

## TLE 4924C

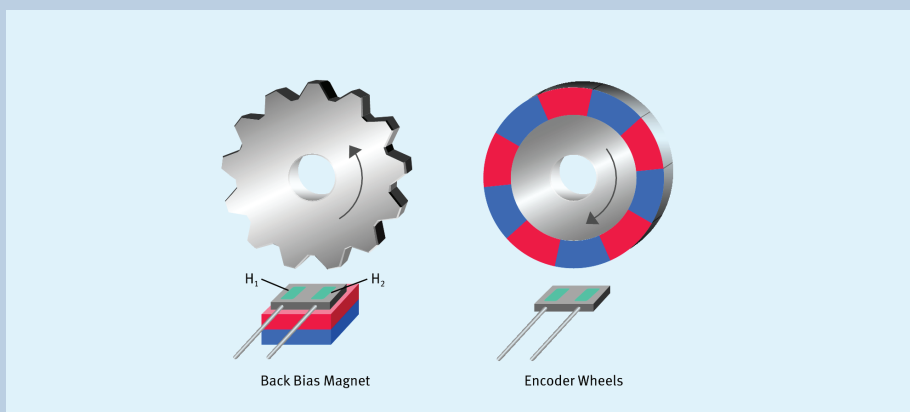
### High accurate hall based crank sensor

The TLE 4924C 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. As the TLE 4924C is switching at visible fixed (-1) or visible adaptive (-2) hysteresis, the sensor enables accurate operation even at large pitches known from e.g. VR applications. Therefore the TLE 4924C supports cost effective transitions from passive to active sensing.

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 4924C perfectly meet the requirements of harsh environmental conditions prevalent in automotive applications. The TLE 4924C comes with the well established PG-SSO package with two integrated capacitors and various hysteresis concepts. With all the features, the TLE 4924C is the ideal fitting hall based crankshaft speed sensing solution for today's automotive requirements. TLE 4924C is perfectly suited for applications with:

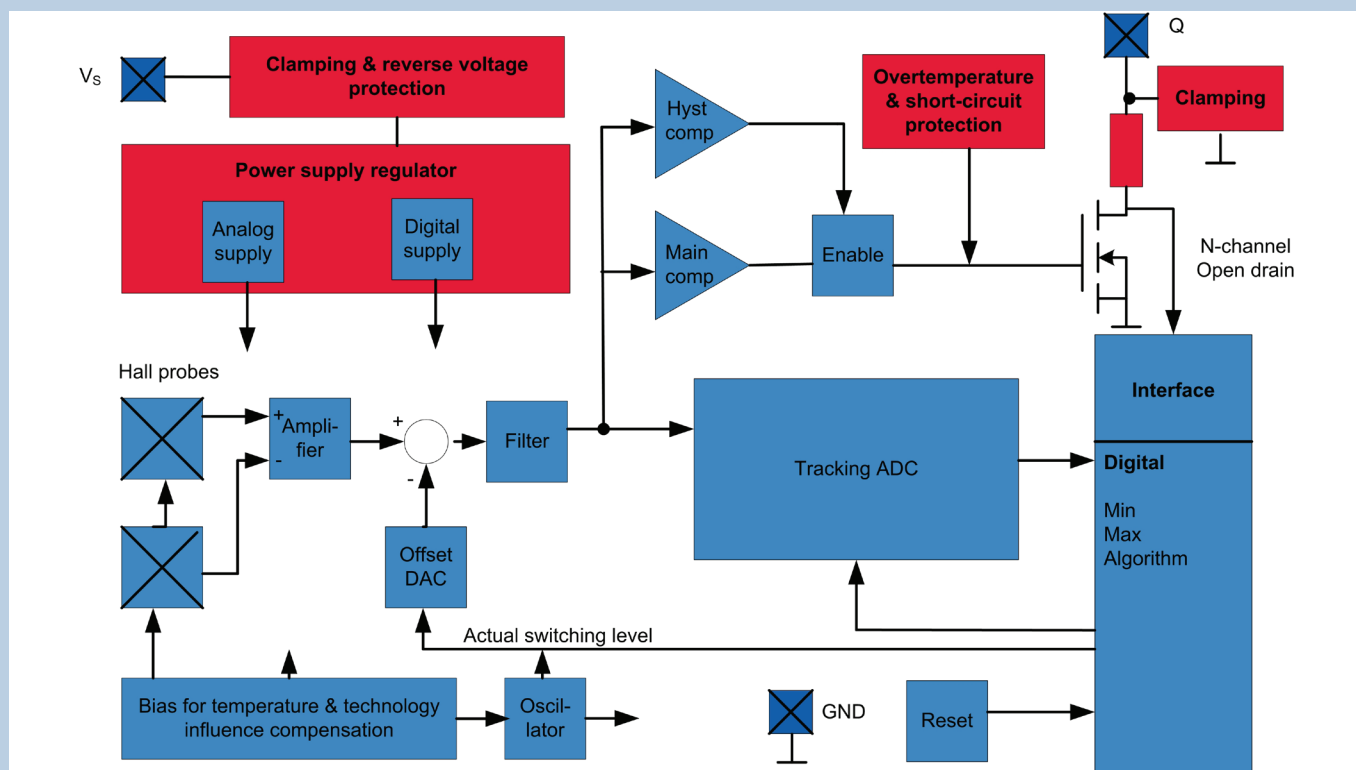
#### Features

- 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
- Module style package with two integrated capacitors:
  - 4.7nF between Q and GND
  - 47nF between  $V_s$  and GND: Needed for microcuts in power supply



# TLE 4924C

## High accurate hall based crank sensor



Block diagram

Sales Name	Description	Order Code
TLE4924C-1 E6547	Visible fixed Hysteresis; Standard Tin Plating	SP000718170
TLE4924C-1N E6547	Visible fixed Hysteresis; Nickle Plating	SP000718184
TLE4924C-2 E6547	Visible adaptive Hysteresis; Standard Tin Plating	SP000718250
TLE4924C-2N E6547	Visible adaptive Hysteresis; Nickle Plating	SP000718254

Published by  
Infineon Technologies AG  
85579 Neubiberg, Germany

© 2011 Infineon Technologies AG.  
All Rights Reserved.

Visit us:  
[www.infineon.com](http://www.infineon.com)

Order Number: B142-H9615-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 ("Beschaffheitsgarantie"). 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](http://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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.