



Product Overview

AMIS-30523: CAN Microstepping Motor Driver w/ Comprehensive Diagnostic Feedback and SLA Output

For complete documentation, see the data sheet

Product Description

The AMIS-30523 is a microstepping stepper motor driver for bipolar stepper motors with an embedded CAN transceiver. The motor driver is connected through I/O pins and a SPI interface with an external microcontroller. It has an on-chip voltage regulator, reset-output and watchdog reset, able to supply peripheral devices. It contains a current-translation table and takes the next micro-step depending on the clock signal on the NXT input pin and the status of the DIR register or input pin. The CAN transceiver is the interface between a CAN protocol controller and the physical bus. It provides differential transmit capability to the bus and differential receive capability to the CAN controller. To cope with the long bus delay the communication speed needs to be low. The integrated transceiver allows low transmit data rates down 10 kbit/s or lower. The AMIS-30523 is ideally suited for general-purpose stepper motor applications in the automotive, industrial, medical, and marine environment. With the on-chip voltage regulator and embedded CAN transceiver it further reduces the BOM for mechatronic stepper applications.

Features	Benefits
<ul style="list-style-type: none">• Programmable peak current up to 1.2 A continuous• Seven step modes from full step up to 32 micro-steps• Full output protection and diagnosis• Compatible with the ISO 11898 standard• Extremely low current standby mode with wakeup via the bus• PTZ camera	<ul style="list-style-type: none">• Fully integrated motor drivers minimize physical footprint and overall solution cost• Precise motor control without the need for external gearing• High reliability motor control with limited external processing• Compatibility with all other CAN devices• Simple power management

Applications

- HVAC damper control
- Industrial controls
- Manufacturing equipment

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

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