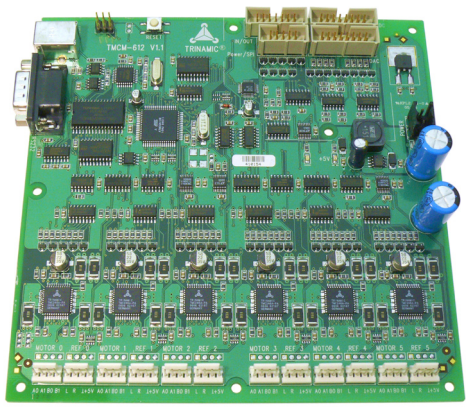


TMCM-612

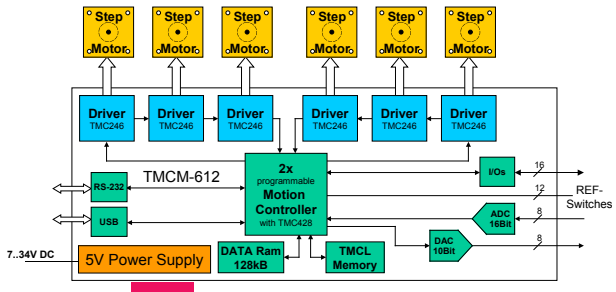
6-Axis
Controller / Driver
1.1A / 34V
+ Data Aquisition

INFO

The TMCM-612 is a six axis 2-phase stepper motor controller and driver module with a high performance data acquisition part. The integrated 8 channel 16 bit ADC converter can be programmed to do a step-synchronous input voltage scan and store values at a high data rate. The module provides a high microstep resolution in order to do very exact positioning and measurement tasks. The measurement results can be transferred to a PC using the high-speed USB interface. A number of analog output channels and digital I/Os can be used to control further instrumentation.

This feature set makes the module pre-destined for analytical instruments.

The TMCM-612 comes with the PC based software development environment TMCL-IDE for the Trinamic Motion Control Language (TMCL). User specific data acquisition extensions are available upon request. The TMCM-612 can be controlled via the high-speed USB interface or via its RS-232 interface.



MAIN CHARACTERISTICS

ELECTRICAL DATA
- up to 1.1A coil current RMS (1.5A peak)
- 12V to 34V supply voltage

SUPPORTED MOTORS
- two-phase bipolar motors with 0.3A to 1.1A coil current

INTERFACE
- RS-232 and USB host interface
- inputs for reference and stop switches
- general purpose analog and digital I/Os
- eight 16 bit ADC inputs (0...10V)
- eight 10 bit DAC outputs (0...10V)

FEATURES
- up to 64 times microstepping
- memory for 2048 TMCL commands
- automatic ramp generation in hardware
- 500kHz, 16 bit AD converter
- 128kbyte RAM for data aquisition
- stallGuard™ for sensorless motor stall detection
- full step frequencies up to 20kHz
- dynamic current control
- TRINAMIC driver technology: no heatsink required

SOFTWARE
- stand-alone operation using TMCL or remote controlled operation
- PC-based application development
- software TMCL-IDE included

OTHER
- pluggable connectors
- RoHS compliant
- size: 160 x 160 mm²

ORDER CODE	DESCRIPTION
TMCM-612/SG	6-axis controller/driver and data aquisition module, stallGuard™