# TLE4928(C)

Highly accurate differential Hall sensor for crankshaft and transmission applications

The TLE4928(C) detects the motion and position of ferromagnetic structures (e.g. pole or gear wheel) by measuring the differential flux density of the magnetic field. A self-calibration mode ensures optimum accuracy. The sensor only needs a few transitions after start-up then self-calibration has finished and reached a high-accuracy running mode. TLE4928(C) is switching at fixed hidden hysteresis, which is combined with a frequent recalibration function in run mode. This enables the sensor to accurately switch over lifetime (e.g. by run out events) and perform reliably, even under challenging conditions like vibrations such as seen in transmission applications.

The sensor combines a fast power up time with high accuracy and sensitivity. Providing a wide temperature range, high ESD robustness and large EMC resistance the TLE4928(C) perfectly meets the requirements of harsh environmental conditions, prevalent in automotive applications. The TLE4928(C) comes with the well established PG-SSO package - with and without two integrated capacitors. With all these features TLE4928(C) is the ideal fitting Hall based crankshaft and transmission speed sensing solution for today's automotive requirements.

TLE4928(C) is Perfectly Suited for Application Using:
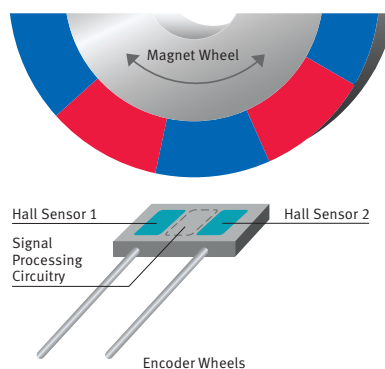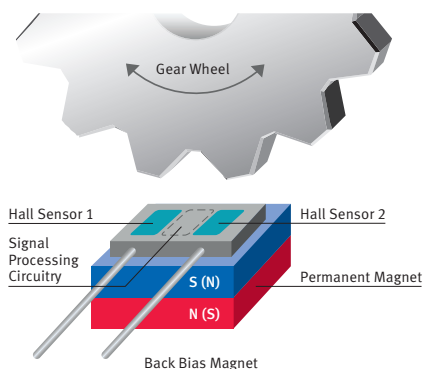

Features

- High sensitivity
- Package options: PG-SSO-3-6 and PG-SSO-3-9 (2)
- Single chip solution
- Symmetrical thresholds
- High resistance to Piezo effects
- South and north pole preinduction possible
- Low cut-off frequency
- Advanced performance by dynamic self calibration principle
- Frequent recalibration in run mode
- Fast start-up time
- Large operating air-gaps
- Digital output signal (voltage interface)
- Reverse voltage protection at $V_{S\text{-pin}}$
- Wide operating temperature range
- Short-circuit and overtemperature protection of output
- Module style package with two integrated capacitors:
  - 4.7nF between Q and GND
  - 47nF between V_S and GND: Needed for micro cuts in power supply

Halogen-Free

RoHS

AEC Qualified

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Block Diagram
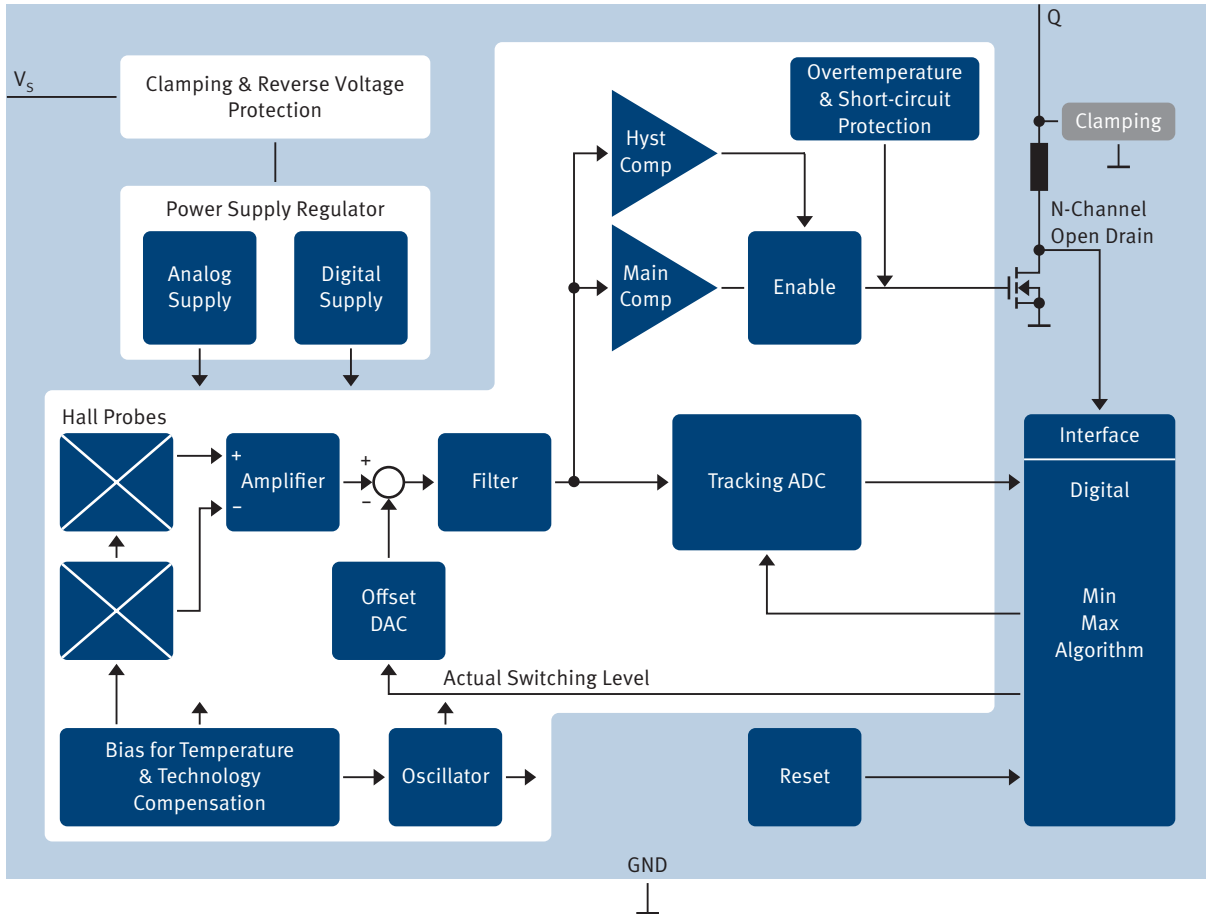
Sales Name	Description	Order Code
TLE4928	PG-SSO-3-6 package without external capacitors	SP000700818
TLE4928C-E6547	PG-SSO-3-92 package with external capacitors (V_S to GND: 47nF and Q to GND: 4.7nF)	SP000718274

Attention please!

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Information

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Warnings

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