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Modules

TMCM-1161

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The TMCM-1161 is a single axis stepper motor controller/driver module for sensorless load dependent current control. The device is powered by Trinamic StallGuard2™, CoolStep™ and SpreadCycle™ chopper technology and has a trapezoidal ramp generator. The TMCM-1161 is capable of driving up to 4A of current from each output (with proper heatsinking). It is designed for an operating voltage of 10...30V. The device provides a RS485 and USB interface. An integrated protocol processor supplies a high level TMCL communication.

All you need to get started is a power supply and Trinamic's free and easy to use TMCL-IDE. This graphical user interface allows quick setup and supports the use of commands in direct mode, monitors real-time behavior visualized in graphs, and logs and stores data.

[More about the TMCL-IDE](#)

Special Features

[StallGuard2™](#)[CoolStep™](#)[SpreadCycle™](#)[Technical Details](#) [Block Diagram / Pinout](#) [Datasheet](#) [Documentation](#) [Software](#) [Drawings](#) [PCNs](#) 

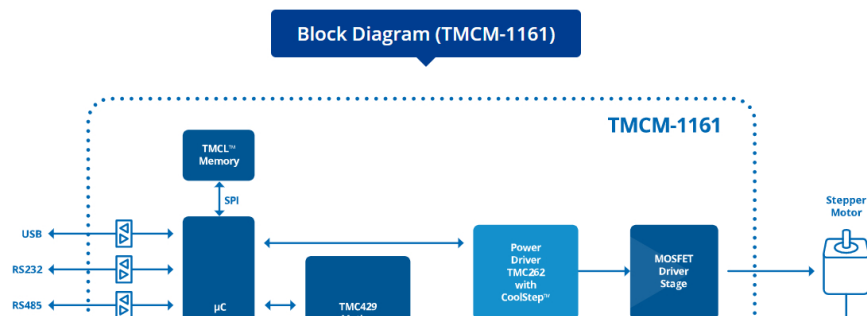
Technical Details

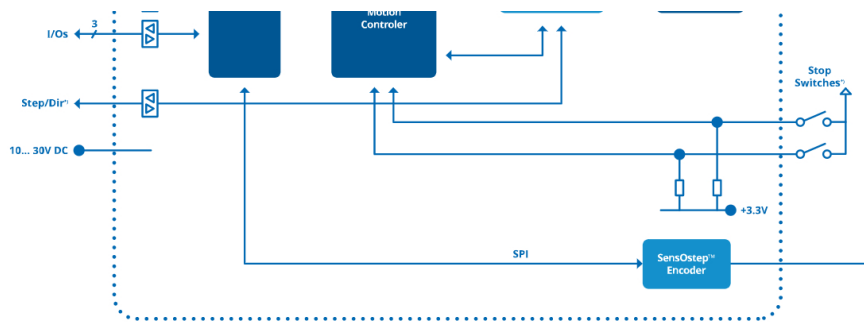


TCM-1161

Status	active
Axes	1
Motor Supply	10...30V
Phase Current, RMS	2.8A
Microsteps	1...256
RS232	☑
RS485	☑
USB	☑
SensOstep™	☑
TMCL™	☑
trapezoidal	☑
StallGuard2™	☑
CoolStep™	☑
SpreadCycle™	☑
Width	60mm
Length	60mm
Height	12mm

Block Diagram / Pinout





*) The module offers three additional inputs. Functionality can be chosen by software:
 a) STOP_L/STOP_R/ HOME b) Step/Dir interface c) 3 general purpose inputs

Downloads

Datasheet

File	Type	Size	Date
Hardware Manual Rev 1.14		850 KB	Feb 12, 2021, 10:32 AM


Documentation

File	Type	Size	Date
TMCL Firmware Manual Revision V1.09 for Firmware V1.42		1.5 MB	Jan 11, 2018, 8:22 AM
TMCL Firmware Manual Revision V1.08 for Firmware V1.29		1.6 MB	Nov 3, 2016, 3:21 PM



Software

File	Type	Size	Date
Setup Information (Trinamic_inf_cat)		6.9 KB	Dec 12, 2017, 2:08 PM
TMCL Firmware V1.42		150 KB	Jul 20, 2017, 11:02 AM
TMCL Firmware V1.35		150 KB	Nov 10, 2016, 10:33 AM
TMCL Firmware V1.29		160 KB	Nov 10, 2016, 10:33 AM
TMCL Firmware V1.27		160 KB	Nov 10, 2016, 10:33 AM
TMCL Firmware V1.24		160 KB	Nov 10, 2016, 10:33 AM
TMCL Firmware V1.21		160 KB	Nov 10, 2016, 10:33 AM

Drawings

File	Type	Size	Date
STEP-File V1.0		1.5 MB	Jan 19, 2017, 3:13 PM

PCNs

File	Type	Size	Date
PCN-2017-07-02 - Firmware 1.42		44 KB	Jul 31, 2017, 7:13 AM
PCN Firmware V1.27		130 KB	Feb 1, 2017, 12:18 PM

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Related Products



PD57/60-x-1161

The PANdrive PD57-1161 and PD60-1161 family is a mechatronic solution including a 57mm or 60mm flange motor, a controller board and a SensOstep™ encoder. It can be controlled via serial interface or operated in standalone mode.

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