



SPIDER Low-Side (8 channel) TLE7240SL/43SL/44SL

SPI Driver for Enhanced Relay Control

The Infineon SPIDER low-side (8 channel) family consists of three family members. They are all eight-channel SPI-controlled low-side switches especially designed to drive automotive relays.

All of the three devices are featuring Limp Home functionality to enable the fail safe mode. Additionally these devices have 4 direct input pins to allow PWM (pulse with modulation) operation and direct control of the load. The devices are available in the very small and board space saving PG-SSOP24 package. All devices are pin-compatible and software compatible. So it is easily possible to switch from on device to another.

All devices are protected against short circuit and overload and especially designed to fulfill the requirements of the harsh automotive environment.

Application:

- Lowside driven automotive Relays
- Small LEDs and other small signal loads
- Unipolar stepper motors

Key Features:

- Scalable by $R_{ds_{on}}$ and current capability
- SPI communication
- Short circuit and over load protection, thermal shutdown
- Features limp functionality for fail safe mode

Key Benefits:

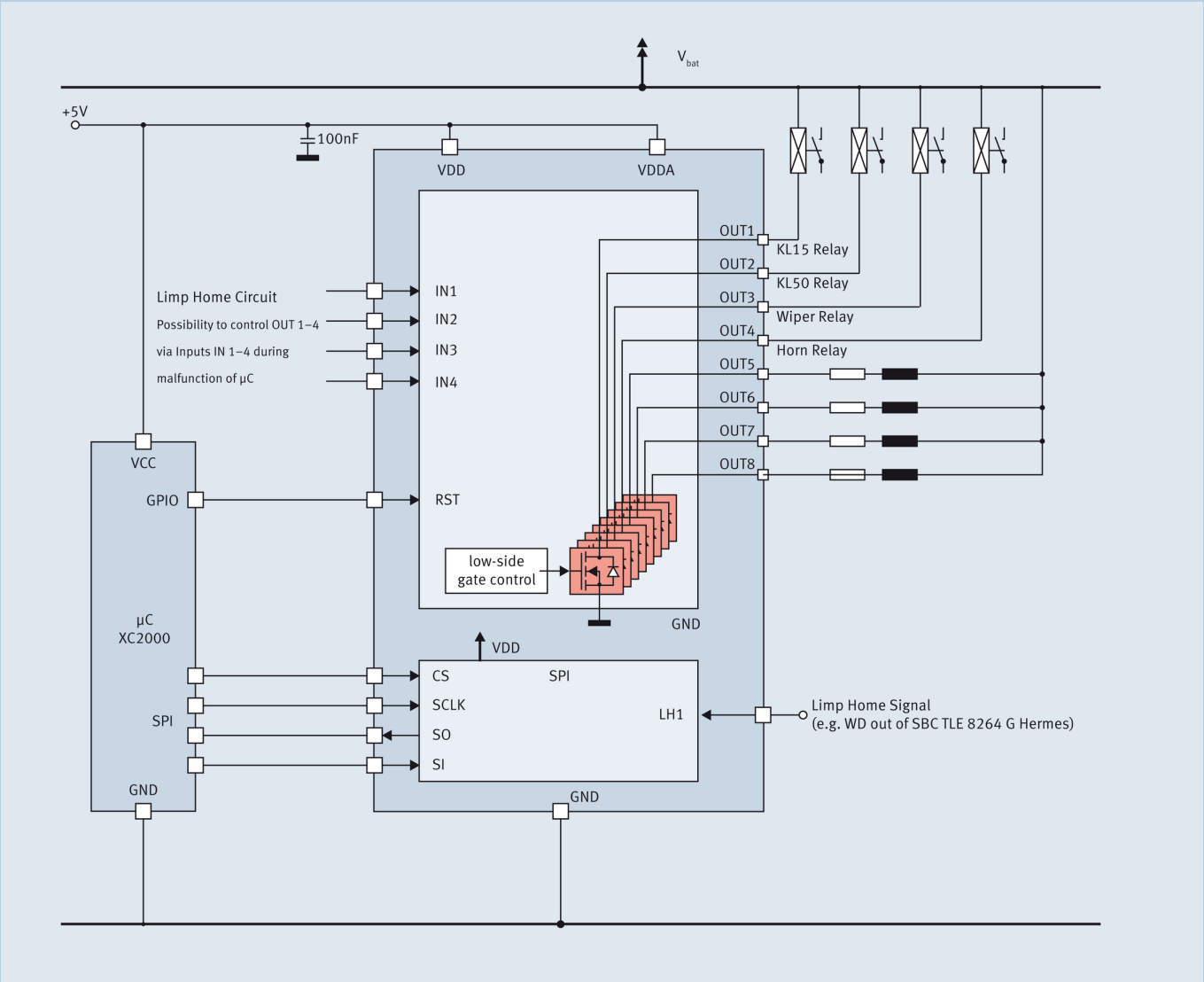
- Reduced microcontroller I/Os
- Small package to reduce board place
- Possibility to address safety critical application under harsh automotive conditions
- If you know one device you know the whole family



SPIDER Low-Side (8 channel)

TLE7240SL/43SL/44SL

TLE7240SL Application Diagram



SPIDER LS (8 channel) family

Product	Nominal Current	$R_{ds_{on}}$ (typ.@25°C)	Package
TLE7240SL	8*210mA	8*1,5Ω	PG-SSOP24
TLE7243SL	8*260mA	8*1,2Ω	PG-SSOP24
TLE7244SL	8*290mA	8*0,8Ω	PG-SSOP24

Published by
Infineon Technologies AG
85579 Neubiberg, Germany

© 2010 Infineon Technologies AG.
All Rights Reserved.

Visit us:
www.infineon.com

Order Number: B127-H9504-X-X-7600
Date: 07 / 2010

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.