

General Description

The TCS5203BC series is a step-up converter designed for driving up to 10 white LEDs or up to 40V output voltage from a single cell Lithium Ion battery. The device features integrated overvoltage protection and feedback voltage is regulated to 100mV to 600mV. Low feedback voltage helps to reduce power loss and improve efficiency. Customers can choose different FB voltages according to their application. Optimized operation frequency can meet the requirement of small LC filters value and low operation current with high efficiency. Internal soft start function can reduce the inrush current. Both SOT23-5 package type provides the best solution for PCB space saving and total BOM cost.

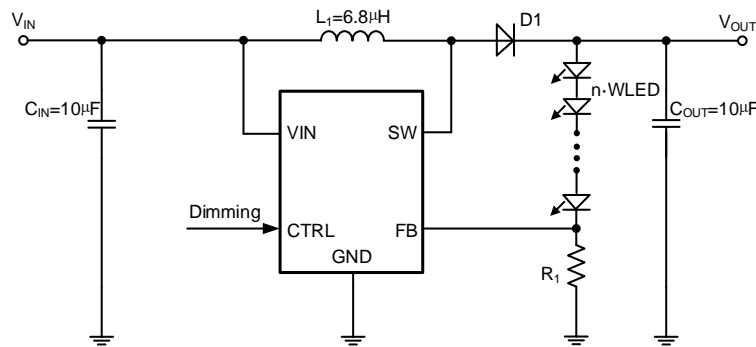
Features

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|--|--------------------------------------|
| 2.5V to 5.5V Input Voltage | Internal 40V Over Voltage Protection |
| Up to 40V Output Voltage | Internal Compensation |
| 1.2MHz Fixed Switching Frequency | Thermal Shutdown |
| 0.1/0.2/0.25/0.3/0.6V Feedback Voltage | Driving Up to 10 White LEDs |
| Internal 1.6A Switch Current Limit | Dimming with wide Frequency Range |
| Support Analog and PWM Dimming Mode | Available in SOT23-5, package |

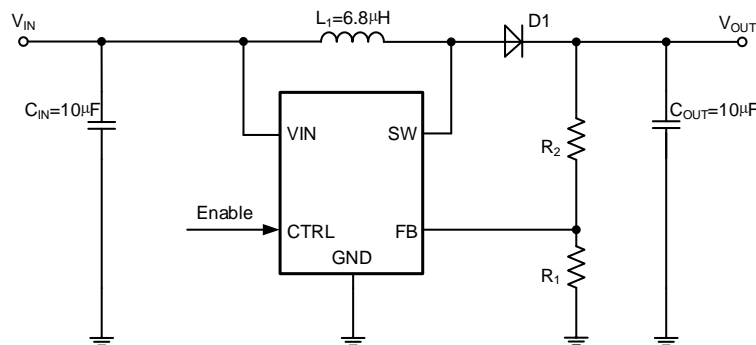
Applications

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|------------------------|--------------------|
| Camera Flash White LED | PDA LED back light |
| Digital still cameras | LCD Bias Supply |

Typical Application Circuit



Typical White LED Application Circuit



Typical Boost Application Circuit