



## Product Overview

### STK672-630CN-E: Unipolar 2-Phase Stepper Motor Driver

For complete documentation, see the data sheet

#### Product Description

The STK672-630CN-E is a hybrid IC for use as a unipolar, 2-phase stepper motor driver with PWM current control. It includes a built-in controller and is based on a unipolar constant-current PWM system. The STK672-630CN-E supports application simplification and standardization by providing a built-in 4 phase distribution stepping motor controller. It supports five excitation methods: 2 phase and 1-2 phase excitations, and can provide control of the basic stepping angle of the stepper motor divided into 1/2 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 STK672-630CN-E has protective function against over-current and over-heat, and motor terminal open.

#### Features

- Stepping controller built in
- Protective function against over-current, over-heat, and motor terminal open built in
- Current detection resistors built in

#### Benefits

- Easy to switch between full step and half 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
- Vending Machine

#### Part Electrical Specifications

Product	Compliance	Status	Type	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
STK672-630CN-E	Pb-free	Active	Stepper	0	46	4.75	5.25	2.65	10	1/2	Clock	None	Fully Integrated	No	Open Coil Over-Current Thermal UVLO			SIP-19

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

Created on: 7/11/2015