

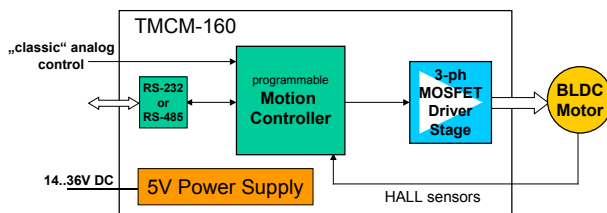
TMCM-160

**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 mm²) 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 mm²



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