

# TLE4927C

## High accurate hall based crank sensor

The TLE 4927C detects the motion and position of ferromagnetic and permanent magnet structures by measuring the differential flux density of the magnetic field. A self-calibration mode ensures optimum accuracy. Few transitions after start up the sensor has already finished self-calibration and has reached a high-accuracy running mode. The zero switching concepts of the TLE 4927C ensures that the switch point stays stable independent to air gap variations.

The sensor combines a fast power up time with high accuracy and sensitivity. With a wide temperature range, high ESD robustness and large EMC resistance, the TLE 4927C perfectly meet the requirements of harsh environmental conditions prevalent in automotive applications. The TLE 4927C comes with the well established PG-SSO package with two integrated capacitors. With all the features, the TLE 4927C is the ideal fitting hall based crankshaft speed sensing solution for today's automotive requirements.

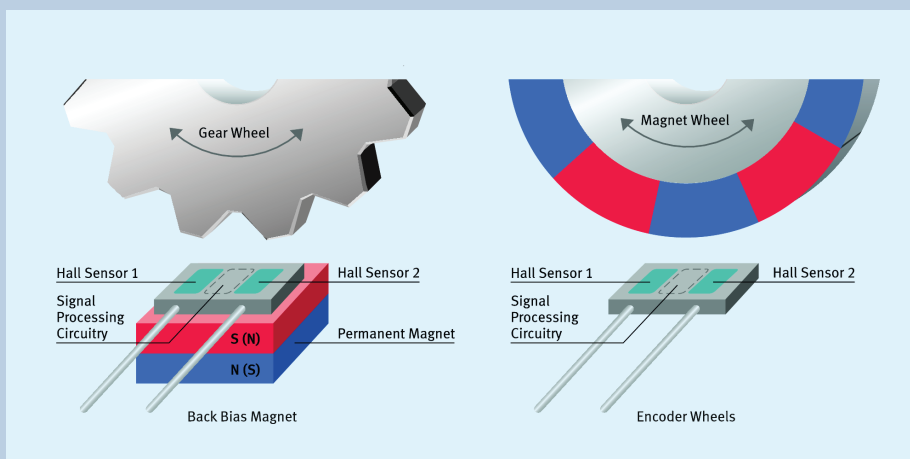
TLE 4927C is perfectly suited for applications using:

### Features

- High sensitivity
- PG-SSO-3-92(3)
- Single chip solution
- Symmetrical thresholds
- High resistance to Piezo effects
- South and north pole preinduction possible
- Low cut-off frequency
- Digital output signal (voltage interface)
- Advanced performance by dynamic self calibration principle
- Two-wire and three-wire configuration possible
- Wide operating temperature range
- Fast start-up time
- Large operating air-gaps
- Reverse voltage protection at  $V_{SS}$ -PIN
- Short-circuit and over temperature protection of output
- Digital output signal (voltage interface)
- Module style package with two integrated capacitors:

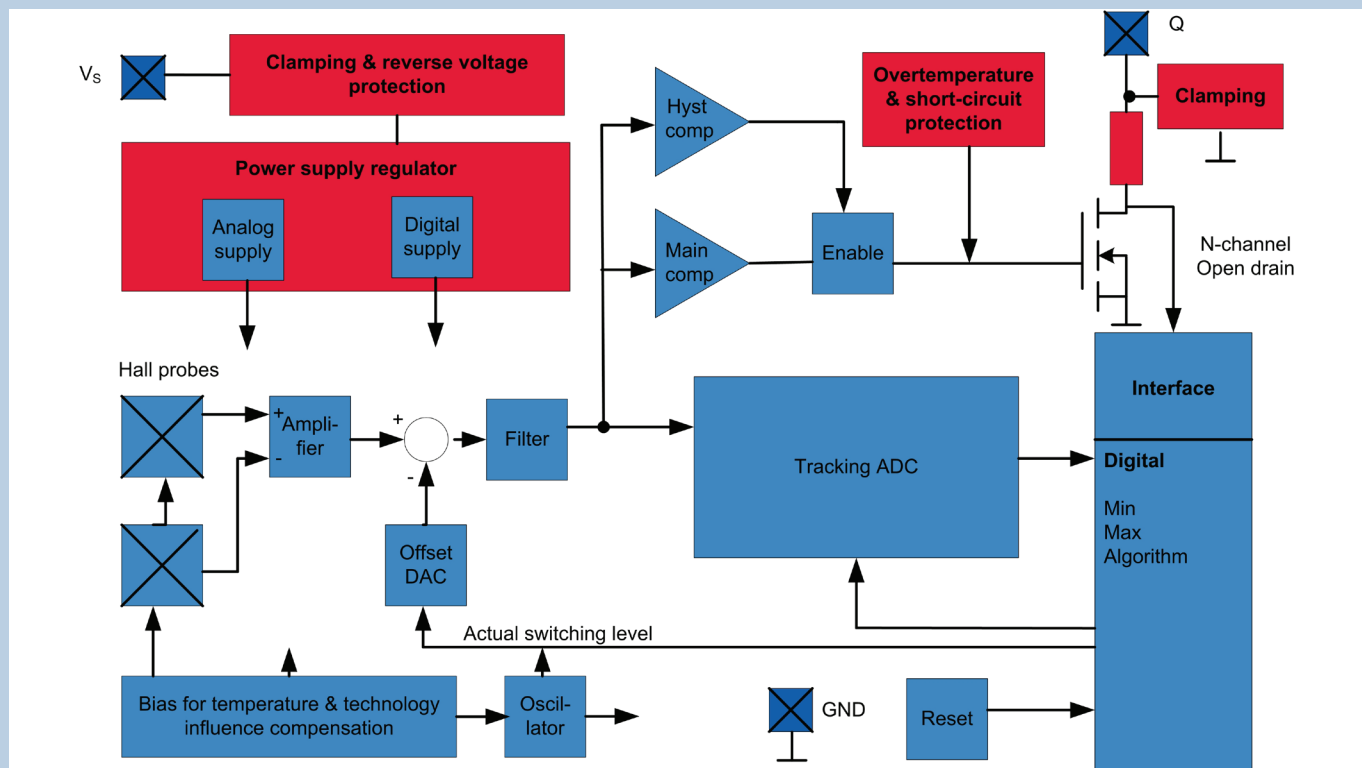
– 4.7nF between Q and GND

– 47nF between  $V_{SS}$  and GND: Needed for micro cuts in power supply



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### Block Diagram

Sales Name	Description	Order Code
TLE4927C-E6547	Standard tin plating	SP000718266
TLE4927C-N E6547	Nickel plating	SP000718270

Published by  
Infineon Technologies AG  
85579 Neubiberg, Germany

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