

## Modern Motion...

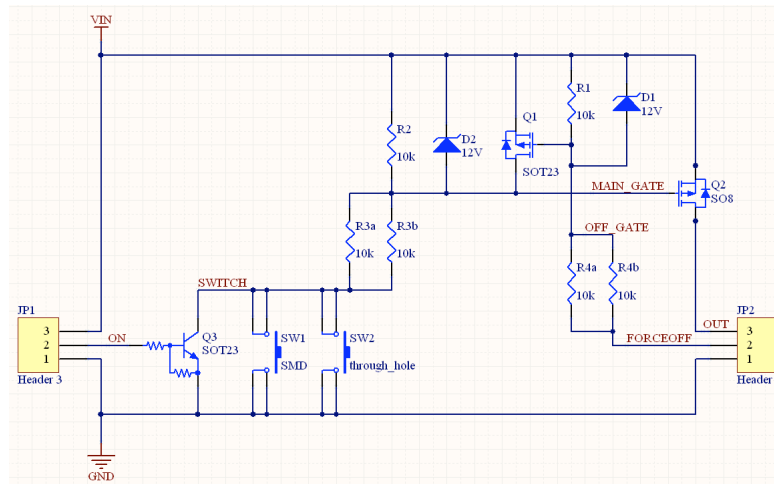
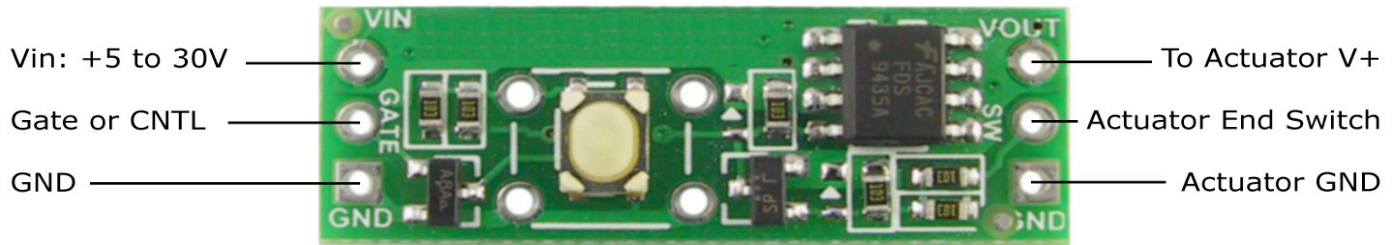
### Miga Analog Driver, V5 Technical Notes

Released: November 6, 2008

The Miga Analog Driver V5 (MAD-V5) is a simple MOSFET switch designed to safely power the MigaOne™ actuators across a wide range of speeds or input voltages.

The MAD-V5 allows either push-button operation, or external GATE (CNTL) signals to actuate the MigaOne until the END limit is reached (goes LOW). The MAD-V5 then cuts power momentarily, preventing overheating of the SMA wires. The Gate transistor allows up to 30V input, but it is recommended to use logic (2.5 to 5-Volt) levels. Pulse-Width-Modulated (PWM) signals can be applied at the Gate to control the actuation speed for a set voltage. For instance, the application of +28VDC power to the MigaOne would result in very fast actuation (~70ms). But with a PWM signal with a 50% duty cycle [ $T_{on}/(T_{on}+T_{off})$ ], the actuation speed would be significantly reduced: offering simple PWM speed control of the MigaOne actuators.

Miga Analog Driver V5 -Pinout Diagram



JP1: Your power supply and/or micro-controller

JP2: MigaOne actuator, 3-Pin Molex connector (note V+ location for polarity)

Note: Maximum peak current: 7A, maximum continuous current: 5A.