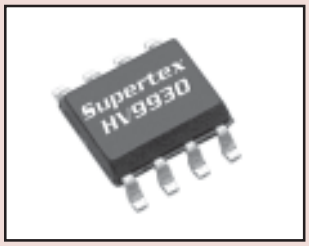
Product Summary Sheet

Applications

- Automotive LED Lighting
- Battery Powered LED Lamps
- RGB Backlight applications
- Low Voltage AC/DC or DC/DC LED Drivers

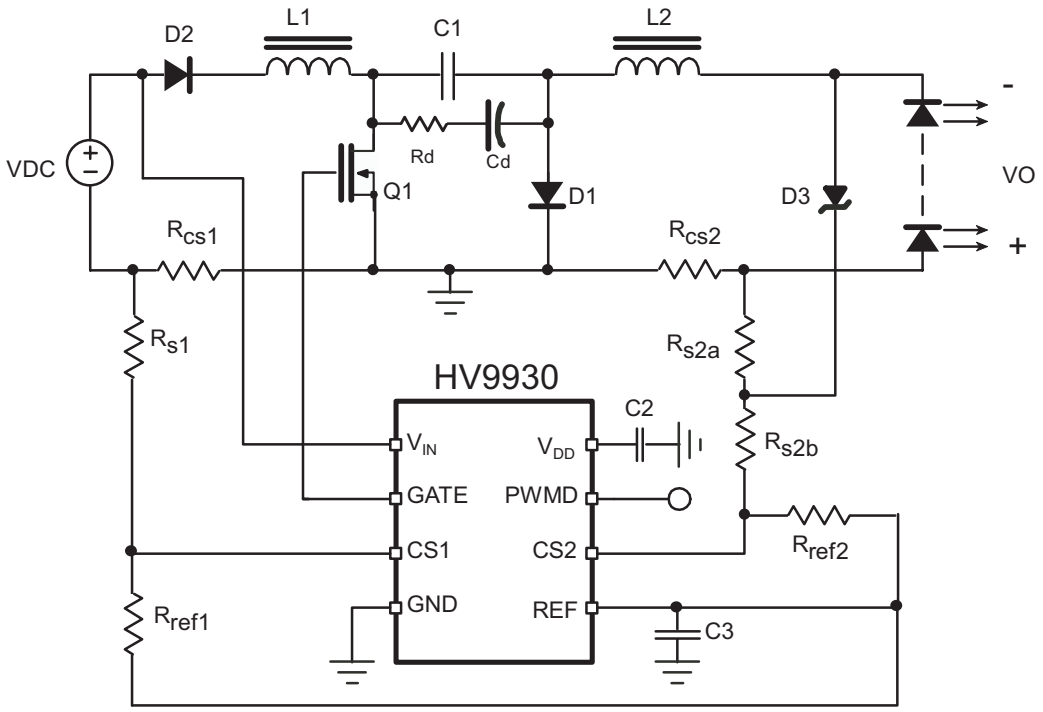
Available Packages:



8-Lead SOIC (LG)

HV9930

Hysteretic Boost-Buck LED Driver



Typical Application Circuit

Product Overview:

The HV9930 is a variable frequency PWM controller IC designed to drive LED lamps using a boost-buck topology. The HV9930 utilizes a hysteretic current-mode control to regulate both the input and output currents. This provides fast transient response (required for PWM dimming of the LED lamp) without the necessary complexity of loop compensation components. Input current control enables current limiting during startup and output overload conditions. Output current control provides constant LED current.

The boost-buck topology is ideal for applications in which the LED voltage needs automatic step up and/or step down from the input voltage, such as automotive lighting, RGB backlight for TV's, monitors and displays, and DC/DC LED driver modules.

Features of HV9930:	Benefits:
Hysteretic Control	Low External Part Count. No compensation components. Fast Transient Response
Boost-Buck Topology	Automatic Step Up or Down of output (LED) voltage. Inherent low EMI. Capacitive Isolation between Input and Output to faults.
DC Input range: 8VDC to 200VDC	Meets automotive input range, including transients. Ideal for high voltage DC/DC operation.
Input and Output Current Sensing	More accurate LED current sensing. Inherent output short circuit protection

Supertex, Inc.

HV9930

Hysteretic Boost-Buck LED Driver

Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV9930LG	8-Lead SOIC	NOW	4 - 5 weeks ARO

Demo Board Information

Part Number	V_{IN}	$V_{LED}(max)/I_{OUT}$	Availability
HV9930DB1	9VDC – 16VDC *(42V Transient and 15V reverse)*	28V / 350mA	4 - 5 weeks ARO

Product Contact

If you have any questions regarding the HV9930, please contact your local Supertex sales office, or contact the main office in the US at

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