Product Overview

LV8741V: PWM Current Control Stepper Motor Driver

For complete documentation, see the data sheet

Product Description

The LV8741V 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 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 : 0.5 ; lower side : 0.5 ; total of upper and lower : 1.0 ; Ta = 25°C, IO = 1.5A)
- Excitation mode can be set to Full-step, Half-step full torque, Half-step or Quarter-step
- Motor current selectable in four steps
- Output short-circuit protection circuit (selectable from latch-type or auto reset-type) incorporated
- Thermal shutdown circuit and power supply monitor circuit incorporated
- CLK-IN Input
- 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
- IO max = 1.5A

Benefits

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

Applications

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

End Products

- Printers
- Flatbed Scanner
- Inkjet Printer
- Multi-Function Printer
- Document Scanner

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	Package Type
LV8741V-MPB-E	Pb-free	Active	Stepper/ Brush DC	9.5	38	2.7	6	1.5	1.75	½ 1 ¼	Clock Parallel	None	External Resistor	Yes	Over-Current Thermal UVLO	Integrated Active	SSOP-44KEP
LV8741V-TLM-E	Pb-free	Active	Stepper/ Brush DC	9.5	38	2.7	6	1.5	1.75	½ 1 ¼	Clock Parallel	None	External Resistor	Yes	Over-Current Thermal UVLO	Integrated Active	SSOP-44KEP
LV8741VB-MPB-E	Pb-free	Active	Stepper/ Brush DC	9.5	38	2.7	6	1.5	1.75	½ 1 ¼	Clock Parallel	None	External Resistor	Yes	Over-Current Thermal UVLO	Integrated Active	SSOP-36JEP

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

Created on: 8/6/2013