



Product Overview

LV8740V: Stepper Motor Driver, PWM, Constant Current Control

For complete documentation, see the data sheet

Product Description

The LV8740V is a 2-channel H-bridge driver IC that can switch a stepper motor driver, which is capable of micro-step drive and supports Quarter-step excitation, and two channels of a brushed DC motor driver, which supports forward, reverse, brake, and standby of a motor. It is ideally suited for driving brushed DC motors and stepper motors used in office equipment and amusement applications.

Features

- On resistance (upper side : 0.3 ; lower side : 0.2 ; total of upper and lower : 0.5 ; Ta = 25°C, IO = 2.5A)
- Excitation mode can be set to Full-step, Half-step full torque, Half-step , or Quarter-step
- Motor holding current selectable in four steps
- Output short-circuit protection circuit (selectable from latch-type or auto reset-type) incorporated
- Built-in thermal shutdown circuit
- No control power supply required
- Single-channel PWM current control stepper motor driver (selectable with DC motor driver channel 2) incorporated.
- BiCDMOS process IC
- Excitation step proceeds only by step signal input
- Unusual condition warning output pins

Benefits

- Good Thermal Performance, High efficiency
- Various Step Adjustment Available
- Low Consumption
- Safety design
- Thermal protection
- Easy Design

Applications

- Computing & Peripherals
- Industrial

End Products

- Flatbed Scanner
- Inkjet Printer
- Multi-Function Printer
- Document Scanner
- Slot Machine

Part Electrical Specifications

Product	Compliance	Status	Type	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)	Step Resolution	Control Type	Feedback Method	Current Sense	Regulator Output	Fault Detection	Flyback Protection	R _{DS(on)} Typ (Ω)	Pack age Type
LV8740V-MPB-E	Pb-free	Active	Step per/ Brush DC	9	35	9	35	2.5	3	$\frac{1}{2}$ 1 ?	Clock Parallel		External Resistor		Over-Current Thermal UV LO		0.5	SSOP-44J EP
LV8740V-TLM-E	Pb-free	Active	Step per/ Brush DC	9	35	9	35	2.5	3	$\frac{1}{2}$ 1 ?	Clock Parallel		External Resistor		Over-Current Thermal UV LO		0.5	SSOP-44J EP

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

Created on: 7/11/2015