

SparkFun Monster Moto Shield

DEV-10182 ROHS ✓

★★★★★ 1



© images are CC BY-NC-SA 3.0

Description: This is essentially a ramped up version of our Arduimoto motor driver shield. For this SparkFun Monster Moto Shield we've replaced the L298 H-bridge with a pair of VN12SP30 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