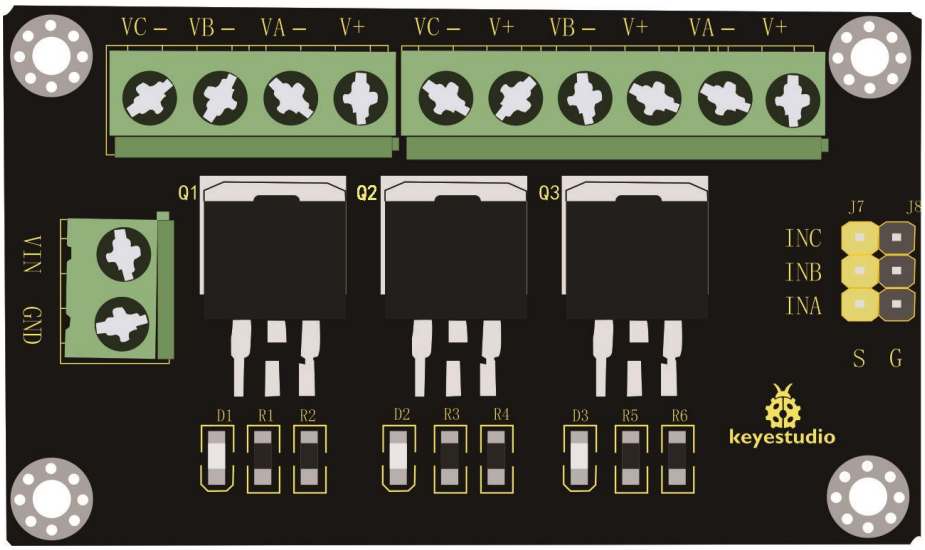
keyestudio 3-Channel IRF540NS Large Current MOS Module

Black and Eco-friendly



Overview

The keyestudio 3-channel IRF540NS large current MOS module uses 3-channel MOS switch, which is applied to operate the large current with small current, similar to a relay element.

It can be applied to drive the Servo, large current LED light, etc.

When using, input the voltage less than 40V to the terminal block VIN GND, the voltage of V+ block is equal to VIN block.

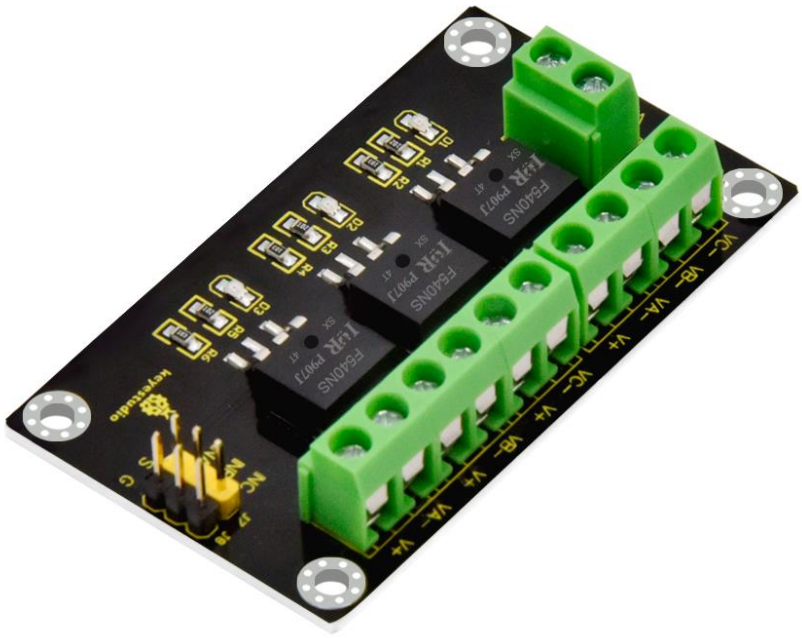
We can control the HIGH or LOW of INA INB INC pin headers to determine whether connect to ground.

When at HIGH, INA- INB- INC-pin headers are connected to ground, D1 D2 D3 led will turn on; when at LOW, INA- INB- INC-pin headers suspend, D1 D2 D3 led will turn off.

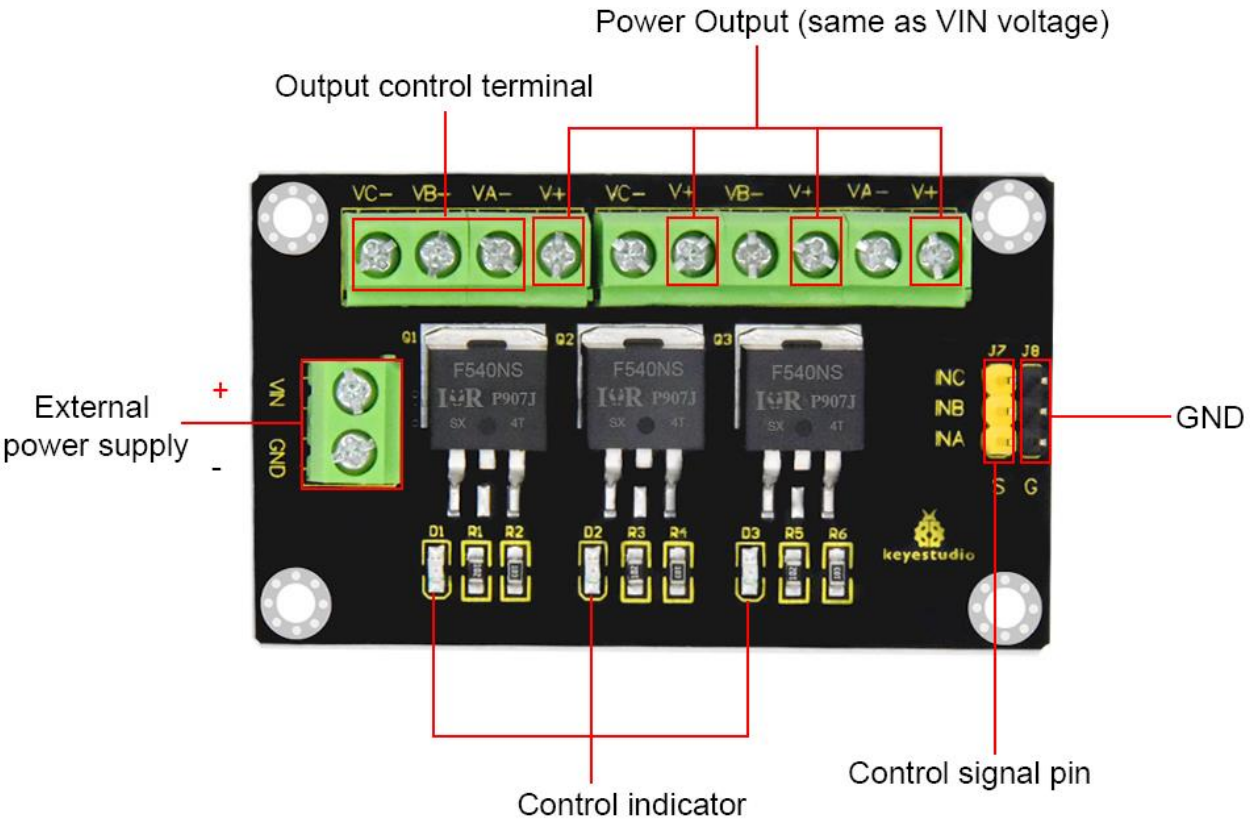
The module comes with four 3mm fixing holes, easy to fix on any other devices.

Technical Details

- Working voltage: VIN terminal is less than DC 40V
- Operating current: less than 10A
- Operating temperature: -20 ~ +60℃
- Dimensions: 66mm * 38mm * 12 mm
- Weight: 22.8 g
- Environmental properties: ROHS



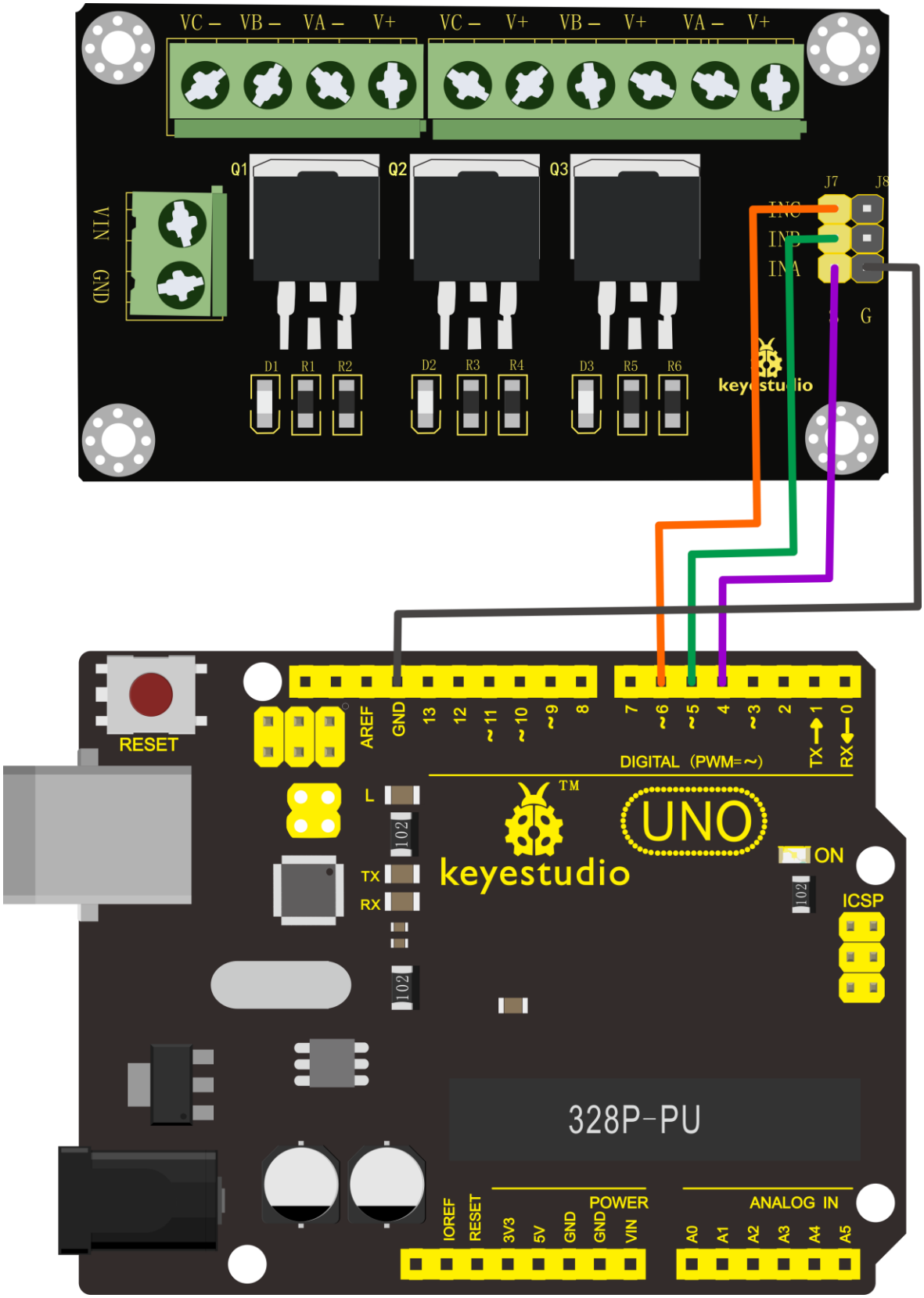
PINOUTS



INA/INB/INC is high level, VA-/VB-/VC-connect to GND

INA/INB/INC is low level, VA-/VB-/VC-disconnect GND

Connection

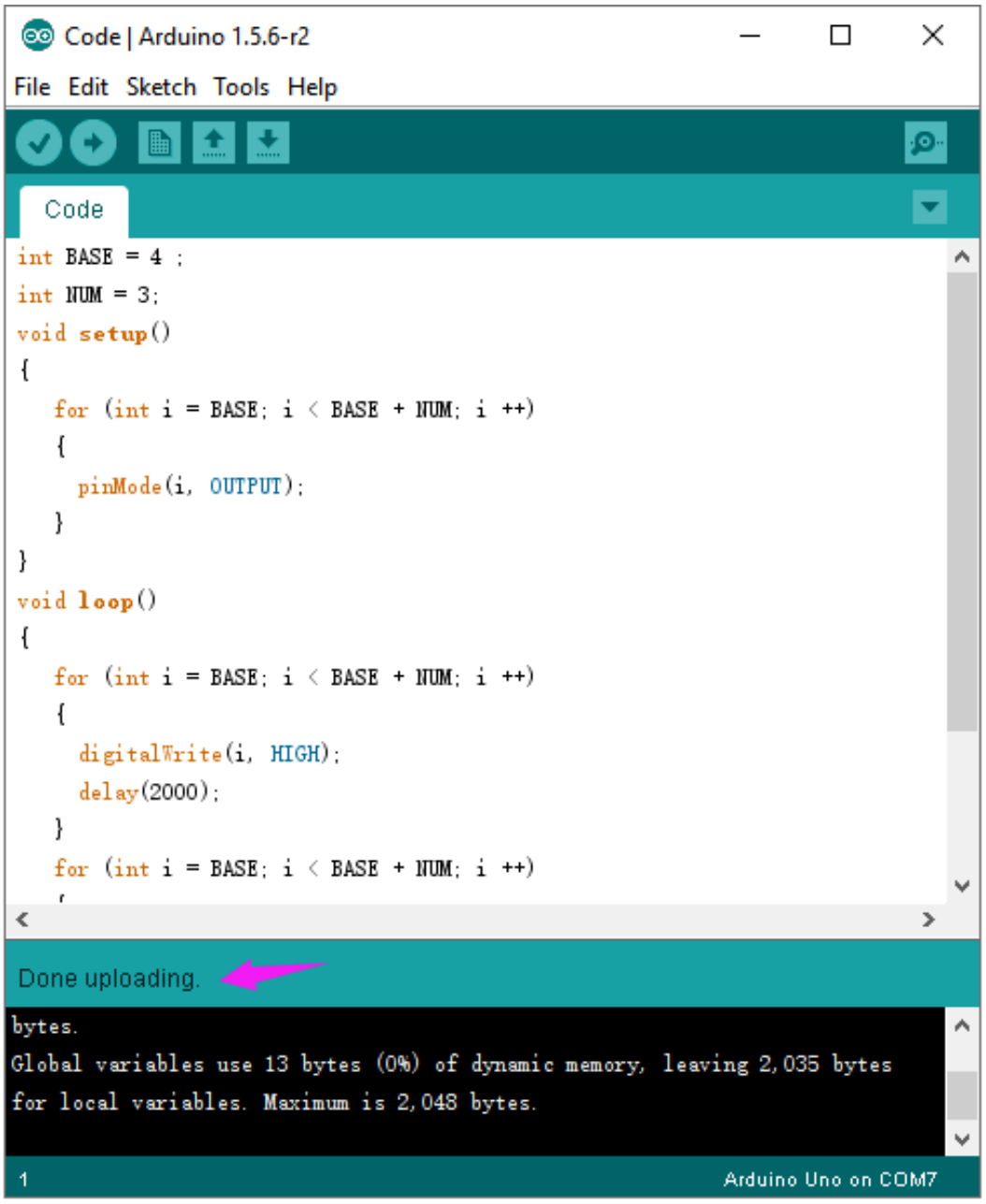

VC – VB – VA – V+ VC – V+ VB – V+ VA – V+
Q1 Q2 Q3
VIN GND
J7 J8
INC
INB
INA
G
D1 R1 R2 D2 R3 R4 D3 R5 R6
RESET
AREF GND 13 12 ~11 ~10 ~9 8 7 ~6 ~5 4 ~3 2 TX→1 RX←0
DIGITAL (PWM=~)
L
TX
RX
keyestudio
UNO
ON
ICSP
328P-PU
POWER
IOREF RESET 3V3 5V GND GND VIN
ANALOG IN
A0 A1 A2 A3 A4 A5

Test Code

```
**********
int BASE = 4 ;
int NUM = 3;
void setup()
{
    for (int i = BASE; i < BASE + NUM; i ++)
    {
       pinMode(i, OUTPUT);
    }
}
void loop()
{
    for (int i = BASE; i < BASE + NUM; i ++)
    {
       digitalWrite(i, HIGH);
       delay(2000);
    }
    for (int i = BASE; i < BASE + NUM; i ++)
    {
       digitalWrite(i, LOW);
       delay(2000);
```

```
    }
}
**********
```

Test Result


Code | Arduino 1.5.6-r2
File Edit Sketch Tools Help
Code
int BASE = 4 ;
int NUM = 3;
void setup()
{
for (int i = BASE; i < BASE + NUM; i ++)
{
pinMode(i, OUTPUT);
}
}
void loop()
{
for (int i = BASE; i < BASE + NUM; i ++)
{
digitalWrite(i, HIGH);
delay(2000);
}
for (int i = BASE; i < BASE + NUM; i ++)
Done uploading.
bytes.
Global variables use 13 bytes (0%) of dynamic memory, leaving 2,035 bytes
for local variables. Maximum is 2,048 bytes.
1
Arduino Uno on COM7

Done uploading the code, powered on, when NA- NB- NC-pin headers are successively connected to ground, D3 D2 D1 led will successively turn on; then NA- NB- NC-pin headers successively suspend, D3 D2 D1 led will successively turn off, alternately and circularly.