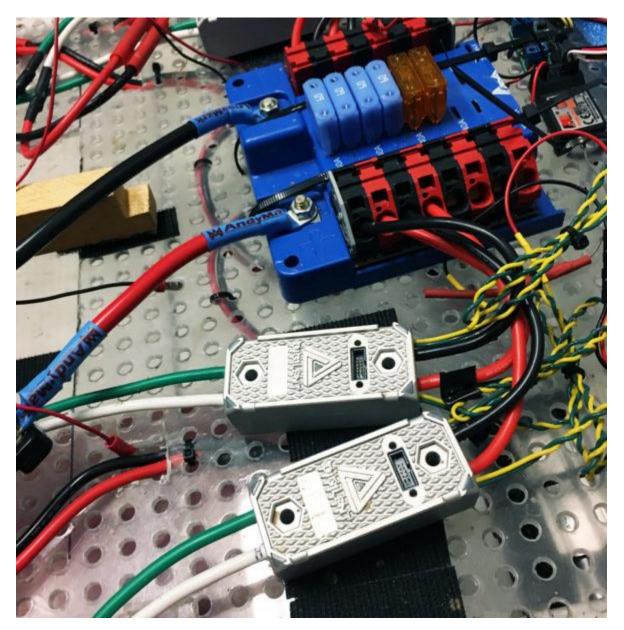
DMC 60 Product Announcement

Digilent DMC 60 is a powerful and compact motor drive/amplifier designed for robotics, electric vehicles, or any application where easy bidirectional control of DC brushed motors is needed. The DMC 60 is controlled using a standard hobby servo PWM signal - the same output from RC controllers and also easily generated by microcontrollers or FPGA boards. The DMC 60 is approved for use in the FIRST Robotics Competition (FRC) and is designed to be electrically and mechanically compatible with the Victor SP motor controller.



Straight out of the box, the DMC 60 is ready to wire into your First Robotics Competition platform! Take a look at the specs:

## Features:

- Sealed, ruggedized, and compact aluminum case
- Tie-wrap and through-bolt mounting drop-in replacement for Victor SP controller
- Four multi-color LED indicators frequency to indicate speed, direction, and status for easier debugging
- Brake/Coast Calibration button enables one-touch setting changes and calibration
- Large gauge input/output cables with flexible silicone insulation
- Integrated thermal sensing and protection current-foldback to prevent overheating and damage
- 15.625 kHz output switching frequency ensures smooth and precise motor control

## **Electrical Features:**

- Dimensions: 2.76" x 1.18" x 1.00"
- Weight: 0.245 lb (including wiring)
- Wire gauge: 12 AWG
- Input voltage: 6-28V
- Continuous current: 60A\*
- Peak current (2 sec): 100A
- PWM input pulse (high time): 1-2 ms nominal, 0.6-2.4 ms max
- PWM input rate (period): 2.9-100 ms
- PWM output chop rate (switching frequency): 15.625 kHz
- Minimum throttle (deadband): 4%

\*at 25°C when mounted to aluminum frame member



There is also access to a debugging JTAG port that allows you to reprogram the microcontroller inside of the DMC60.



Exposing the programming port for access