



MLX90395

MAGNETIC
NODE



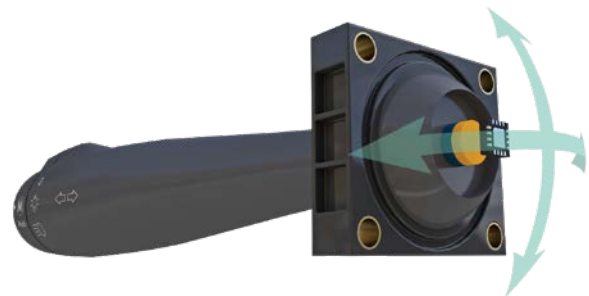
While hunting, the Arctic fox uses the magnetic north to locate its prey beneath the snow. No wonder it is the perfect metaphor for our wide portfolio of magnetic sensors. In addition, the Arctic fox lives in some of the coldest places on earth. Yet, it does not start to shiver until the temperature drops to -70°C . Being able to function in even the most extreme weather conditions is a feature it shares with our products.

AUTOMOTIVE-GRADE SOFTWARE-DEFINED 3D HALL EFFECT SENSOR

The MLX90395 Triaxis magnetic node is a miniature sensor IC capable of measuring 3D magnetic fields, temperature, and supply voltage. This allows the MLX90395 to detect the absolute position of nearly any nearby magnet and includes programmable parameters to optimize power, noise, and speed. It enables the design of a novel generation of non-contacting position sensors that are frequently required for both automotive and industrial applications utilizing rotary, linear, and joystick motion.

KEY FEATURES

- ✓ Micro-power magnetic field sensor
- ✓ Selectable measurements with programmable duty cycle
 - 16-bit magnetic field (X, Y, and/or Z)
 - 16-bit supply voltage (V)
 - 14-bit temperature (T)
- ✓ Triggered, free-running, and wake-on-change modes
- ✓ Programmable sensitivity, offset, filtering, and thresholds
- ✓ Extended magnetic field range option
- ✓ Up to 10 MHz SPI or 1 MHz I2C interfaces
- ✓ Automotive-grade (AEC-Q100)



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