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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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## RGB LED Breakout (3528) SKU:DFR0239

From Robt Wiki



RGB LED Breakout (3528)

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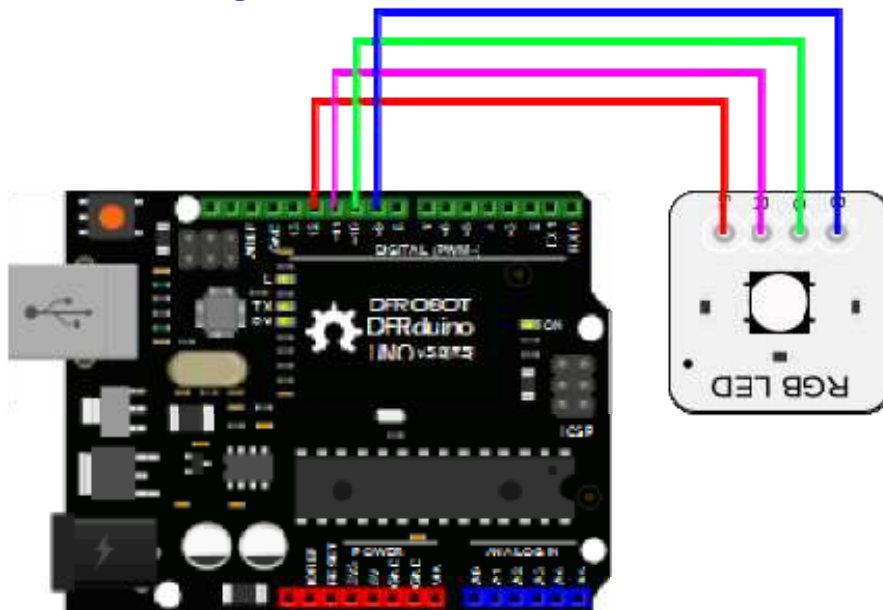
### Introduction

This small size breakout is programmable full-color RGB LED for hobbyists, industrial designers, prototypers, and experimenters. It is designed to allow the easy addition of dynamic indicators, displays, and lighting to existing or new projects. Controlled by PWM channels can be available in soft red, orange, yellow, green, blue and white...The high quality LED has wide viewing angle and optimized light coupling by inter reflector.

### Specification

- Full color RGB LED
- Operating Voltage:5V
- Wide viewing angle
- White package
- Operating Temperature:-40°C to +85°C
- Size:13x13mm

## Connection Diagram



## Sample Code

As 3528 is a common anode component, the PWM value formula: **PWM=255-RGB**.  
For example: Purple(128,0,128)

```
int r=128;
int g=0;
int b=128; //purple

void setup()
{
  pinMode(9,OUTPUT);
  pinMode(10,OUTPUT);
  pinMode(11,OUTPUT);
  pinMode(12,OUTPUT);
}
void loop()
```

```
{  
  digitalWrite(12,HIGH);    //Power 5V  
  analogWrite(11,(255-r));  
  analogWrite(10,(255-g));  
  analogWrite(9,(255-b));  
}
```