



## Product Overview

### LV8735V: Stepper Motor Driver, PWM, Constant Current Control

For complete documentation, see the data sheet

#### Product Description

The LV8735V is a 2-channel H-bridge driver IC that can switch a stepper motor driver, which is capable of micro-step drive and supports 1/16 step excitation, and two channels of a brushed 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

- Low on resistance (upper side : 0.75 ; lower side : 0.5 ; total of upper and lower : 1.25 ; Ta = 25°C, IO = 1A)
  - Excitation mode can be set to Full step, Half step, 1/8 step, or 1/16 step
  - Motor 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
  - CLK-IN Input
  - Single-channel PWM current control stepper motor driver (selectable with DC motor driver channel 2) incorporated.
  - BiCMOS process IC
  - Excitation step proceeds only by step signal input
- For more features, see the data sheet

#### Benefits

- High Efficiency
- Various Step Adjustment Available
- Low Consumption
- Safety Design
- Thermal protection
- Easy Design
- Easy Control for Micro-step Drive

#### Applications

- Stepper/Brush DC Motors
- Computing & Peripherals
- Industrial

#### End Products

- Inkjet Printer
- Flatbed Scanner
- Multi-Function Printer
- Document Scanner
- PoE Security Camera

#### 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 |
|---------------|------------------------|--------|------------------------|------------------------|-------------------------|-------------------------|------------------------|-----------------------------|-----------------|--------------|-----------------|-------------------|------------------|-----------------|--------------------|-----------------------------|--------------|
| LV8735V-TLM-H | Pb-free<br>Halide free | Active | 9                      | 32                     | 9                       | 32                      | 1                      | 1.5                         | 1/16            | Clock        |                 | External Resistor |                  | UVLO            |                    | 1.25                        | SSOP-44K EP  |

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

Created on: 6/11/2016