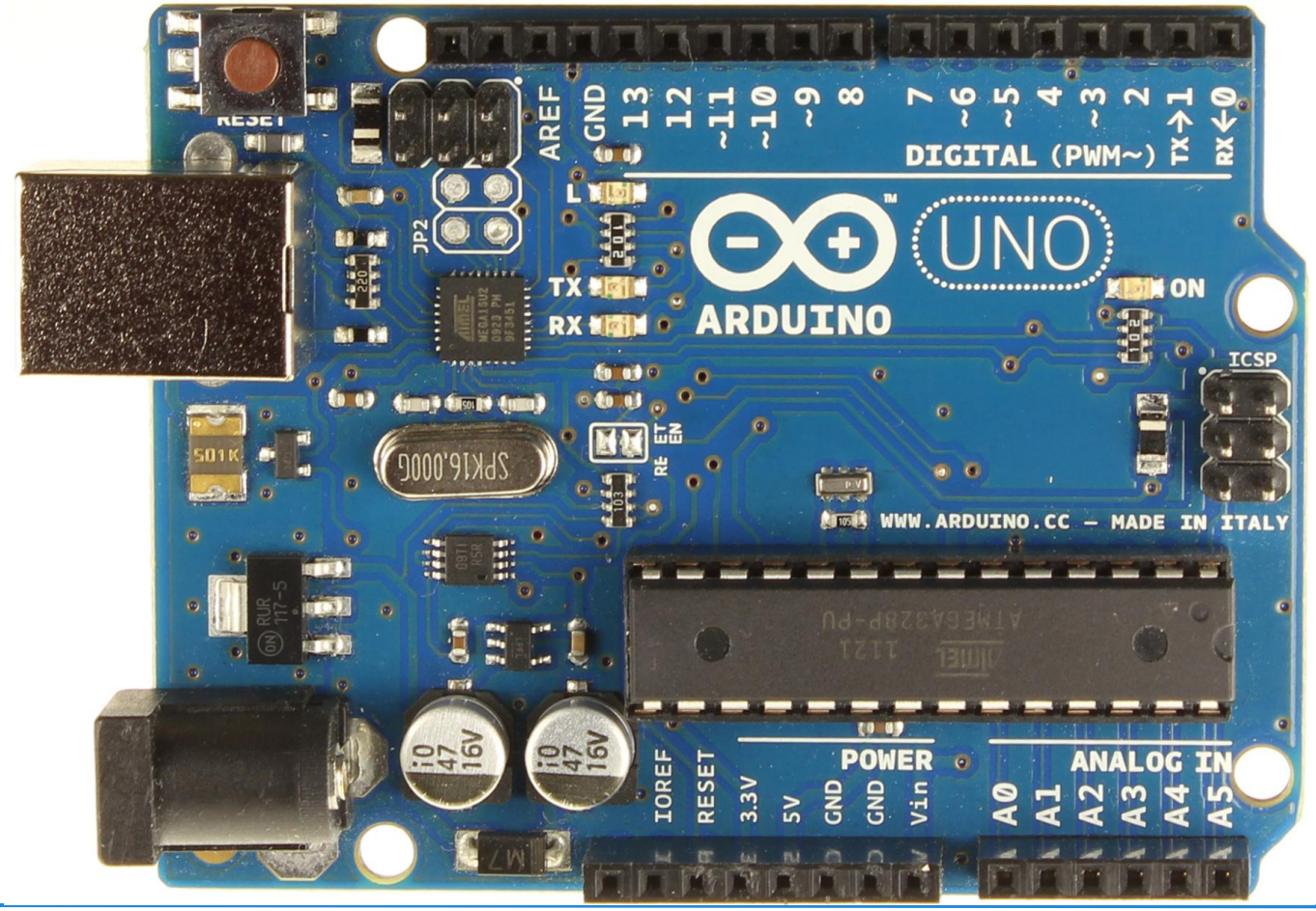
Curso avanzado sobre Arduino: motores

ElCacharreo.com

Arduino avanzado: Presente



Arduino avanzado: Presente

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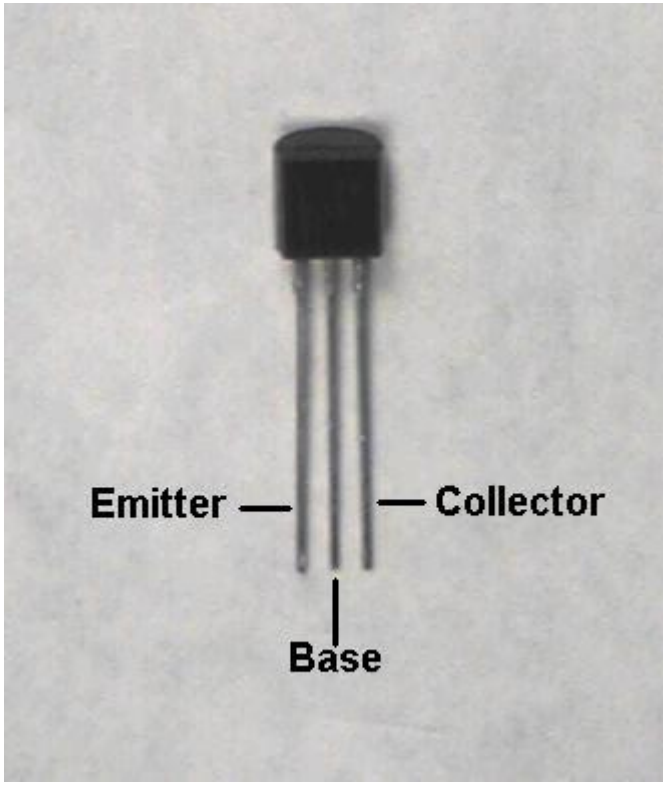
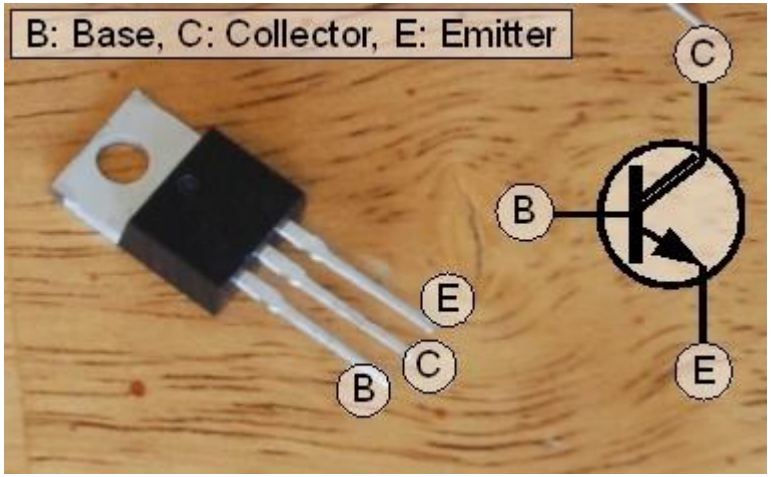
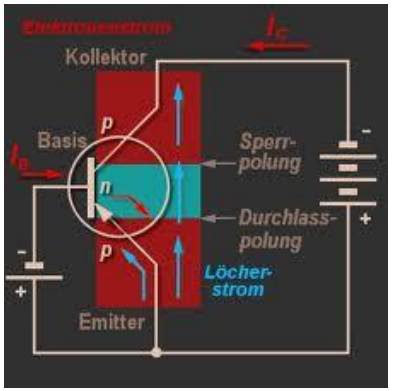
Electrónica III: Transistor

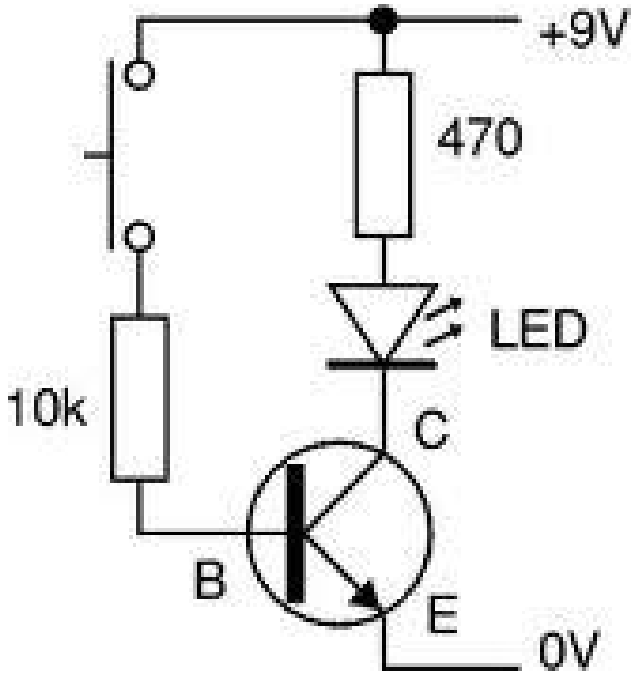




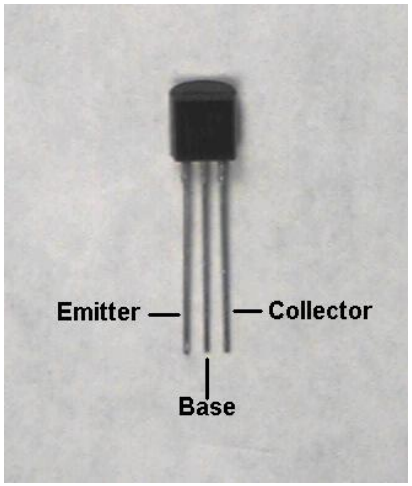
- Colector
- Base: control
- Emisor



Electrónica III: Transistor interruptor

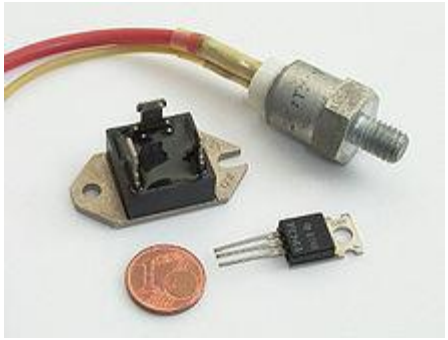


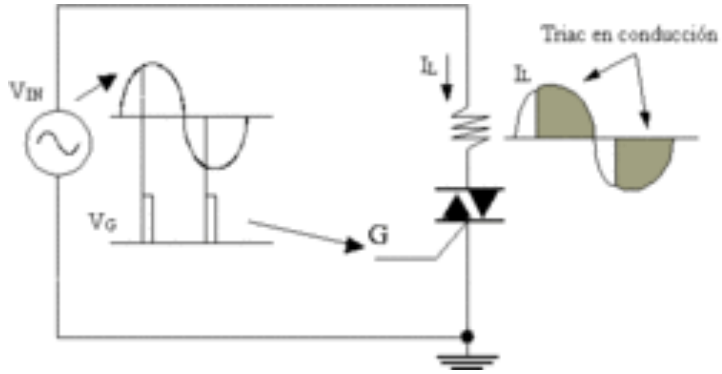
- Colector
- Base: control
- Emisor



Electrónica III: Otros tipos de ...

Triac: ideal para controlar alterna





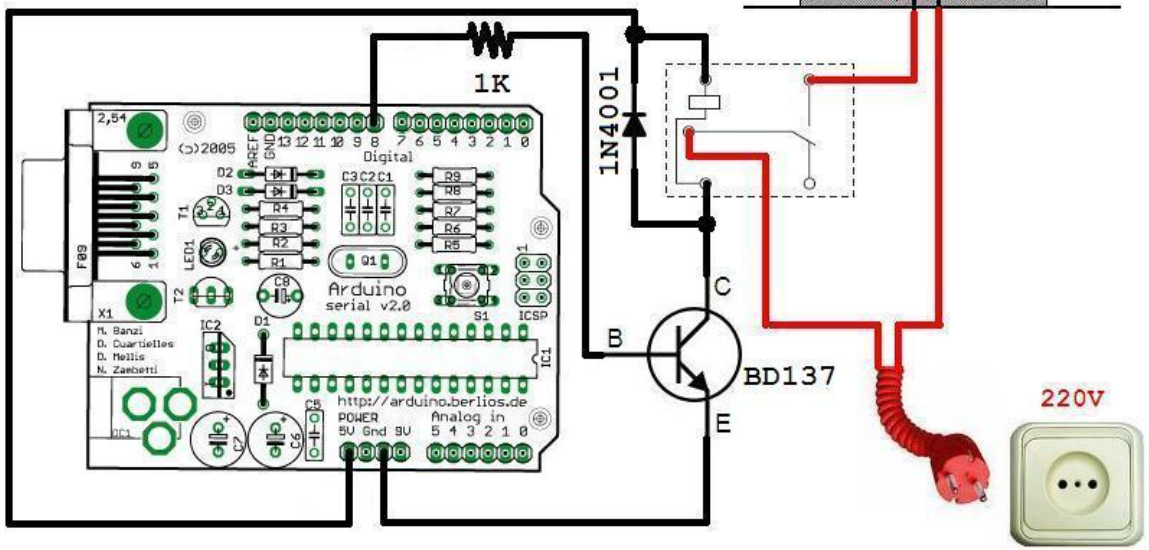
Electrónica III: Relé

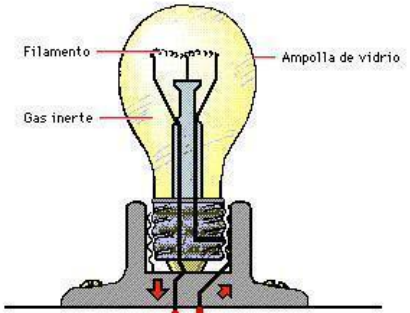
Para no forzar las salidas usaremos un transistor

Relé

5V DC
220V AC

Para evitar corrientes inversas un diodo

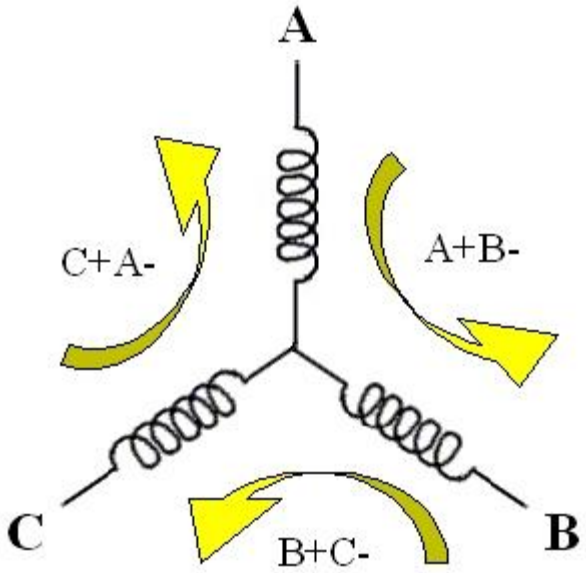




Arduino avanzado: motores

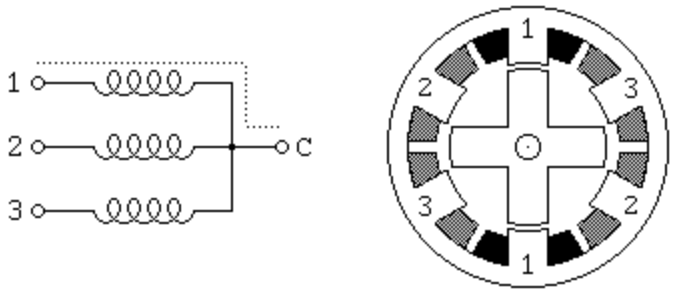
Motores de 3 fases

http://bldc.wikidot.com/p-esc-motor

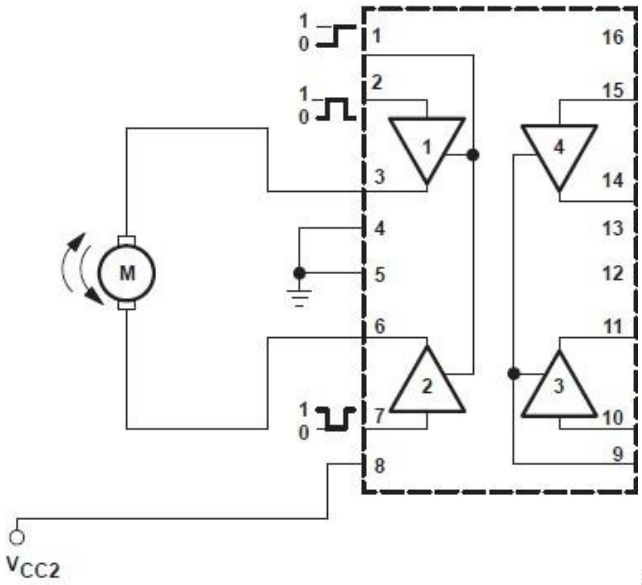


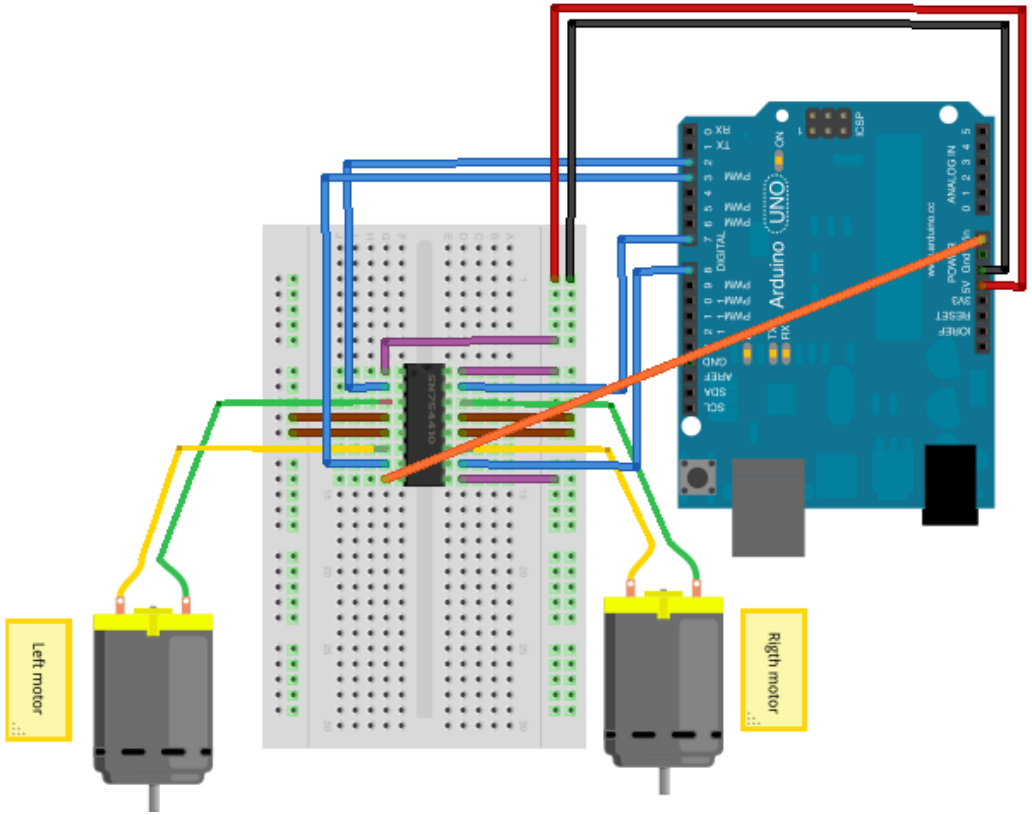
Arduino avanzado: motores

Motores de discos duros
http://www.pial.net/post/Arduino-and-stepper-motor-test.aspx

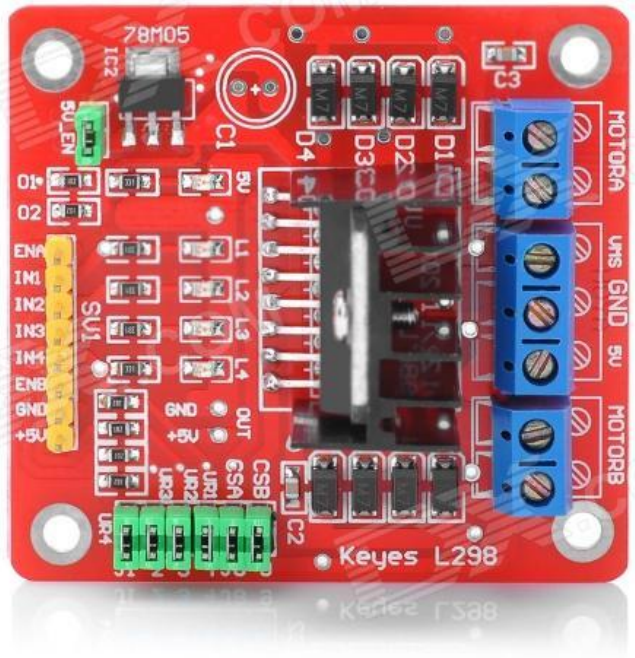


Arduino avanzado: Puente en H





Arduino avanzado: motores

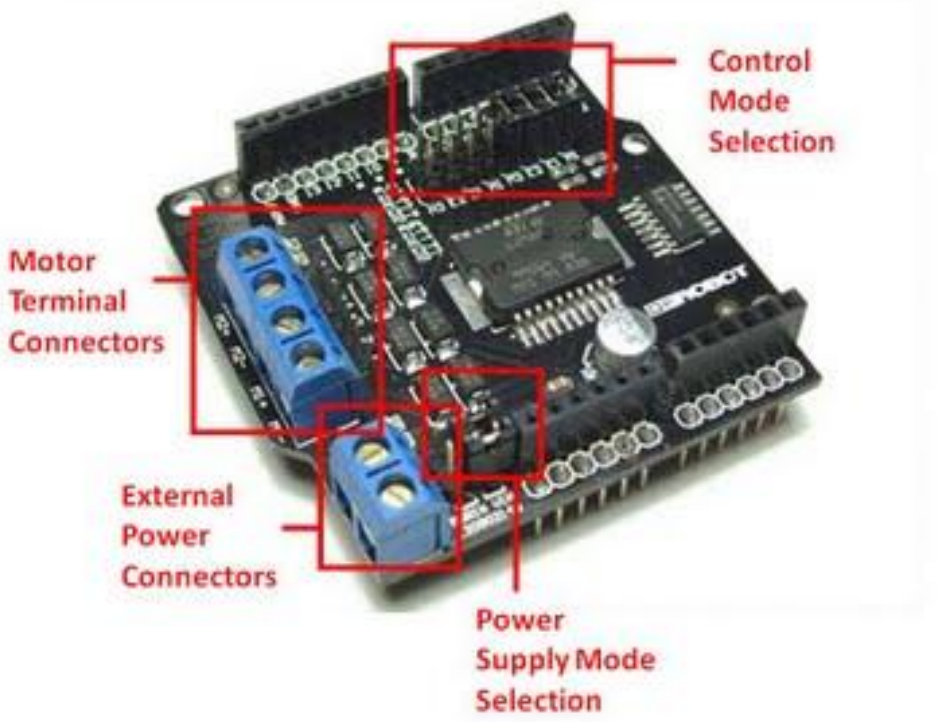



```
int dir1PinA = 13; // Motor A
int dir2PinA = 12;
int speedPinA = 11;
int dir1PinB = 10; //motor B
int dir2PinB = 8;
int speedPinB = 9;
void setup()
{
pinMode(dir1PinA,OUTPUT); // Dir 1 Motor A
pinMode(dir2PinA,OUTPUT); // Dir 2 Motor A
pinMode(speedPinA,OUTPUT);  //PWM
pinMode(dir1PinB,OUTPUT); // Dir 1 Motor B
pinMode(dir2PinB,OUTPUT); // Dir 2 Motor B
pinMode(speedPinB,OUTPUT); //  PWM
}
```

http://dx.com/p/l298n-stepper-motor-driver-controller-board-for-arduino-120542?item=127

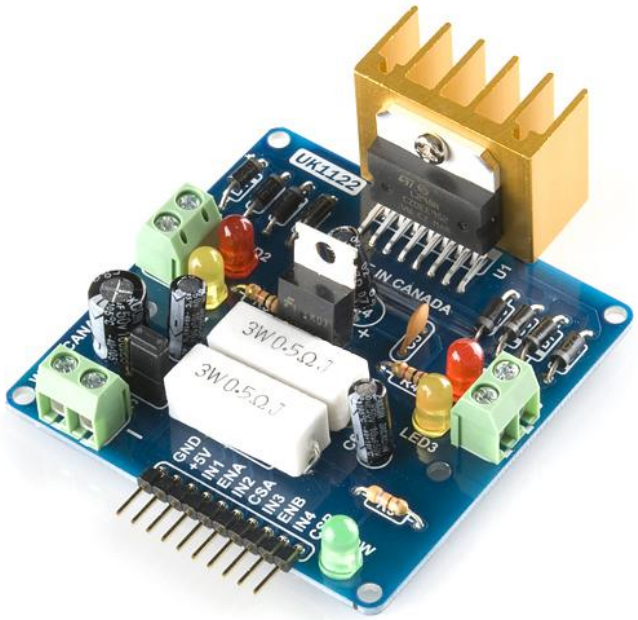
Arduino avanzado: motores

http://www.hobbyist.co.nz/?q=motor-shield-tutorial



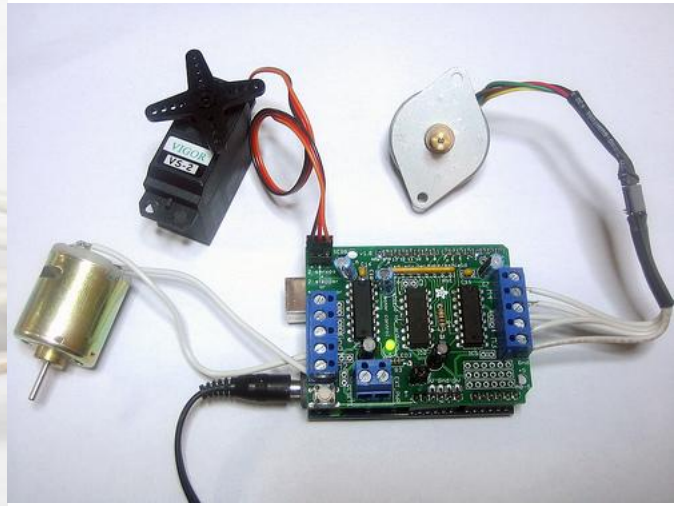
Arduino avanzado: motores

https://www.sparkfun.com/products/9670



Arduino avanzado: motores

http://www.ladyada.net/make/mshield/index.html

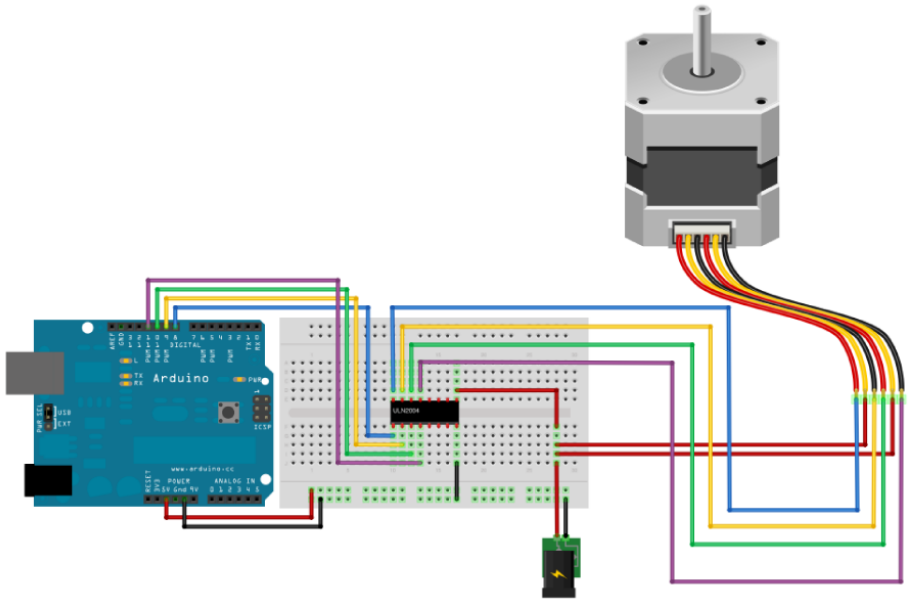


Arduino avanzado: motores

http://arduino.cc/en/Tutorial/StepperUnipolar
http://arduino.cc/es/Reference/Stepper

```
const int stepsPerRevolution = 2048;
Stepper myStepper(stepsPerRevolution,
8,10,9,11);

myStepper.setSpeed(8);
myStepper.step(10);  //10 pasos
```



Conclusiones

Gracias por vuestra atención