



RGB LED Breakout (3528) SKU:DFR0239

From Robt Wiki



RGB LED Breakout (3528)

Contents

- 1 Introduction
- 2 Specification
- 3 Connection Diagram
- 4 Sample Code

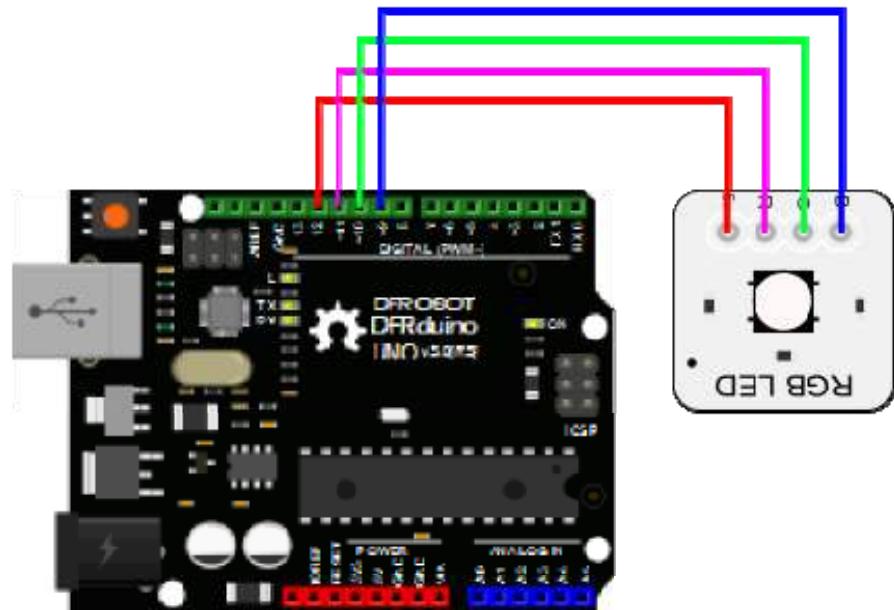
Introduction

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));
```

```
}
```