



## 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
- For more features, see the data sheet

#### 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	V <sub>M</sub> Min (V)	V <sub>M</sub> Max (V)	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	I <sub>O</sub> Max (A)	I <sub>O</sub> Peak Max (A)	Step Resolution	Control Type	Feedback Method	Current Sense	Regulator Output	Fault Detection	Flyback Protection	R <sub>DS(on)</sub> Typ (Ω)	Package Type
LV8740V-MPB-E	Pb-free	Active	9	35	9	35	2.5	3	?	Clock		External Resistor		UVLO		0.5	SSOP-44J EP
LV8740V-TLM-E	Pb-free	Active	9	35	9	35	2.5	3	1	Clock		External Resistor		Over-Current		0.5	SSOP-44J EP

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com)

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