

Product Overview

AMIS-30621: Microstepping Motor Driver and Controller with LIN Bus

For complete documentation, see the data sheet.



The AMIS-30621 is a single chip microstepping motor driver with position controller and control diagnostic interface. It is ready to build dedicated mechatronics solutions connected remotely with a LIN master. The chip receives positioning instructions through the bus and subsequently drives the motor coils to the desired position. The on chip position controller is configurable (OTP or RAM) for different motor types, positioning ranges and parameters for speed, acceleration and deceleration. The AMIS-30621 acts as a slave on the LIN bus and the master can fetch specific status information like actual position, error flags, etc. from each individual slave node. The chip is implemented in I2T100 technology, enabling both high voltage analog circuitry and digital functionality on the same chip. The AMIS-30621 is fully compatible with the automotive voltage requirements.

Features

- Automatic selection of fast and slow decay mode.
- No external flyback diodes required.
- Configurable speeds and acceleration.
- Field programmable node addresses.
- Dynamically allocated identifiers.
- Both physical and data-link layers (conform to LIN rev. 1.3).
- LIN bus short circuit protection to supply and ground.
- High temp warning and management.
- Lost LIN safe operation.
- Micro-stepping technology.

For more features, see the data sheet

Applications

- Automotive applications like headlamp alignment, HVAC, idle control and cruise control.
- Industrial equipment like lighting, fluid control, labeling, process control, XYZ tables, robots...
- Building automation like HVAC, surveillance, satellite dish and renewable energy systems.
- In general the device is ideally suited for small positioning applications which typically have multiple axes or require mechatronic solutions with the driver chip mounted directly on the motor.

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

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