

TLE 4209G

DC Motor Driver for Servo Applications



THE TLE 4209G is a protected H-Bridge Driver designed specifically for automotive manual headlight beam control and industrial servo control applications with DC-brush motor loads.

The part is built using the bipolar high voltage power technology DOPL.

The standard enhanced power PG-DSO-14-23 package meets the application requirements and saves PCB-board space and costs. The package is RoHS compliant.

The servo-loop-parameter pos.- and neg. Hysteresis, pos.- and neg. deadband and angle-amplification are programmable with external resistors.

An internal window-comparator controls the input line. In the case of a fault condition, like short circuit to GND, short circuit to supply-voltage, and broken wire, the TLE 4209G stops the motor immediately (brake condition).

Furthermore the built in features like over- and under voltage-lockout, short-circuit-protection and over-temperature-protection will open a wide range of automotive- and industrial applications.

Applications

- Manual Headlight Beam Control
- Servo Control Applications for Industrial and Automotive Market

Features

- Optimized for manual headlight beam control applications
- Delivers up to 0.7 A continuous
- Low saturation voltage; typ. 1.6 V total @ 25 °C; 0.7 A
- Output protected against short circuit
- Over temperature protection with hysteresis
- Over- and under voltage lockout
- Internal clamp diodes
- Enhanced SMD power package
- Green Product (RoHS compliant)
- AEC Qualified

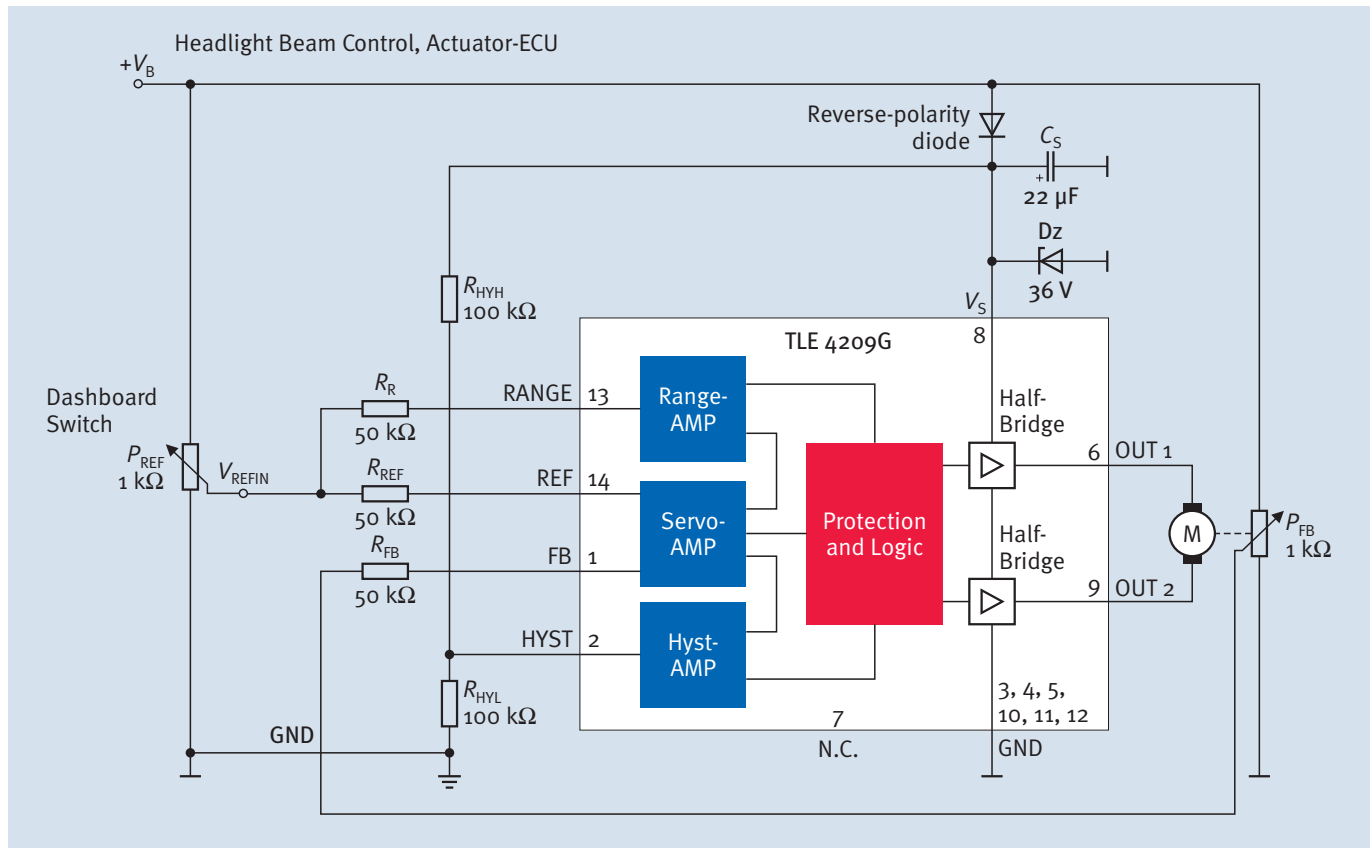
www.infineon.com/DC-Motor-Bridges

Automotive Power



Never stop thinking

Block Diagram



Examples for further Infineon Headlight Application Products

Type	Description	Package
TLE 4209A	Servo driver for manual headlight beam control	PG-DIP-8
TLE 4206G	Servo driver for manual headlight beam control with current peak blank	PG-DSO-14
TLE 4206-2G	Servo driver for automatic static headlight beam control	PG-DSO-14
TLE 4729G	Stepper motor driver for automatic headlight beam control	P-DSO-24
TLE 4205G	Servo driver for truck applications	P-DSO-20
BTS 6142D	High-side switch for headlight (55 ... 65 W)	P-TO252-5
BTS 6143D	High-side switch for headlight (55 ... 65 W)	P-TO252-5
BTS 5236-2GS ¹⁾	High-side switch for side indicators (2 x 27 W)	PG-DSO-14
BTS 5231-2GS ¹⁾	High-side switch for park light (2 x 10 W)	PG-DSO-14
BTS 5590G ²⁾	SPI Power controller for advanced light control	PG-DSO-36
µC XC866	8-bit Microcontroller for headlight control unit	PG-TSSOP-38

1) Available in Q4 2007

2) Available in Q3 2007

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Published by
 Infineon Technologies AG
 81726 Munich, Germany

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