

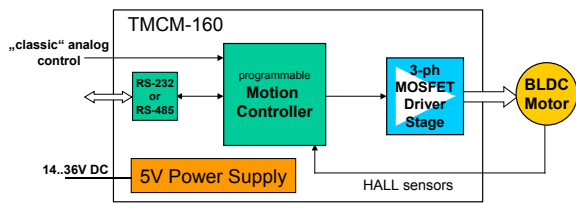
# TMCM-160

**1-Axis BLDC  
Controller / Driver  
5A / 48V**

**INFO** The TCMC-160 is a controller / driver module for general brushless DC motor applications. It integrates velocity and torque control as well as a hall sensor based positioning mode. The position resolution depends on the motor, i.e. a standard 8 pole motor gives a motor axis resolution of 15 degrees. The module can be used in stand alone operation (analog voltage) or remote controlled (TMCL) via a RS232 or RS485 interface (ordering option). Its small form factor (50 x 92 mm<sup>2</sup>) allows for integration onto a user board as a plug-on module or for panel mounting, by connecting flat ribbon cables to the two 2x13 2.54 mm standard header connectors. Multi-axis drives can be easily realized by integrating multiple modules on one baseboard. For Evaluation and small series the BB-160 baseboard has all needed features. The TCMC-160 fits perfectly to the QBL4208 BLDC motors.

**MAIN CHARACTERISTICS**

- ELECTRICAL DATA**
  - up to 5A coil current (airflow might be required if operated cont. above 3A)
  - 12V to 48V motor supply voltage
- SUPPORTED MOTORS**
  - three phase BLDC motors with hall sensors from a few watts up to 180W
  - velocity up to 100,000 rpm (el. field)
- INTERFACE**
  - RS232 or RS485 host interface
  - analog and digital control inputs
- FEATURES**
  - constant velocity drives, constant torque drives or positioning
  - on the fly alteration of motion parameters (e.g. position, velocity, acceleration)
  - high efficiency, low power dissipation
  - integrated protection: reverse polarity, overload / overtemperature
- SOFTWARE**
  - stand-alone operation (analog voltage) or remote controlled operation (TMCL)
  - PC based demonstration software allows setting of all parameters
- OTHER**
  - two 2-row 2.54 mm connectors
  - RoHS compliant
  - size: 50 x 92 mm<sup>2</sup>



ORDER CODE	DESCRIPTION
<b>TMCM-160 (-option)</b>	1-axis BLDC controller / driver module 5A / 48V
<b>Related products:</b>	BB-160, QMot QBL4208
<b>OPTIONS</b>	
<b>232</b>	RS-232 interface
<b>485</b>	RS-485 interface