for portable and low-power devices.

Applications

- Battery-operated / Handheld Appliances
- Rotary or Linear Contact-Less Encoders
- Scroll/Jog Wheel, Trackball (Mobile Phones, Portable Media Players, Notebooks, Computer Mice, Camcorders, Cameras,...)
- Home/Industrial Metering Equipment (Wafer Flow Meter)

Features

- Operating Voltage from 1.6 to 3.6V
- Latching Output Behaviour
- Micropower Consumption
48uA@3V ; 36uA@1.8V
- Advanced Power Manageability through dedicated "Enable" pin
- Ultra High Sensitivity Hall Sensor
- Push-Pull Output
- Miniature & Ultra Thin CSP package
(2mm x 1.5mm ; 0.4mm thickness)
- "Green" and "Pb-Free" Compliant Package



Bus ICs

BLDC Motor
Control ICs

Pressure Sensors

Wireless ICs

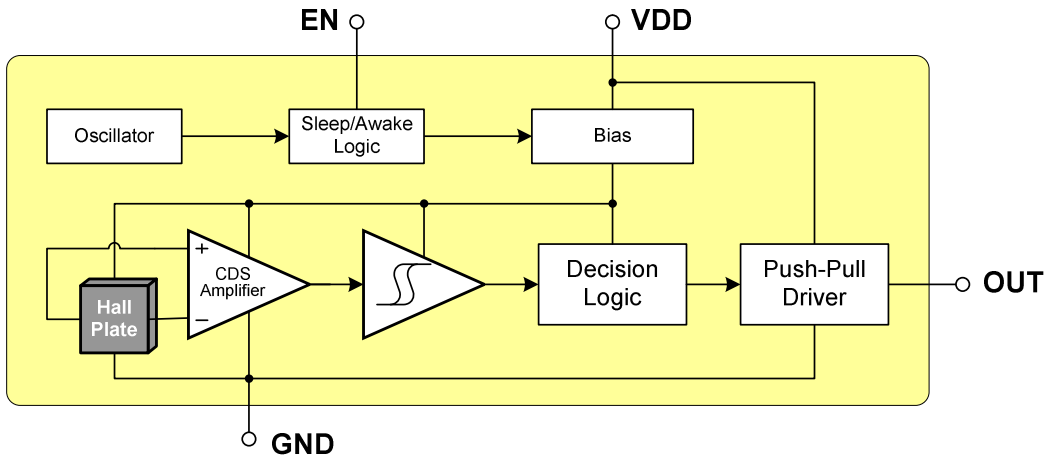
Hall Effect ICs
And Sensors

Optoelectronic
Sensors

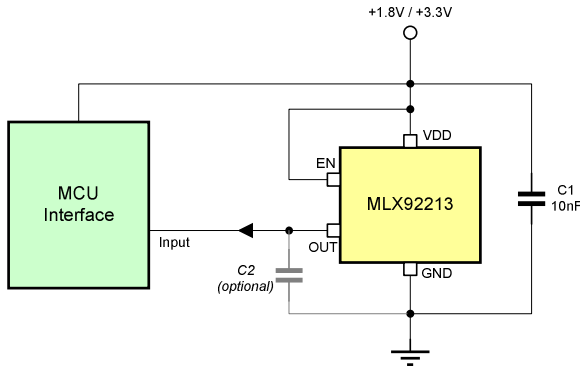
Sensor Interface ICs

Infrared Sensors

Functional Diagram

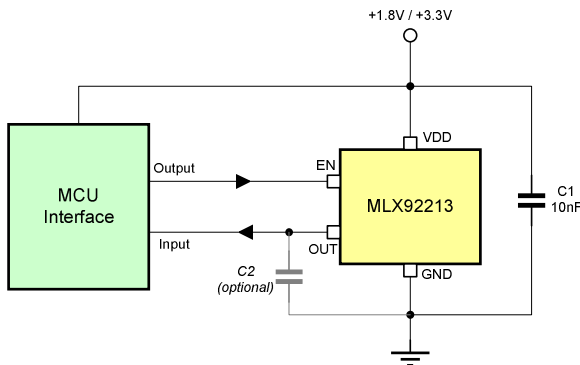


Application



Default Application

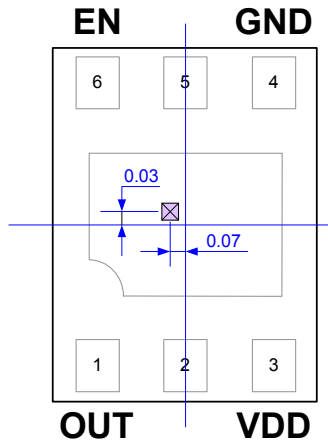
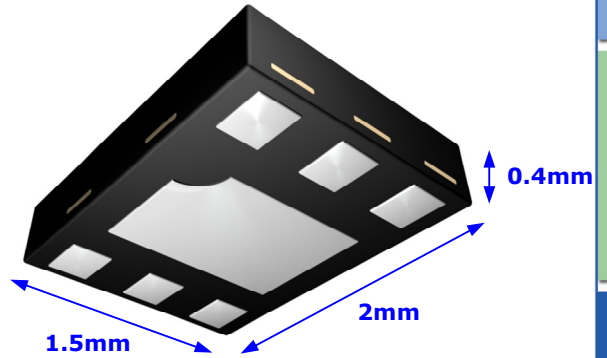
1.8V or 3.3V application with MCU interface reading the OUT signal with default "Micropower"



Enhanced Power Management Application

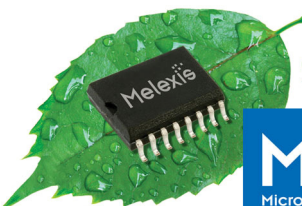
Typical 1.8V or 3.3V application with MCU interface reading the OUT signal and driving the EN signal

Pin-out & Hall Plate Location



LD package (Ultra-Thin QFN) - top view

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