

Product Overview

STK672-630AN-E: Unipolar 2-Phase Stepper Motor Driver

For complete documentation, see the data sheet

Product Description

The STK672-630AN-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 STK672-630AN-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 STK672-630AN-E has protective function against over-current and over-heat. and a small package STK672-632AN-E without hole to attach a heat-sink is lined up.

Features

- 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 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 _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 |
|----------------|------------|--------|---------|------------------------|------------------------|-------------------------|-------------------------|------------------------|-----------------------------|-----------------|--------------|-----------------|------------------|------------------|---------------------------------|--------------------|-----------------------------|--------------|
| STK672-630AN-E | Pb-free | Active | Stepper | 10 | 52 | 4.75 | 5.25 | 2.65 | 10 | 1/2 | Clock | None | Fully Integrated | No | Over-Current Thermal UVLO | | | SIP-19 |

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

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