



MLX90373

PSI-5 OUTPUT

POSITION SENSOR



Thanks to its magnetic compass the fascinating honey bee has the ability to perceive the omnipresent magnetic field (MF) of the Earth. This magnetic field sensitivity matches this wonderful creature with our Triaxis® magnetic sensors.

MAGNETIC POSITION SENSOR

The MLX90373 sensor expands the Triaxis® product portfolio by providing a 2-wire PSI-5 output. The PSI-5 output allows the MLX90373 to transmit an absolute rotary or linear position over the sensor supply wire by modulating the chip's current consumption. With the additional use of bus operation, multiple sensors can share the same supply and ground wires leading to a lower implementation cost.

MLX90373



The MLX90373 measures two selectable magnetic field vectors (XY, XZ, YZ) and computes a rotary angle or linear motion. The output range is fully programmable with multiple calibration options enabling the programming time and needed accuracy to be balanced. The input pin allows for system expansion, while the PCB-less package, high EMC robustness, stray field mode of operation, and wide supply range make the MLX90373 ideal for many applications like ride / chassis height sensors, steering, and other powertrain applications.



KEY FEATURES

- ✓ Highly flexible and robust position sensor
- ✓ Stray field immune (up to 4 kA/m) mode of operation
- ✓ PSI-5 output
- ✓ EMC capable to automotive OEM requirements
- ✓ ASIL-C (SEooC) component
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- ✓ TSSOP-16, redundant dual-die package
- ✓ DMP-4, single-die PCB-less package
- ✓ In-application programmable
- ✓ $T_a = -40 \dots 125 \text{ }^\circ\text{C}$



Ride / chassis height sensor

BLOCK DIAGRAM

