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/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Exercise the motor using

the L293D chip

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#define ENABLE 5

#define DIRA 3

#define DIRB 4

int i;

void setup() {

//---set pin direction

pinMode(ENABLE,OUTPUT);

pinMode(DIRA,OUTPUT);

pinMode(DIRB,OUTPUT);

Serial.begin(9600);

}

void loop() {

//---back and forth example

Serial.println("One way, then reverse");

digitalWrite(ENABLE,HIGH); // enable on

for (i=0;i<5;i++) {

digitalWrite(DIRA,HIGH); //one way

digitalWrite(DIRB,LOW);

delay(500);

digitalWrite(DIRA,LOW); //reverse

digitalWrite(DIRB,HIGH);

delay(500);

}

digitalWrite(ENABLE,LOW); // disable

delay(2000);

Serial.println("fast Slow example");

//---fast/slow stop example

digitalWrite(ENABLE,HIGH); //enable on

digitalWrite(DIRA,HIGH); //one way

digitalWrite(DIRB,LOW);

delay(3000);

digitalWrite(ENABLE,LOW); //slow stop

delay(1000);

digitalWrite(ENABLE,HIGH); //enable on

digitalWrite(DIRA,LOW); //one way

digitalWrite(DIRB,HIGH);

delay(3000);

digitalWrite(DIRA,LOW); //fast stop

delay(2000);

Serial.println("PWM full then slow");

//---PWM example, full speed then slow

analogWrite(ENABLE,255); //enable on

digitalWrite(DIRA,HIGH); //one way

digitalWrite(DIRB,LOW);

delay(2000);

analogWrite(ENABLE,180); //half speed

delay(2000);

analogWrite(ENABLE,128); //half speed

delay(2000);

analogWrite(ENABLE,50); //half speed

delay(2000);

analogWrite(ENABLE,128); //half speed

delay(2000);

analogWrite(ENABLE,180); //half speed

delay(2000);

analogWrite(ENABLE,255); //half speed

delay(2000);

digitalWrite(ENABLE,LOW); //all done

delay(10000);

}