



**THE DATASHEET OF  
TLE7239SLXUMA1**





## SPIDER HS/LS Enhanced SPI Driver for Enhanced Relay Control TLE 723xSL/3xSE/3xEM

The Infineon SPIDER high-side / low-side (HS/LS) enhanced family consists of nine family members. They are all eight-channel SPI-controlled combined high- and low-side switches especially designed to drive automotive relays.

The HS/LS family consists of three sub-families (-SL, -SE and -EM), offering different combinations of current capability and package size. Within these sub-families, the device can be selected by its featureset limp-home or low-voltage cranking (down to 4.0V).

The subfamily devices are pin-compatible and devices with same featureset are software compatible. So it is easily possible to switch from one device to another.

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

### Applications

- High-side and low-side driven automotive relays
- Small LEDs and other small signal loads

### Key Features

- Logic part of all devices is protected against reverse battery
- High flexibility due to 4 high-side 2 configurable, 2 low-side channels
- SPI communication
- Short circuit and over load protection, thermal shutdown
- Scalable by featureset and current capability
- Cranking and limp home version available

### Key Benefits

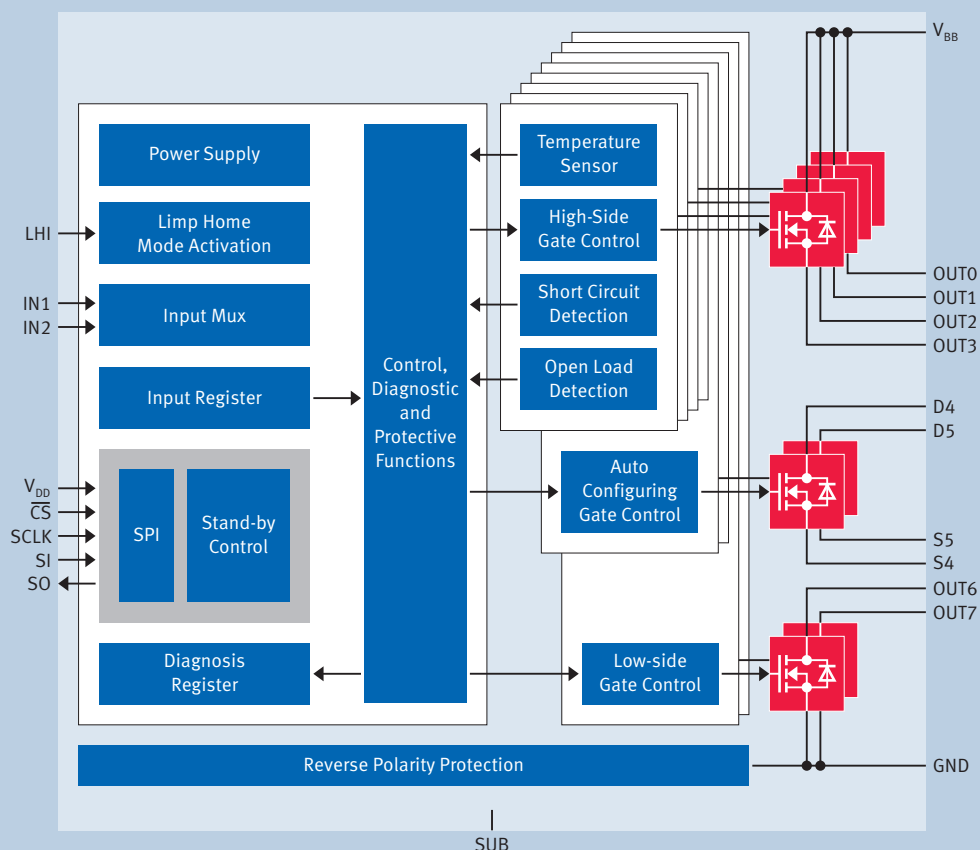
- Reduced microcontroller I/Os
- Small package to reduce board space
- Possibility to address safety critical application under harsh automotive conditions
- If you know one device you know the whole family



# SPIDER HS/LS Enhanced

## TLE 723xSL/3xSE/3xEM

Block Diagram TLE 7239SL



### SPIDER HS/LS Enhanced Family

Product	Nominal Current	Package	Features
TLE 7237SL	6*230mA, 2*130mA	PG-SSOP-24	3 Direct Inputs
TLE 7238SL	6*230mA, 2*130mA	PG-SSOP-24	2 Limp Home Channels
TLE 7239SL	6*230mA, 2*130mA	PG-SSOP-24	2 Limp Home Channels & Cranking
TLE 7234SE	6*280mA, 2*140mA	PG-DSO-20	3 Direct Inputs
TLE 7235SE	6*280mA, 2*140mA	PG-DSO-20	2 Limp Home Channels
TLE 7236SE	6*280mA, 2*140mA	PG-DSO-20	2 Limp Home Channels & Cranking
TLE 7234EM	6*350mA, 2*175mA	PG-SSOP-24 Exposed Pad	3 Direct Inputs
TLE 7235EM	6*350mA, 2*175mA	PG-SSOP-24 Exposed Pad	2 Limp Home Channels
TLE 7236EM	6*350mA, 2*175mA	PG-SSOP-24 Exposed Pad	2 Limp Home Channels & Cranking

Published by  
Infineon Technologies AG  
85579 Neubiberg, Germany

© 2010 Infineon Technologies AG.  
All Rights Reserved.

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

Order Number: B000-H0000-X-X-7600  
Date: 09 / 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](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.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View TLE7239SLXUMA1 on WIN SOURCE](#)
- ⊖ [Infineon Technologies Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management