



## Product Overview

### STK672-440AN-E: Unipolar 2-phase Stepper Motor Driver

For complete documentation, see the data sheet

#### Product Description

The STK672-440AN-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 STK672-440AN-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 STK672-440AN-E has various protective function against over-current and over-heat. And small package type STK672-442AN-E without 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 <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 Reso- lution	Cont rol Type	Feed back Meth- od	Curr- ent Sense	Reg- ulator Output	Fault Dete- ction	Fly- back Protec- tion	R <sub>DS(on)</sub> Typ ( $\Omega$ )	Pack- age Type
STK672-440AN-E	Pb-free	Active	Step- per	10	52	4.75	5.25	3.5	20	1/16	Clock	Non- e	Fully Integ- rated	No	Over- Cur- rent Ther- mal UV LO			SIP- 19

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