

Product Overview

LV8740V: Stepper Motor Driver, PWM, Constant Current Control

For complete documentation, see the data sheet.

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 : 0.3Ω ; lower side : 0.2Ω ; total of upper and lower : 0.5Ω ; 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 | Pricing (\$/Unit) | Compliance | Status | 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 | Current Sense | Fault Detection | Package Type |
|---------------|-------------------|------------|--------|------------------------|------------------------|-------------------------|-------------------------|------------------------|-----------------------------|-----------------|--------------|-------------------|-----------------|--------------|
| LV8740V-TLM-E | 3.9586 | Pb-free | Active | 9 | 35 | 9 | 35 | 2.5 | 3 | 1 | Clock | External Resistor | Over-Current | SSOP-44J EP |

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

Created on: 6/1/2020