

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





www.infineon.com/spider

Key Features:

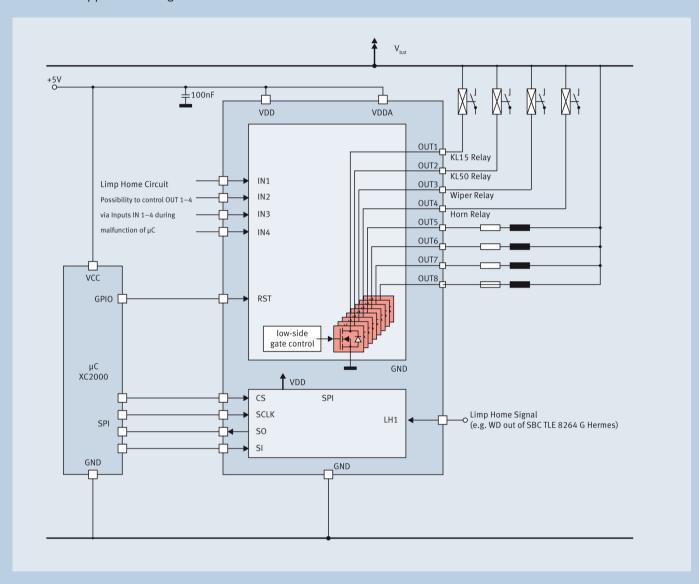
- Scalable by Rds_{on} and current capability
- SPI communication
- Short circuit and over load protection, thermal shutdown
- Features limp functionality fur fail safe mode

Key Benefits:

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

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TLE7240SL Application Diagram



SPIDER LS (8 channel) family

| Product | Nominal Current | Rds _{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 |

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