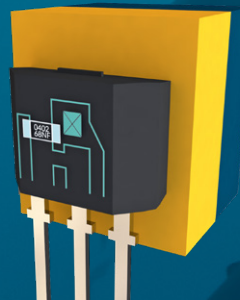


## LATERAL SENSING WITHIN LATCH & SWITCH PRODUCTS

MLX92242 / MLX92241

2-WIRE SENSOR

BACK-BIASED APPLICATIONS



The hammerhead shark is able to detect electronic signals of no more than half a billionth of a volt. The process uses specialized electroreceptors to detect and locate the source of an external electric field in its environment. What better animal to reflect our sensing capacities?

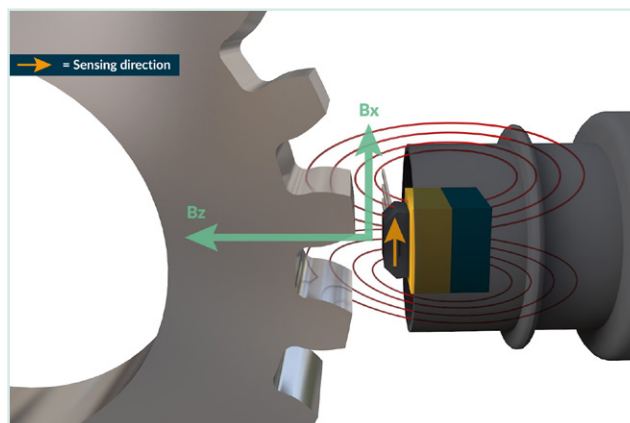
## SPEED SENSING WITH A SIMPLE SWITCH

Melexis' Latch & Switch sensors use an innovative magnetic technology that allows the measurement of the lateral magnetic flux component.

As a result of the inclusion of IMC technology, simple wheel speed sensing on motorcycles can now be performed using a single two-wire switch sensor with integrated capacitor (MLX92242 or MLX92241) and a traditional magnet. This approach uses the lateral field rather than the previous method of using the perpendicular field, thus vastly simplifying the designer's task.

## KEY FEATURES

- ✓ Value optimized solution by combining a simple programmable switch and a traditional magnet with an integrated capacitor
- ✓ High accuracy achieved by end-of-line programming
- ✓ Integrated capacitor allows a PCB-less solution
- ✓ Robust EMC performance
- ✓ Lateral sensing made possible by using IMC-Hall® technology



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