

HL9701SC

Secondary-Side Synchronous Rectifier Controller for Flyback Converters

Overview

The HL9701 is a secondary-side synchronous rectifier (SR) controller for isolated flyback converters. By implementing proprietary turn-off control algorithm, the HL9701 can reliably support discontinuous conduction mode (DCM), quasi-resonant (QR), and continuous conduction mode (CCM) operation, which will help to design robust flyback converters.

Features

- Compatibility of continuous conduction mode (CCM), quasi-resonant (QR), and discontinuous conduction mode (DCM)
- Compatible with high side and low side application
- Wide input voltage ranges up to 26.5V
- Optimized SR gate turn-off threshold control
- Proprietary CCM SR turn-off control algorithm
- Minimized SR turn-on/off propagation delay
- SR MOSFET gate passive clamp
- Low power saving mode
- Small footprint with SOT-23 6 pin package

Applications

- USB PD Quick Chargers for Smartphones, Feature Phones, and Tablet PCs
- Power Adapters for Portable Devices
- Flyback Power Supplies with Fixed or Variable Output Voltage

Simplified Application Diagrams

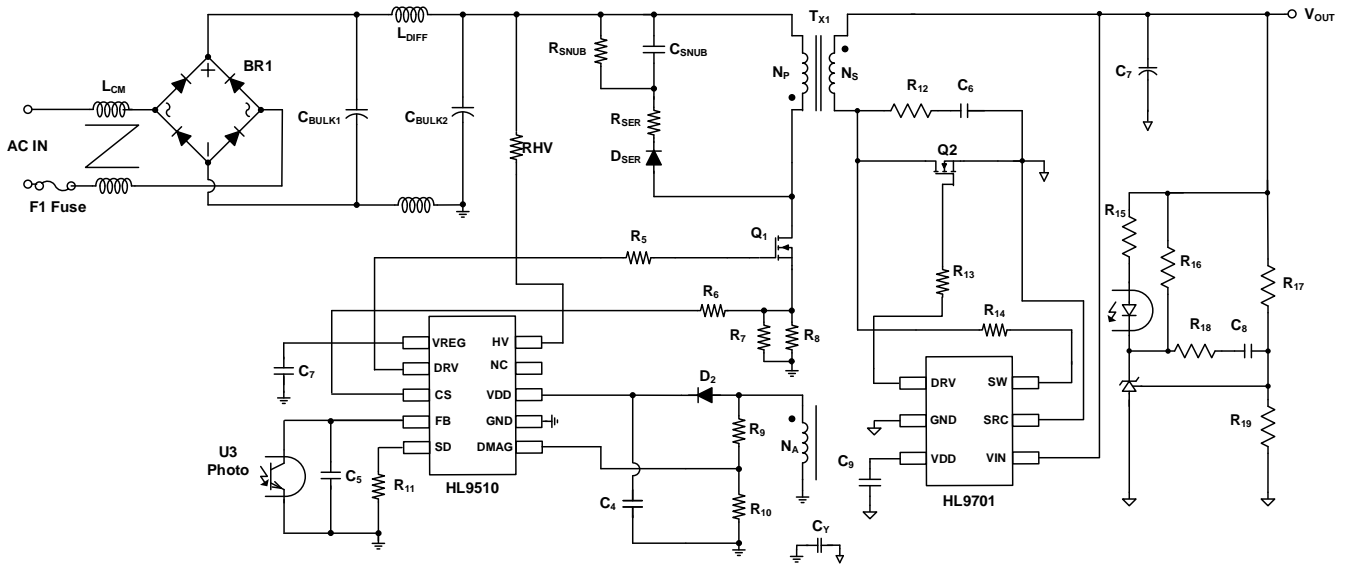


Figure 1. Low-Side SR Application Diagram

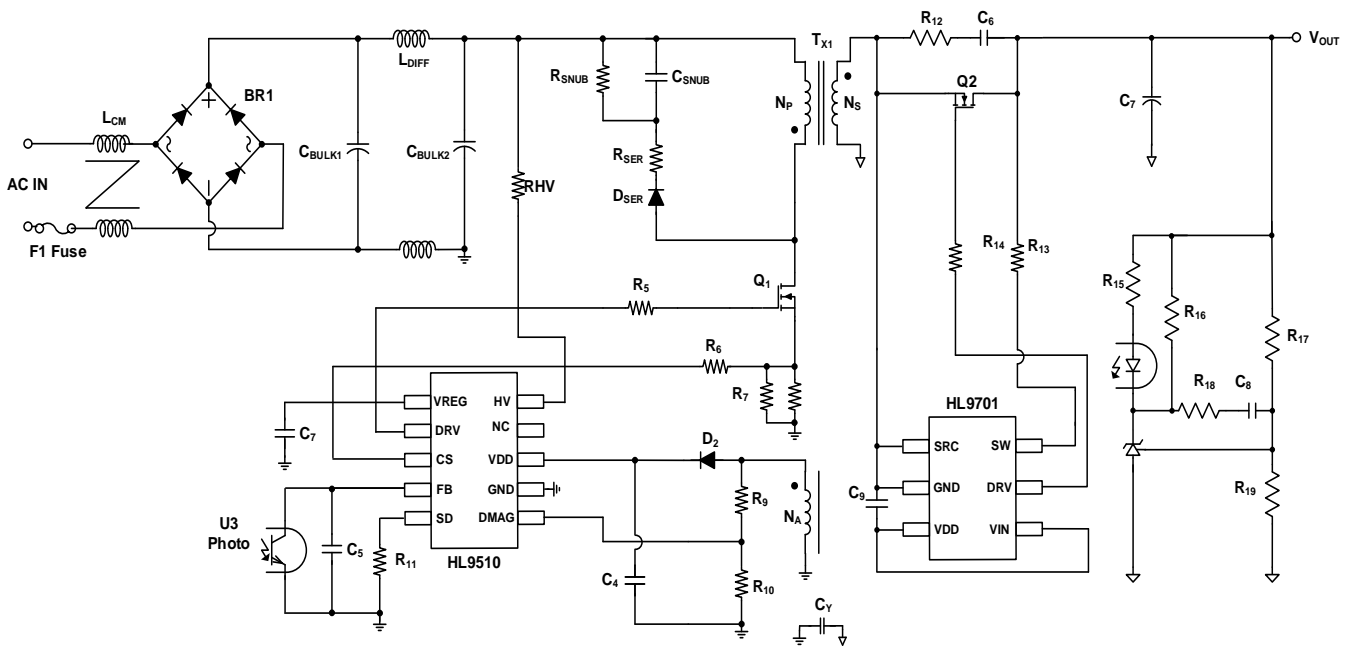


Figure 2. High-Side SR Application Diagram

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
HL9701SC01	-40°C to +125°C	6-Lead, SOT23	3K/Tape & Reel

Pin Configuration and Marking Diagram

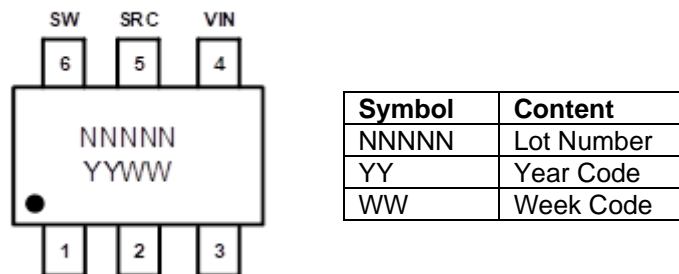


Figure 3. The HL9701 Pin Configuration & Marking Diagram (Top View)

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