

Product Overview

LV88563: Motor Driver, Single-Phase, PWM, Full-Wave, BLDC for 24V/48V fan

For complete documentation, see the data sheet.

The LV88563JA is the pre-driver for a single-phase 24V/48V BLDC motor, which has the closed loop controller for motor rotation speed. This is available to control a motor with low vibration and the low noise. In addition, lead-angle adjustment is possible by external pins. Lead-angle value and lead-angle slant can be adjusted independently. Thus, the device can be driven by high efficiency and low noise with various motors. Motor speed setting curve is adjustable for many variety using external resistor only. As a method of the rotary speed control of the motor, direct-PWM pulse input is adopted.

Features

- Single-phase full wave drive pre-driver include closed loop speed control
- Speed control function by PWM duty input (25 Hz to 100 kHz)
- Soft start-up function and PWM soft switching phase transition
- Soft PWM duty cycle transitions
- Built-in current limit circuit and thermal protection circuit
- Built-in locked rotor protection and auto recovery circuit
- FG signal output
- Dynamic lead angle adjustment with respect to rotational

Benefits

- High accuracy for motor speed control
- Wide operation range
- Low noise and silent drive
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- Safety
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- Easy to motor control
- High efficiency

Applications

- Motor Drive Unit

End Products

- Server cooling fan
- Server cooling fan

Part Electrical Specifications

Product	Pricing (\$/Unit)	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
LV88563JA-AH	0.9866	Pb-free Halide free non AEC-Q and PPAP	Active	1			3.9	20	0.05	0.15	PWM	SSOP-20J
LV88563RTXG	1.008	Pb-free Halide free non AEC-Q and PPAP	Active	1			3.9	20	0.05	0.15	PWM	VCT-20

For more information please contact your local sales support at www.onsemi.com.

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