

Product Overview

LB1868M: Two-Phase Brushless Fan Motor Driver

For complete documentation, see the data sheet.

The LB1868M is a 2-phase unipolar brushless motor driver. With only a few peripheral parts, lockup protection and automatic recovery can be implemented. The IC can be configured for 12V or 24V operation and a wide range of variations, from Low speed to H-High speed and from 60cm to 120cm square using the same PCB. This makes it easy to design highly reliable fan motor installations.

Features

- Output protection Zener diode with variable withstand voltage
Z1, Z2 pins open: VOLM = 57V (24V specification)
Z1, Z2 pins shorted: VOLM = 32V (12V specification)
External Zener diode connected across Z1-VCC pins: support for fans with large drive current
- External resistor allows configuration for 12V or 24V
- Direct Hall element connection possible (built-in Hall amplifier with hysteresis supports core without auxiliary electrode)
- Built-in output transistor with 1.0A output current (strengthened negative-current support for core without auxiliary electrode)
- Built-in rotation detection function: Low during rotation and High during stop
- Built-in lockup protection with automatic recovery
- ST pin for motor stop/drive (for standby mode of copiers etc.)
- BC pin for kickback noise reduction (with 2 external capacitors)
- FG output pin for rotation detection
- Built-in thermal shutdown

For more features, see the data sheet

Part Electrical Specifications

Product	Compliance	Status	Phase	V _M Min (V)	V _M Max (V)	V _{CC} Min (V)	V _{CC} Max (V)	I _O Max (A)	I _O Peak Max (A)	Control Type	Package Type
LB1868M-TLM-E	Pb-free	Active	2		60	6.4	7	1		Parallel	SOIC-14W / MFP-14S
	Halide free										
LB1868M-TLM-H	Pb-free	Active	2		60	6.4	7	1		Parallel	SOIC-14W / MFP-14S
	Halide free										
LB1868M-W-AH	Pb-free	Active	2		60	6.4	7	1		Parallel	SOIC-14W / MFP-14S
	Halide free										

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