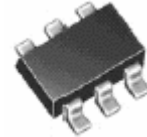


### 3-Channel Low-Dropout Constant-Current Parallel LED Driver with 1-Wire Pulse Counting Dimming Control

www.datasheet4u.com

#### General Description

The CP2141, a 3-channel low-dropout constant-current parallel LED driver, can be used to drive white LED, red LED, blue LED or any color LED whose forward operating voltage is lower than the battery voltage. The unique Auto-Mirror™ technology is introduced in CP2141, which can guarantee a constant LED current in various operating conditions. The CP2141 uses the 1-wire pulse counting technique to adjust the brightness of LEDs, with the pulse signal on the EN pin, the LED current varies according to 16 steps logarithmic scale. Without any external components, it is available in a tiny SOT23-6L package and is ideally suitable for portable device applications.



SOT23-6L  
-40°C~85°C

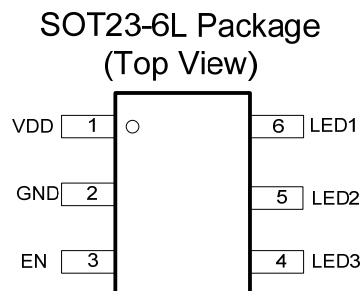
#### Features

- No External Component Required
- 20mA Full Scale Current per Channel
- Only 100mV Dropout Voltage Needed at 20mA per Channel
- 1-Wire Pulse Counting Dimming: 16 Steps Logarithmic Scale
- LED Current Matching:  $\pm 2\%$  (typical)
- Over 90% Efficiency can be Reached
- No EMI and Switch Noise
- Thermal Shutdown Protection
- Supply Voltage Range: 2.7~5.5V
- Shutdown Current Less Than 0.1 $\mu$ A
- RoHS Compliant and 100% Lead(Pb)-free

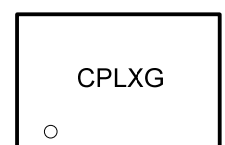
#### Applications

- Mobile Phones
- Digital Still Camera
- MP3 Players
- PDA
- GPS Receivers

#### Pin Configuration



#### SOT23-6L Marking

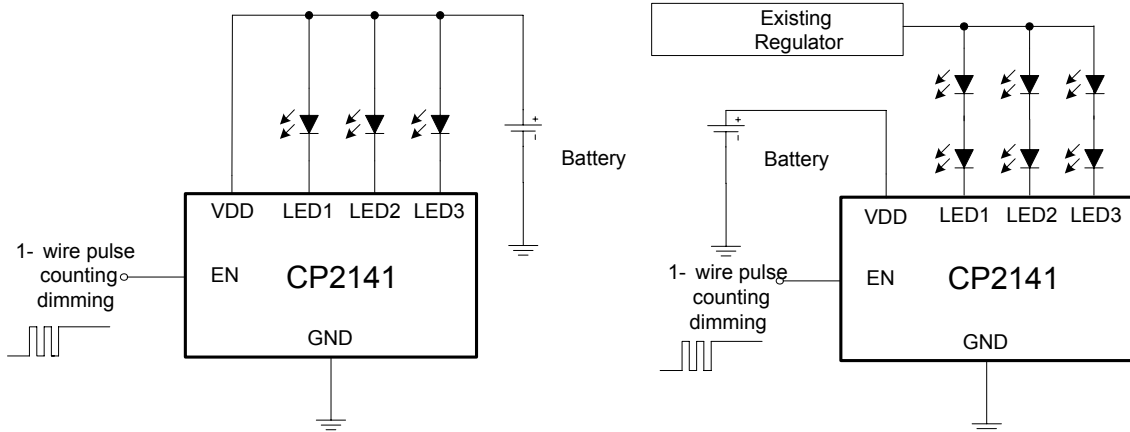


CPLXG-CP2141ST

### 3-Channel Low-Dropout Constant-Current Parallel LED Driver with 1-Wire Pulse Counting Dimming Control

#### Typical Application Circuit

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