



MLX91377

HIGH-PERFORMANCE

LINEAR HALL
EFFECT SENSOR IC



Salmon represent our magnetic sensors because of the use magnetism for their sense of direction. This sense of direction is so strong they even can climb waterfalls.

LINEAR HALL SENSOR FOR SAFETY-CRITICAL AUTOMOTIVE TORQUE-SENSING APPLICATIONS

MLX91377

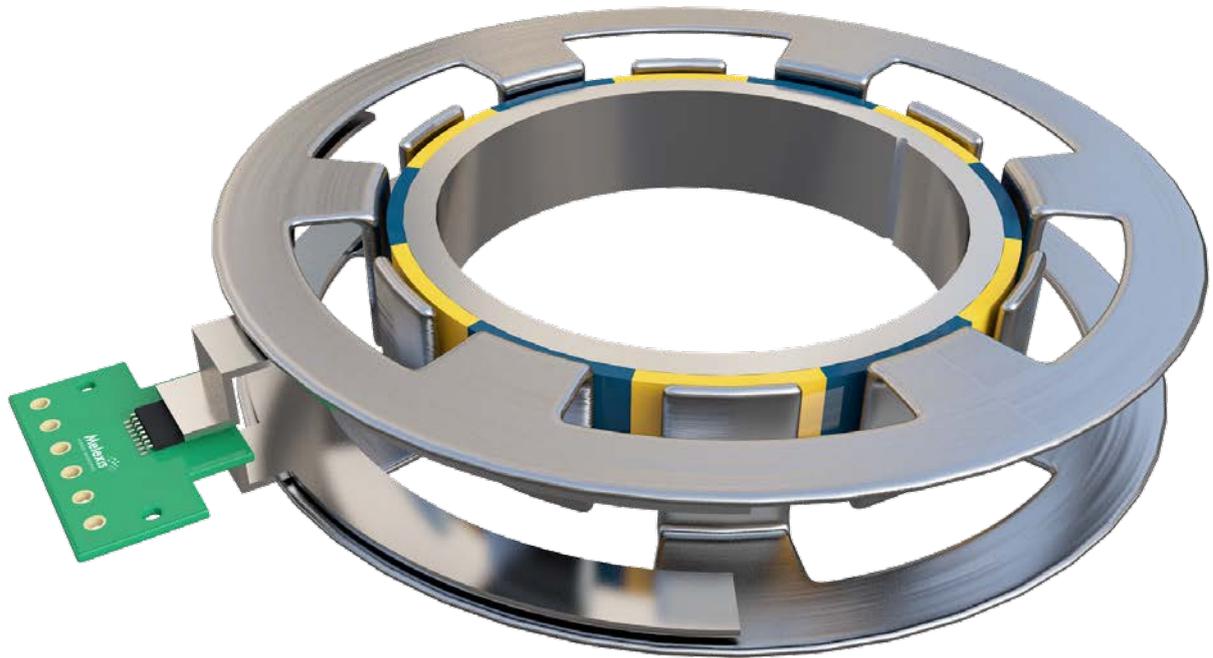
The MLX91377 is a linear hall designed to meet the requirements of highly demanding applications such as steering torque sensing. Providing ratiometric analog, PWM, SENT, and Short PWM Code (SPC) outputs, it is capable of supporting a variety of architectures including multi-bus triggered signal acquisition and data transmission. High speed, low thermal sensitivity and offset drift, flexible programming and linearization options for position and temperature further enable these applications.

The fully redundant dual die TSSOP-16 package and the ASIL-C (SENT & SPC) and ASIL-B (Analog) safety ratings enable use in safety-critical automotive and industrial applications.

KEY FEATURES

- ✓ High accuracy with low thermal drift
- ✓ Flexible output options with analog, PWM, SENT, or SPC
- ✓ Multi-point (up to 32) programmable for high accuracy
- ✓ ISO 26262 ASIL-C compliant for digital output, ASIL-B compliant for analog output
- ✓ Dual die, fully redundant TSSOP-16 package for redundancy in safety-critical, high-availability systems.

EASY APPLICATION CONFIGURATION



Example torque sensor implementation patented by Moving Magnet Technologies

BLOCK DIAGRAM

