

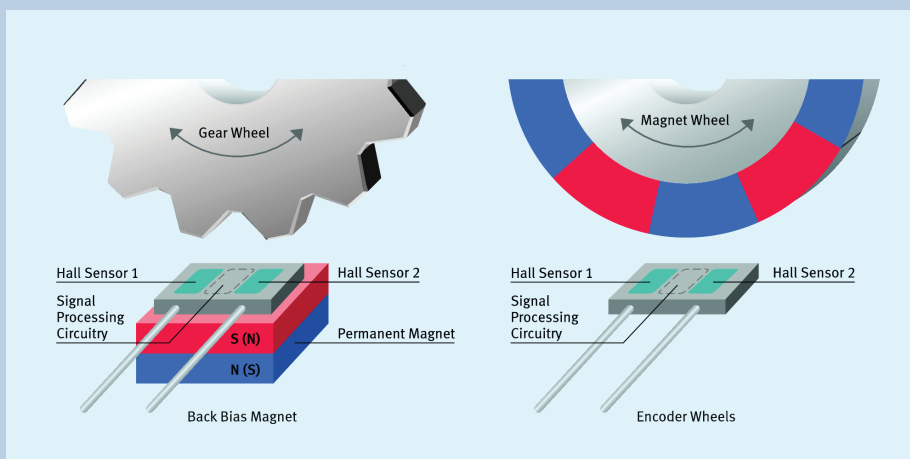
TLE4927C

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:

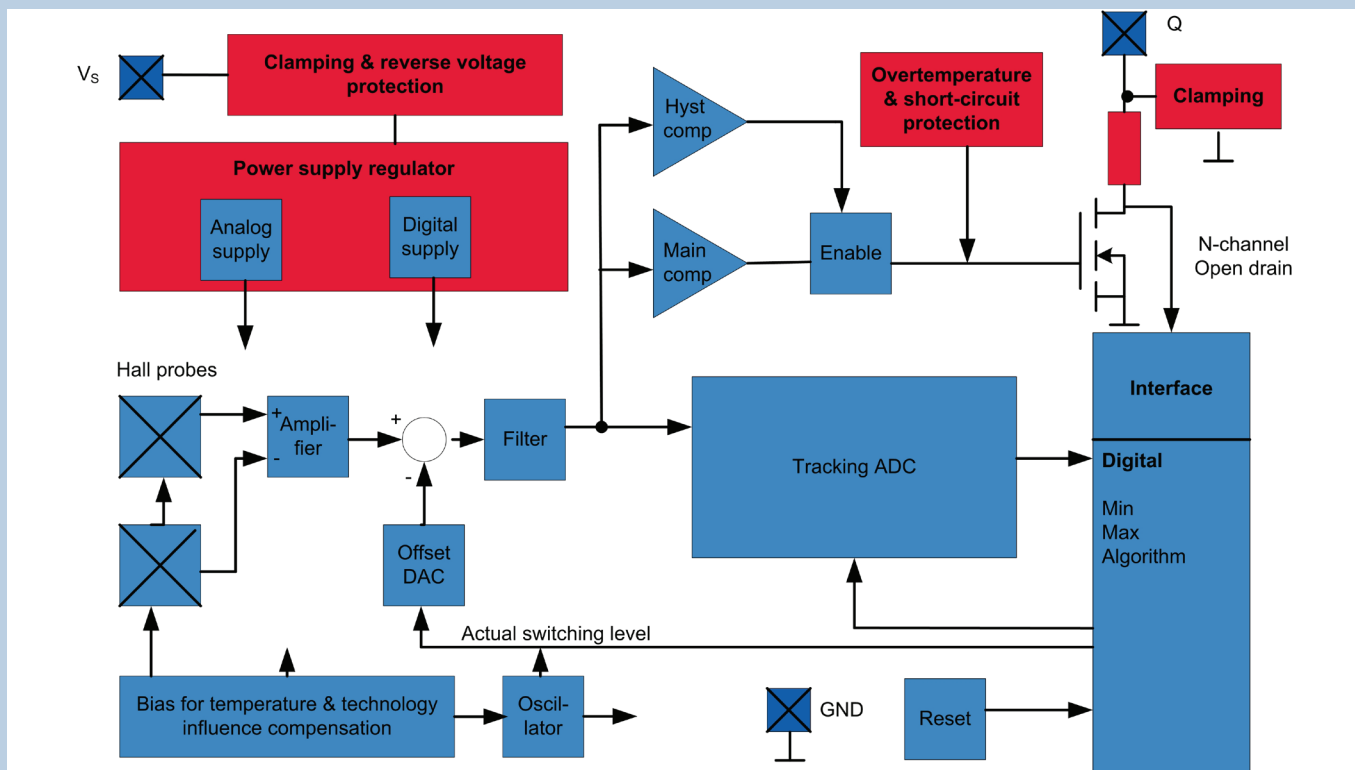


Features

- 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_s -PIN
- Short-circuit and over temperature protection of output
- Digital output signal (voltage interface)
- Moduce 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

TLE4927C

High accurate hall based crank sensor



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

© 2011 Infineon Technologies AG.
All Rights Reserved.

Visit us:
www.infineon.com

Order Number: B142-H9616-X-X-7600
Date: 08 / 2011

ATTENTION PLEASE!

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie"). With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

INFORMATION

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office (www.infineon.com).

WARNINGS

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office. Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.