

## TMC211

**Microstep  
Controller / Driver  
for up to 0.8A  
with LIN Interface**

**INFO** The TMC211 is a single chip microstepping motor driver and motion controller with integrated sequencer, bipolar stepper motor driver and LIN slave interface. It is specially intended for de-centralized mechatronic functions. A user-programmable OTP memory is integrated to store motor parameters and configuration settings. The TMC211 allows up to four bit of microstepping and is capable of driving a phase current of up to 800 mA peak. After initialization, it performs all time critical tasks autonomously based on target positions and velocity parameters. Together with an inexpensive microcontroller the TMC211 forms a complete motion control system.

For using the evaluation board together with the PC software a USB-2-X interface is needed.

### MAIN CHARACTERISTICS

- build-in ramp generator for autonomous positioning
- programmable speed and acceleration
- on-the-fly alteration of target position
- up to 16 times microstepping
- reference switch input read out
- full protection and diagnostics
- automatic fast decay and slow decay
- low power stand-by mode

### INTERFACE

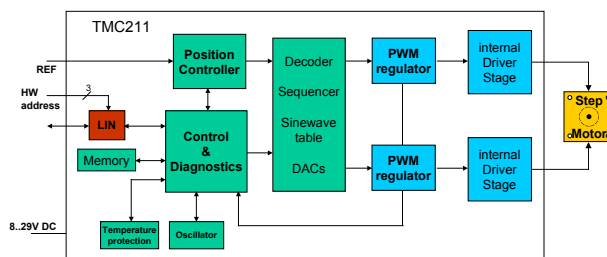
- physical and data link layers conform to LIN rev. 1.2
- field programmable node addresses

### ELECTRICAL DATA

- up to 800 mA coil current (peak)
- supply voltage 8V to 29V

### PACKAGE

- standard SO20 package
- RoHS compliant



ORDER CODE	DESCRIPTION
TMC211-SA	Stepper IC with LIN in SO20 package
TMC211-EvalBoard	Evaluation board for TMC211
<b>Related product:</b>	USB-2-X V2 interface converter, TCM-Motor