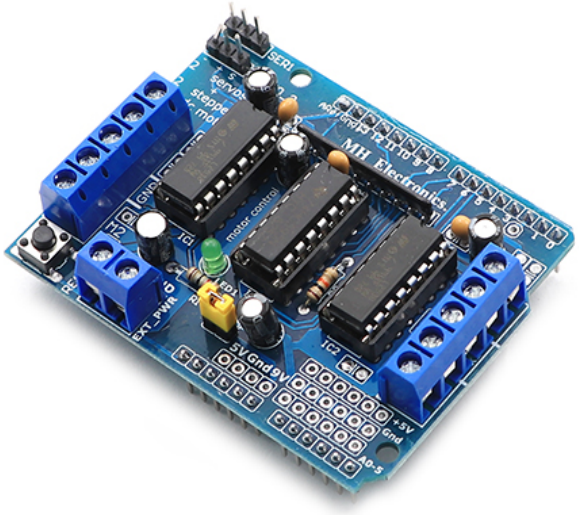
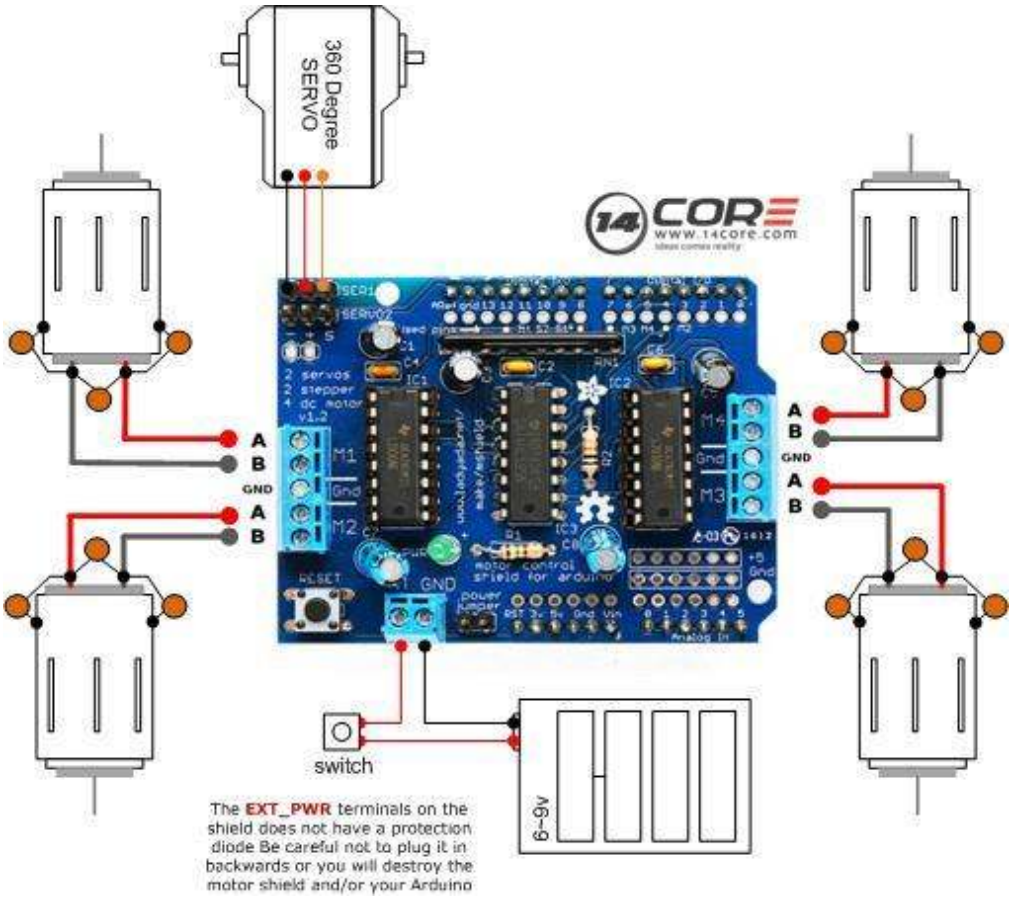
Arduino Shield Motor L293D

User Manual



Wiring a DC Motor:



Motor requires more energy specially cheap motors since chip motors less efficient. The important thing you need is find out what voltage require your going to use. some small motors are only intended to run at 1.5 volts but it is just a common to have 6 ~ 12v motors. The motor controller on L294D shield is design to run at 4.5v to 25v. most 1.5 ~ 3 volts motor will not works on this shield. another thing you need is to figure it out how much current the motor will support? The L293D chip support up to 600 mA per motor, with 1.2A peak current. Note ones you head towards 1A you'll probably want to put a heat sink on the chip, otherwise it will get thermal failure or burning out the chip.

Note:

Do not connect the motor to 5v line on the board. There are two places you can get your motor high voltage supply.

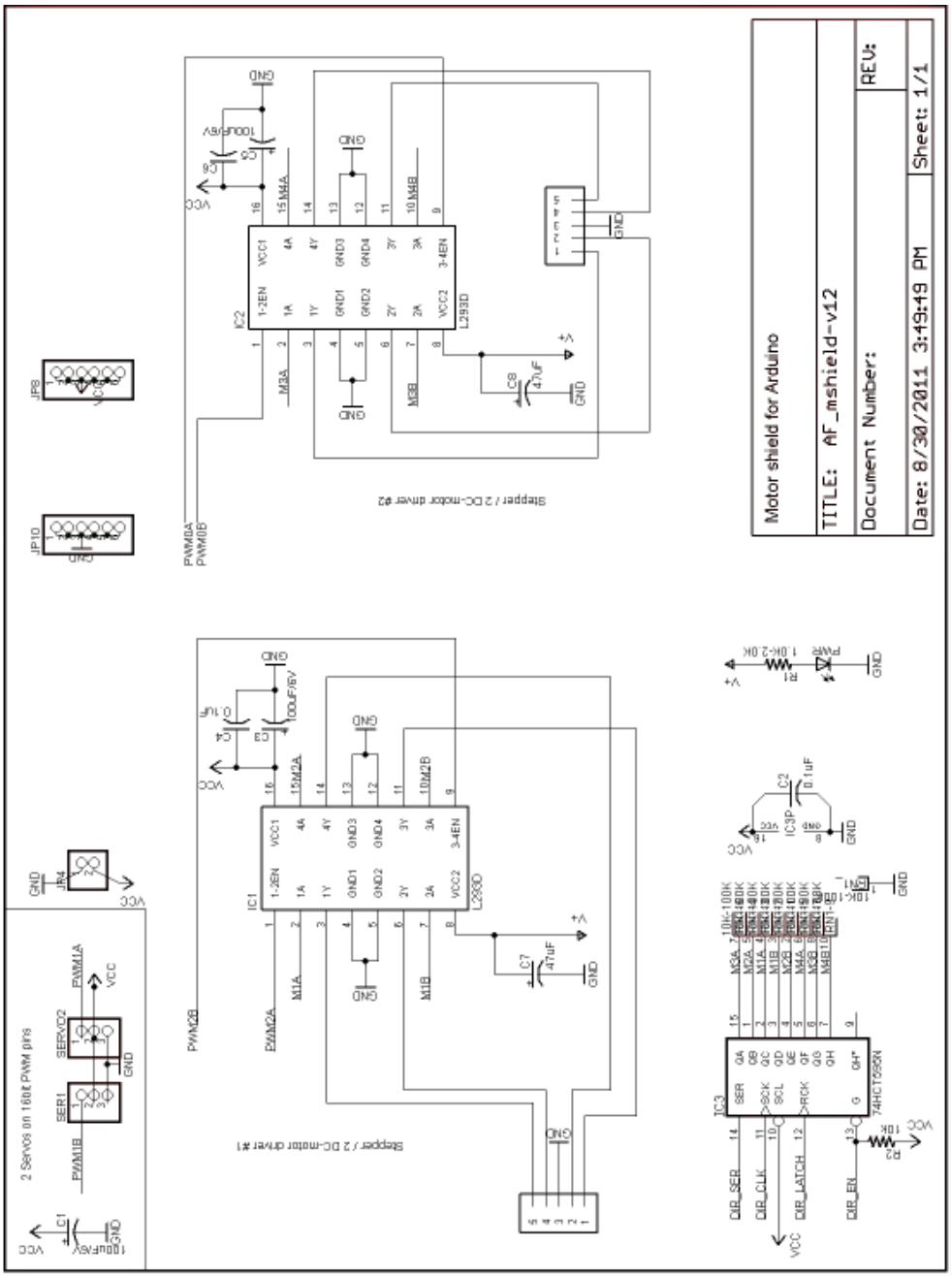
Wiring and Installation the DC Motor to the l293D Shield:

The DC motor are used for all sort of robotics projects. The motor shield can drive up to 4 or 6 DC motors bi directional, it means that they can be driven forward and backward. The speed can also be varied at 0.5% increments using PWM(Pulse with Modulation) this means that speed can be controlled.

Note:

The H-Bridge Chip is not supported for driving load over 0.6A over 1.2A so this it means that this chip is for small motors. Check the datasheet below to learn more. To connect simply place the 2 wires to the terminal with screw and then connect them to either M1, M2, M3, or M4 follow the example diagram above.

Schematic:


Motor shield for Arduino
TITLE: AF_mshield-v12
Document Number:
REV:
Date: 8/30/2011 3:49:49 PM
Sheet: 1/1
Stepper / 2 DC-motor driver #2
Stepper / 2 DC-motor driver #1
2 Servos on 16bit PWM pins
ARDUINO
Duemilanove Diecimila