

## TMC236

Microstep Driver for  
up to 1.5A

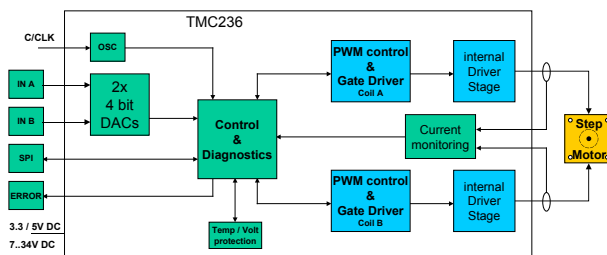
**INFO** The TMC236 is a smart power microstepping driver for bipolar stepper motors. It provides an SPI™ interface as well as the classical analog/digital control. A full set of protection and diagnostic features makes this device very rugged. The integrated low-RDS-ON TrenchFET® power MOSFETs give an extremely high efficiency and allow driving of a high motor current of up to 1.5A per phase without cooling measures even at high environment temperatures.

The small footprint and high efficiency make the device a perfect solution for embedded motion control and even for battery powered designs.

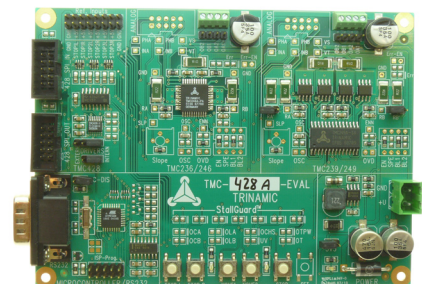
The evaluation can be done with the TMC428, as the only difference is the additional stallGuard™ feature.

### MAIN CHARACTERISTICS

- full protection and diagnostics
  - low power dissipation
  - 16 times microstepping via SPI, 64 times using additional shift register, even more via analog control
  - mixed decay for smooth operation
  - programmable slope control for low EME
  - internal or external chopper clock
  - standby and shutdown mode
- INTERFACE**
- easy-to-use SPI™ interface
  - classical analog interface
- ELECTRICAL DATA**
- up to 1500 mA coil current (peak)
  - 7V to 34V motor supply (TMC236A)
  - 3.3V or 5V operation for digital part
- PACKAGE**
- standard PQFP-44 package
  - RoHS compliant



10 mm



ORDER CODE	DESCRIPTION
TMC236A-PA	1.5A driver, PQFP-44
TMC428A-EVAL	Evaluation board for TMC428, TMC246A and TMC249A with stallGuard™