



Product Overview

STK672-442AN-E: Unipolar 2-phase Stepper Motor Driver

For complete documentation, see the data sheet

Product Description

The STK672-442AN-E is a hybrid IC for use a unipolar, 2-phase stepper motor driver with PWM current control. It includes a built-in microstepping controller and is based on a unipolar constant-current PWM system. The STK672-442AN-E supports application simplification and standardization by providing a built-in 4 phase distribution stepper motor controller. It supports five excitation methods: 2 phase, 1-2 phase, W1-2 phase, 2W1-2 phase, and 4W1-2 phase excitations, and can provide control of the basic stepping angle of the stepper motor divided into 1/16 step units. It also allows the motor speed to be controlled with only a clock signal. The use of this hybrid IC allows designers to implement systems that provide high motor torques, low vibration levels, low noise, fast response, and high-efficiency drive. In addition the STK672-442AN-E has various protective function against over-current and over-heat. And STK672-440AN-E with hole to attach a heat-sink is lined up.

Features

- Micro stepping controller built in
- Protective function against over-current and over-heat built in
- Current detection resistors built in

Benefits

- Easy to switch between full step, half step, 1/4 step, 1/8 step and 1/16 step with prevention of jumping phase
- Superior in safety drive
- Easy to design and reduce the mounting area

Applications

- Computing & Peripherals
- Industrial

End Products

- Multi-Function Printer
- Document Scanner
- Security Camera
- Vending 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)	Package Type
STK672-442AN-E	Pb-free	Active	Stepper	20	52	4.75	5.25	3.5	20	1/16	Clock	None	Fully Integrated	No	Thermal			SIP-19

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

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