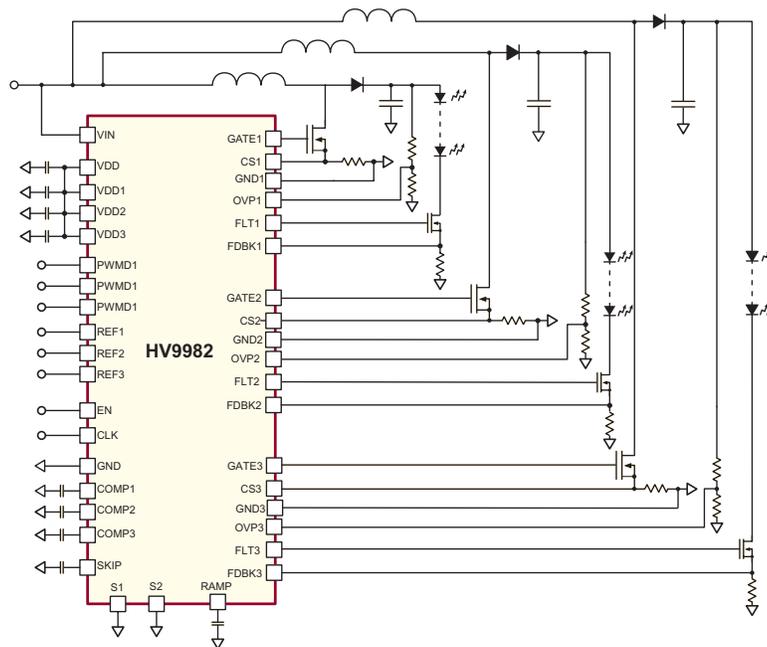


Product Summary Sheet

HV9982 Three-Channel, Closed-Loop, Switch Mode LED Driver IC

Applications

- ▶ RGB backlight applications
- ▶ Multiple string white LED driver applications



Typical Application Circuit

Product Overview:

The HV9982 is a three-channel, closed loop, peak current mode PWM controller for driving a constant output current. It can be used for driving either RGB LEDs or multiple channels of white LEDs.

The HV9982 includes a 40V linear regulator which provides an 8V supply to power the IC. The switching frequencies of the three converters are controlled by an external clock signal. The channels operate at a switching frequency of 1/12th of the external clock frequency to reduce the input current ripple. Each converter is driven by a peak current mode controller with output current feedback.

The three output currents can be individually dimmed using either linear or PWM dimming. The IC also includes three disconnect FET drivers which enable high PWM dimming ratios and also help to disconnect the input in case of an output short circuit condition. HV9982 includes a hiccup mode protection for both open LED and short circuit condition with automatic recovery when the fault clears.

Features:	Benefits:
Internal Transconductance Op Amp	Closed-loop system. Tight line and load regulation of the LED current with excellent PWM dimming performance.
Synchronization	Prevents noise issues when operating multiple ICs in a single system.
External Switching FETs	Flexibility in use of various converter topologies (Buck, Boost, and SEPIC) and at different load conditions (LED voltage/current).
Programmable internal OVP comparator and short circuit protection	Integrated hiccup mode open LED and output short circuit protection helps the system recover after momentary faults.



40-Lead QFN (K6)



HV9982

Three-Channel, Closed-Loop, Switch Mode LED Driver IC

Ordering Information / Availability

<u>Part Number</u>	<u>Package Option</u>	<u>Samples</u>	<u>Lead Time</u>
HV9982K6-G	40-Lead QFN (Green)	Now	2-4 Weeks ARO

-G indicates the part is RoHS compliant (Green).



Product Contact

For any questions regarding the HV9982 please contact your local area Supertex sales office, or contact the main office in the US at:

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