

Product Overview

AMIS-30422: Stepper motor driver/controller for external FETs

For complete documentation, see the data sheet.

The AMIS-30422 is a micro-stepping stepper motor bridge controller for large current range bipolar applications. The chip interfaces via a SPI interface with an external controller in order to control two external power NMOS H-bridges. It has an on-chip voltage regulator, current sensing, self adapting PWM controller and pre-driver with smart slope control switching allowing the part to be EMC compliant with industrial and automotive applications. It uses a proprietary PWM algorithm for reliable current control.

Features

- Dual H-bridge pre-drivers for two phase stepper motors
- Programmable current via SPI
- On-chip current translator
- SPI interface
- Speed and load angle output
- 9 step modes from full step up to 128 microsteps
- Current sense via two external sense resistors
- PWM current control with automatic selection of fast and slow decay
- Low EMC PWM with selectable voltage slopes
- Full output protection and diagnosis

For more features, see the data sheet

Applications

- Motor control

End Products

- HVAC
- Industrial control systems

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

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