



New Product Announcement

ZXBM5408Q

Automotive-Compliant Motor Driver with Servo Control for Accurate Brushed DC Motor Position Control

The DIODES™ ZXBM5408Q is a self-protected H-Bridge driver designed for automotive headlight beam control and servo DC motor applications.

The device's integrated full bridge driver output stage is composed of low- $R_{DS(on)}$ MOSFETs which maximize efficiency. Integrated temperature-compensated internal references, amplifiers, and state-machines simplify circuit design, as well as minimize external components.

The ZXBM5408Q integrates multiple input, output, and protection features to protect itself, the motor, and system.

The automotive-compliant ZXBM5408Q is qualified to AEC-Q100 Grade 1 and is available in the industry-standard PDIP-8 and SO-14 packages.



The DIODES™ Advantage

The ZXBM5408Q provides a simple and reliable solution for headlamp height adjustments.

- **Built-In H-Bridge with Low $R_{DS(on)}$ MOSFETS**
Reduced power dissipation, higher efficiency, and lower running temperatures
- **Wide Operating Voltage Range of 8V to 18V**
Supports the standard automotive battery range
- **Multiple Input, Power, and Output Protection Features**
Improved motor drive reliability to create a safer system
- **Industry-Standard PDIP-8 and SO-14 Packages**
Enhances ease of use and assembly processes

Automotive-compliant – AEC qualified, manufactured in IATF certified facilities supporting PPAP documents.

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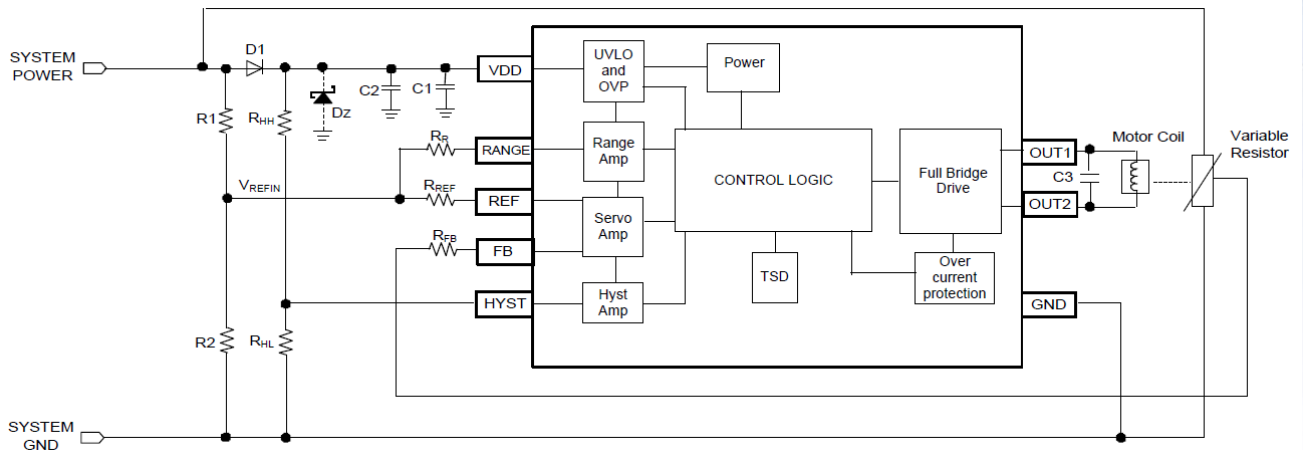
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Applications

- Headlight beam position servo motors
- Servo DC motors

Typical Application



Product Portfolio

Part Number	Voltage	Supply Current (No Load)	Peak Motor Current	Typical Total R _{DS(on)}	Direction Control	Brake Mode	Operating Temperature Range	Package
	V	mA	mA				°C	
ZXBM5408Q	8 to 18	1.45	1,500	1.8Ω	Yes	Yes	-40 to +125	PDIP-8 SO-14

Ordering Information

Orderable Part Number	Compliance (Only Automotive Supports PPAP)	Package	Moisture Sensitivity	Part Number Suffix	Packing	
					Quantity	Carrier
ZXBM5408Q-N-U	Automotive	PDIP-8	MSL-1	-U	60	Tube
ZXBM5408Q-S14-13	Automotive	SO-14	MSL-1	-13	2,500	13" Tape & Reel