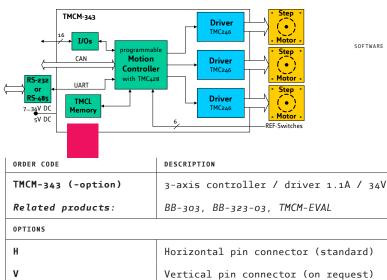


INFO The TMCM-343 is a compact and versatile triple axis 2-phase stepper motor controller and driver module. It provides a complete motion control solution at a very small size for embedded applications. Using the integrated additional I/Os it even can do complete system control applications. The board can be connected to a baseboard or customized electronics with a pin connector. The TMCM-343 comes with the PC based software development environment TMCL-IDE. Using predefined TMCL (Trinamic Motion Control Language) high level commands like "move to position" or "constant rotation" rapid and fast development of motion control applications is guaranteed. Host communication is possible via the serial UART interface (e.g. using a RS-232 or RS-485 level shifter), via CAN or optional via USB. All time critical operations, e.g. ramp calculation are performed on board. A user TMCL program can be stored in the on board EEPROM for stand-alone operation. An optional firmware allows to control the TMCM-342 via CANopen. The firmware of the module can be updated via the serial or the CAN interface.



TMCM-**343**

3-Axis Controller / Driver 1.1A / 34V

• up to 1.1A coil current RMS (1.5A peak) ELECTRICAL 7V to 34V motor supply voltage 5V DC logic supply voltage two-phase bipolar motors SUPPORTED MOTORS with 0.3A to 1.1A coil current INTERFACE · UART (RS-232, RS-485, up to 115200 bit/s) or CAN 2.0b host interface (up to 1Mbit/s) or USB (optional) $\boldsymbol{\cdot}$ inputs for reference and stop switches general purpose analog and digital I/Os FEATURES • up to 64 times microstepping memory for 2048 TMCL commands ready for CANopen automatic ramp generation in hardware · on the fly alteration of motion parameters (e.g. position, velocity, acceleration) 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

MAIN CHARACTERISTICS

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www.trinamic.com - for detailed information and datasheets