

Features

- Synchronous rectification: Up to 95% efficiency
- Single inductor
- Quiescent current: 500uA
- Programmable LED drive current, up to 1A
- Input voltage range from 1.8V to 5V
- No Schottky Diodes required
- Shutdown current: $I_Q < 1\mu A$
- Package: SOP-8/PP

Applications

- LED standby light
- Constant current source
- LED flashlight

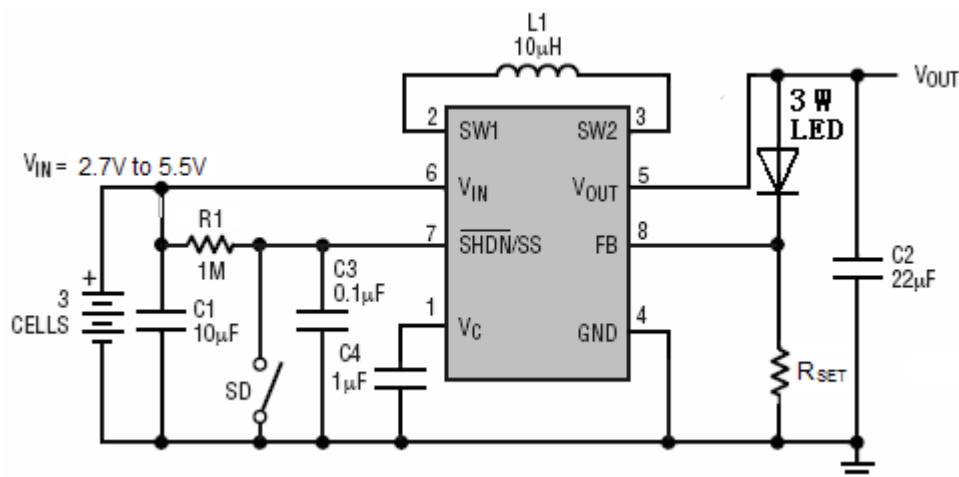
Description

The HX8005 is high efficiency, fixed frequency, Buck-Boost LED driver which operates from input voltages above, below or equal to the output voltage. The device is suitable for single lithium-ion, multi-cell alkaline or NiMH applications where the output voltage is within the scope of battery voltage.

The quiescent current is only 500uA, and this feature maximizing the battery life in portable applications.

Other features include thermal shutdown and current limit. The HX8005 is available in the SOP-8/PP package.

Typical Application Circuit



* The feedback reference voltage is typically $0.097V \cdot I_{LED} = V_{FB} / R_{SET}$.