

TMC 222

Micro Step Motor Controller & Driver (up to 0.8A) with IIC Bus Interface

The **TMC222** is a single chip micro stepping motor driver and motion controller with integrated sequencer, bipolar stepper motor driver and two wire serial slave interface (IIC). It is specially intended for de-centralized mechatronic functions. A user-programmable OTP memory is integrated to store motor parameters and configuration settings. The TMC222 allows up to four bit of micro stepping 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 TMC222 forms a complete motion control system.

Electrical data

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

Main characteristics

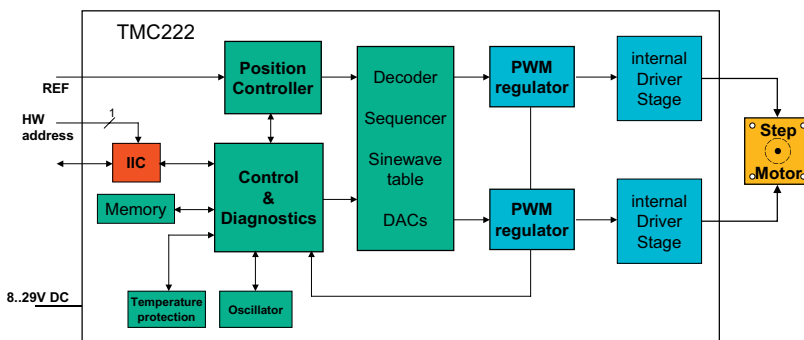
- build-in ramp generator for autonomous positioning
- programmable speed and acceleration
- on-the-fly alteration of target position
- up to 16 times microstepping
- reference switch input read out
- full protection and diagnostics
- automatic fast decay and slow decay
- low power stand-by mode

Interface

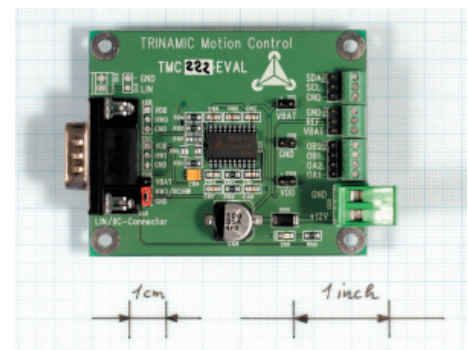
- two wire serial interface (IIC bus)
- field programmable node addresses (32)

Package

- standard SO20 package
- chip size QFN32 7x7mm² package
- RoHS compliant



ORDER CODE	DESCRIPTION
TMC222-SI	stepper IC with I ² C in SO20 package
TMC222-LI	stepper IC with I ² C in QFN32 package
TMC222-EvalBoard	evaluation board
<i>Related product:</i>	<i>USB-2-X interface converter</i>



For further detailed information and datasheets please refer to our website <http://www.trinamic.com>.