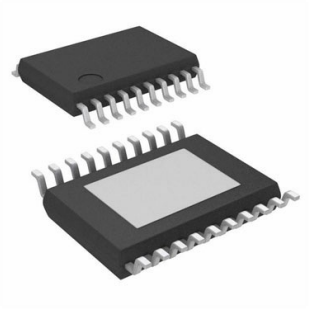
LP8861QPWPRQ1

LED Driver 32 Segment 12000uA Supply Current Automotive 20-Pin HTSSOP EP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	HTSSOP20
Product Type:	Optoelectronics
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

The LP8861-Q1 is an automotive high-efficiency, low-EMI, easy-to-use LED driver with integrated boost/SEPIC converter. It has four high-precision current sinks that can provide high dimming ratio brightness control with a PWM input signal.

The boost/SEPIC converter has adaptive output voltage control based on the LED current sink headroom voltages. This feature minimizes the power consumption by adjusting the voltage to lowest sufficient level in all conditions. The boost/SEPIC converter supports spread spectrum for switching frequency and an external synchronization with dedicated pin. A wide-range adjustable frequency allows the LP8861-Q1 to avoid disturbance for AM radio band.

The LP8861-Q1 has an option to drive an external p-FET to disconnect the input supply from the system in the event of a fault and reduce inrush current and standby power consumption. The device can reduce LED current based on temperature measured with external NTC sensor to protect LED from overheating and extend LED lifetime.

The input voltage range for the LP8861-Q1 is from 4.5 V to 40 V to support automotive stop/start and load dump condition. The LP8861-Q1 integrates extensive fault detection and protection features.

Key Features

Qualified for Automotive Applications

AECQ100 Qualified With the Following Results:

Device Temperature Grade 1: –40°C to +125°C Ambient Operating Temperature

Input Voltage Operating Range 4.5 V to 40 V

Four High-Precision Current Sinks

Current Matching 1% (Typical)

LED String Current up to 100 mA/Channel

Dimming Ratio of 10 000:1 at 100 Hz

Integrated Boost/SEPIC Converter for LED String Power

Switching Synchronization Input

Power-Line FET Control for Inrush Current Protection and Standby Energy Saving

Extensive Fault Detection and Tolerance Features

Recommended For You

LP8860AQVFPRQ1

Texas Instruments, Inc

HLQFP32

LP8860RQVFPRQ1

Texas Instruments, Inc

HLQFP-32

LP8860NQVFPRQ1

Texas Instruments, Inc

HLQFP-32

DLP9500UVFLN

Texas Instruments, Inc

DLP-TYPEA.9-355

DLP2000AFQC

Texas Instruments, Inc

CLGA(FQC)

DLP3010AFQK

Texas Instruments, Inc

CLGA57

DLPA200PFP

Texas Instruments, Inc

HTQFP-80

DLP4500AFQE

Texas Instruments, Inc

CLGA-80

DLP4710FQL

Texas Instruments, Inc

CLGA-100

DLP6500FLQ

Texas Instruments, Inc

CLGA203

DLP4500FQE

Texas Instruments, Inc

DLP

DLPC350ZFF

Texas Instruments, Inc

BGA-419

DLP9500BFLN

Texas Instruments, Inc

LCCC355

DLP6500BFYE

Texas Instruments, Inc

DLP-S600-350

DLPC410ZYR

Texas Instruments, Inc

BGA