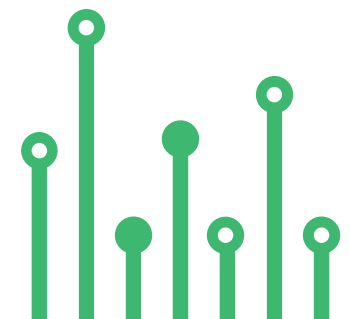


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“ Linear Current Source LED Driver with Dimmer Input —



SKU: EL136285

Linear Current Source LED Driver with Dimmer Input



The compact module shown here is a linear current source for LED driver and it's ideal for automotive LED lighting applications. The project is built using a TLD1211 chip from Infineon. The board provides supply to LEDs under the severe condition of automotive applications resulting in constant brightness and extended LED lifetime. The project is capable to drive high current, high brightness LEDs. The circuit features overload, short circuit, over-voltage, and over-temperature protections. It also has the option to control the LED brightness control by an external PWM signal.

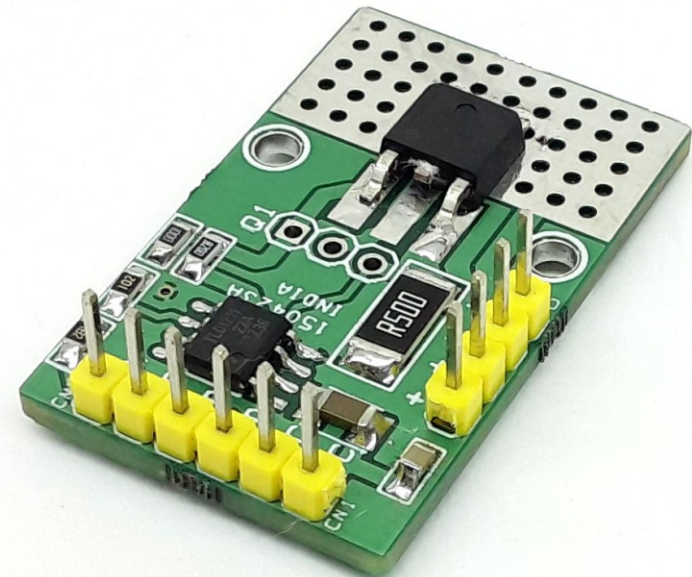
The project can provide an output current of up to 2.5A. You will need to choose the appropriate booster transistor Q1 and sense resistor R5 to achieve this output. Please refer to the datasheet of the chip for more info.

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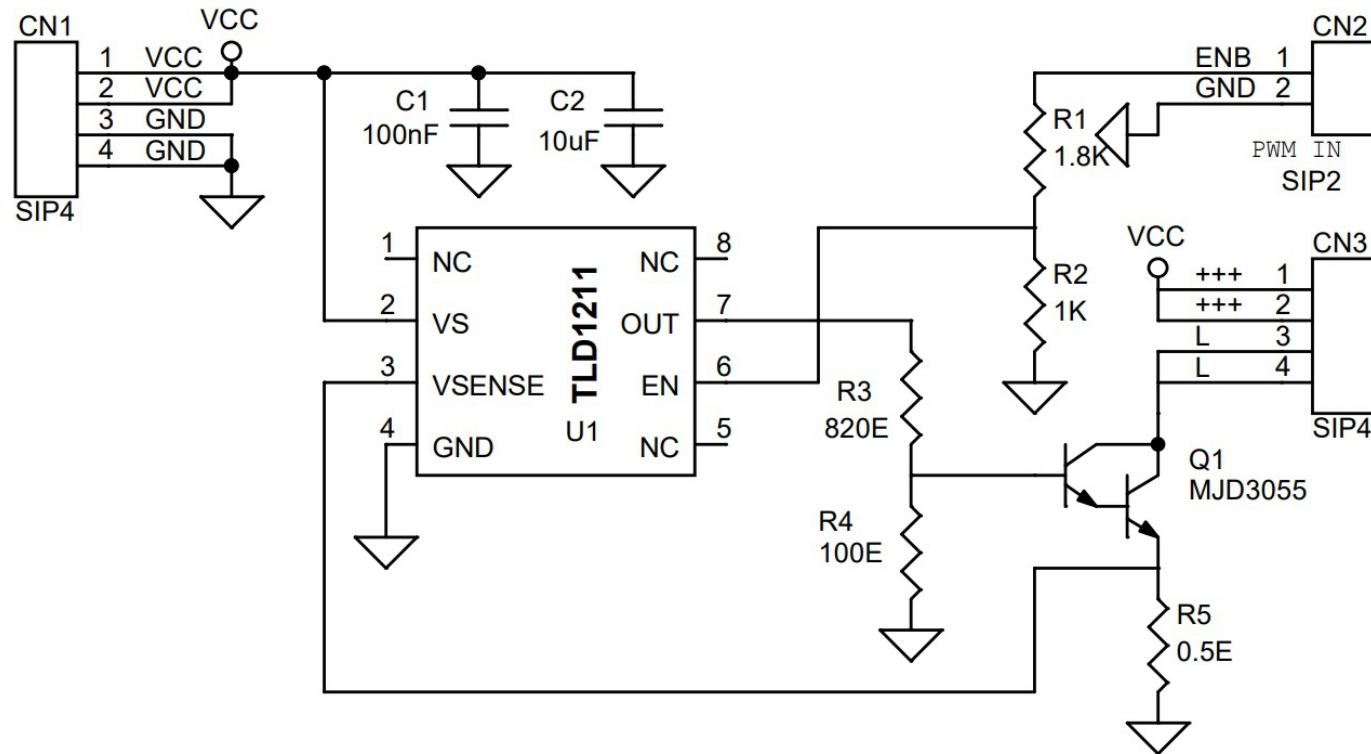
Note: Dimmer: LED brightness control is possible with an external PWM signal. In this case, you can use the enable pin to feed a PWM signal to control the brightness of the LED. For full current/full brightness apply 5V to Enable Pin or change resistor R1 to 12K and connect it to a 24V LED supply to enable the output.

Features

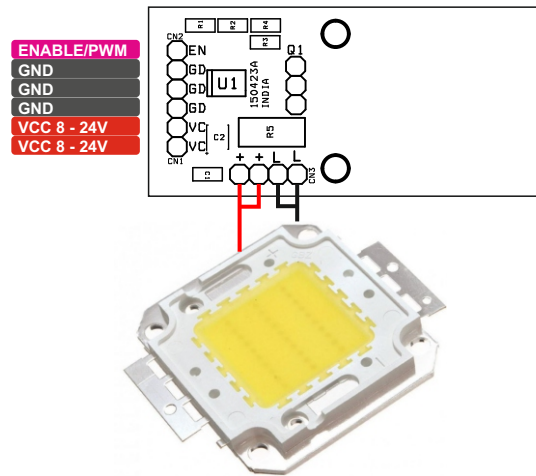
- Operating Voltage 8 to 24V (Maximum 28V)
- Load Current 300mA
- Constant Current Output
- Enable Input for PWM Brightness or ON/OFF
- Over Voltage Protection
- Very low Standby Current
- PCB Dimensions 36.04 x 22.54mm
- 2 x 2.5mm Mounting Holes



Schematic



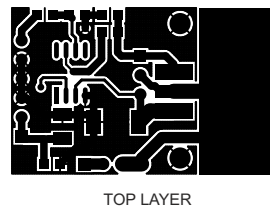
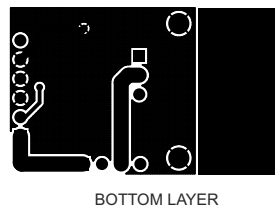
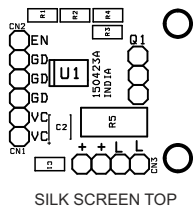
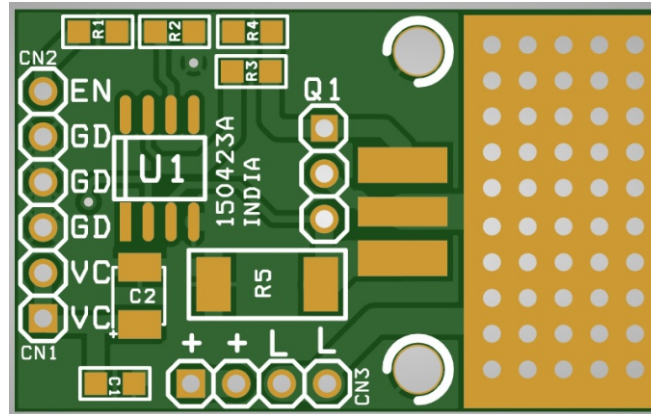
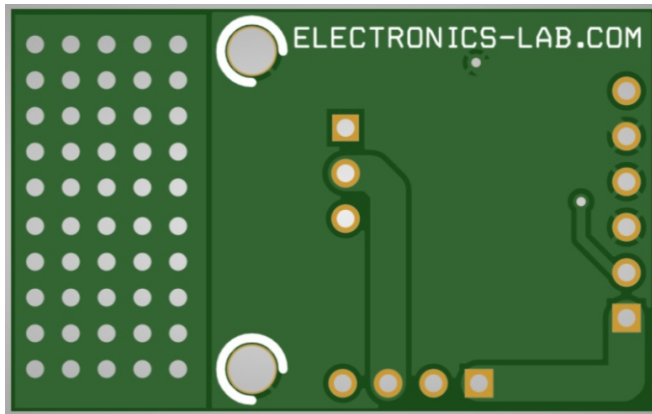
Connections



Connections and Other Details

- CN1: Pin 1,2 = VCC, Pin 3, 4 = GND
- CN2: Pin 1 = Enable or PWM Enput, Pin 2 = GND
- Cn3: Pin 1, 2 = +LED , Pin 3,4 = -LED

PCB



PCB DIMENSIONS 36.04 X 22.54MM

Parts List

BOM						
NO.	QNTY.	REF.	DESC	MANUFACTURER	SUPPLIER	SUPPLIER'S PART NO
1	2	CN1,CN3	4 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5317-ND
2	1	CN2	2 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5315-ND
3	1	C1	100nF/50V CERAMIC SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
4	1	C2	10uF/35V CERAMIC SMD 1206 OR 1210	YAGEO/MURATA	DIGIKEY	
5	1	Q1	MJD3055	ONSEMI	DIGIKEY	MJD3055-ND
6	1	R1	1.8K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
7	1	R2	1K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
8	1	R3	820E 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
9	1	R4	100E 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
10	1	R5	0.5E/2W 1% SMD SIZE 2512	YAGEO/MURATA	DIGIKEY	
11	1	U1	TLD1211 SOIC8	INFINEON	DIGIKEY	TLD1211SJFUMA1TR-ND

Notes

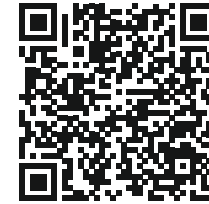


APP

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Android App

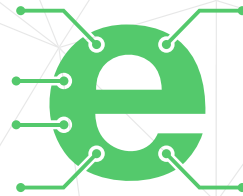
DOWNLOAD



Android App launched in 2017 and has 100k+ downloads - rated with 4.5 stars.

SCAN QR CODE





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