



Brushless DC motors require a driver called an ESC (Electronic Speed Control). This circuit serves as a learning tool to help understand the control necessary to turn the motor. Brushless DC motors require a three phase square wave similar to three phase AC motors.

Description	
Arduino ESC (Electric Speed Control) or Brushless DC motor controller.	
Drawn By	Fileark
Date	2010 08 25
Company	<a href="http://Fileark.com">http://Fileark.com</a>
Rev	01.00

Notes:  
 This circuit is a tool for learning how Brushless DC motors and ESCs (Electronic Speed Control) work. Almost any small NPN transistor can be used, I used some 2N2222A transistors. The Arduino can not supply enough current requiring the transistors. The Brushless DC motor I used was salvaged from a computer CD drive. LEDs are optional but really handy when troubleshooting the circuit. The 1K resistors reduce the current draw on the Arduino board protecting it. Both the LEDs and transistors will draw too much current without resistors. To learn more and download the arduino sketch visit <http://Fileark.com> and look through the Arduino projects.