sparkfun

SparkFun Monster Moto Shield

DEV-10182 ROHS✓ ★ ★ ★ ★ ★ 1



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Description: This is essentially a ramped up version of our Ardumoto motor driver shield. For this SparkFun Monster Moto Shield we've replaced the L298 H-bridge with a pair of VNH2SP30 full-bridge motor drivers. We've also beefed up the support circuitry so this board is capable of driving a pair of high-current motors! The VIN and motor out are pitched for our 5mm screw terminals (not included), making it easy to connect larger gauge wires.

Note: When using this board in extreme high-demand applications it may be necessary to improve thermal performance with a heat-sink or fan and to solder the wires directly to the board instead of using a screw terminal (in addition to the myriad other complications present in a high-current system) However, when using the board at currents up to 6A the chips will barely become noticeably warm.

Features:

- Voltage max: 16V
- · Maximum current rating: 30 A
- Practical Continuous Current: 14 A
- · Current sensing available to Arduino analog pin
- MOSFET on-resistance: 19 mΩ (per leg)
- Maximum PWM frequency: 20 kHz
- Thermal Shutdown
- · Undervoltage and Overvoltage shutdown