

LM3429MH/NOPB

LED DRVR 5V/9V/12V/15V/18V/24V 14-Pin HTSSOP EP Tube

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: HTSSOP14

Product Type: Optoelectronics

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The LM3429 is a versatile high voltage N-channel MosFET controller for LED drivers. It can be easily configured in buck, boost, buck-boost and SEPIC topologies. This flexibility, along with an input voltage rating of 75V, makes the LM3429 ideal for illuminating LEDs in a very diverse, large family of applications.

Adjustable high-side current sense voltage allows for tight regulation of the LED current with the highest efficiency possible. The LM3429 uses Predictive Off-time (PRO) control, which is a combination of peak current-mode control and a predictive off-timer. This method of control eases the design of loop compensation while providing inherent input voltage feed-forward compensation.

The LM3429 includes a high-voltage startup regulator that operates over a wide input range of 4.5 V to 75 V. The internal PWM controller is designed for adjustable switching frequencies of up to 2 MHz, thus enabling compact solutions. Additional features include analog dimming, PWM dimming, overvoltage protection, undervoltage lock-out, cycle-by-cycle current limit, and thermal shutdown.

Key Features

LM3429-Q1 is AEC-Q100 Grade 1 Qualified for Automotive Applications

V_{IN} Range From 4.5 V to 75 V

Adjustable Current Sense Voltage

High-Side Current Sensing

2-Ω, 1-A Peak MosFET Gate Driver

Input Undervoltage Protection

Overvoltage Protection

PWM Dimming

Analog Dimming

Cycle-by-Cycle Current Limit

Programmable Switching Frequency

Low Profile 14-lead HTSSOP Package

Thermal Shutdown

Recommended For You

LM2438T	LM3409HVMY/NOPB	LM3429O1MHX/NOPB

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TO-220-9 MSOP10 HTSSOP14

LM3409MY/NOPB LM3509SD/NOPB LM3406HVMHX/NOPB

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LM3409MYX/NOPB LM3405AXMY/NOPB LM2406T

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