



New Product
Announcement

ZXLD1371

LED Driver Controller Handles More Demanding Lighting Applications

The ZXLD1371 is a high accuracy LED driver controller; the LED load current that can be delivered is dependent on the external MOSFET.

The ZXLD1371 with its unique architecture, utilizing only one current sense resistor, can be used as a:

- Buck converter
- Boost converter
- Buck-Boost converter

The ZXLD1371 extends the minimum input voltage of the ZXLD1370 down to 5.0V; this allows it operate at lower input voltages than the '1370' making it better suited to applications that are subjected to large variances in their input voltages; for example automotive lighting and 12V_{AC} powered systems.

Its 60V maximum input voltage enables it to comfortably operate from 48V rails and in Boost mode can drive LED chain voltages greater than 60V



The Diodes' Advantage

The ZXLD1371 provide simple high reliability solution for driving multiple extremely high brightness LEDs in multiple topologies

▪ **Operates down to 5.0V**

Provides wider transient operating voltage range supporting applications that require this.

▪ **High accuracy LED control: 1% reference tolerance**

Better brightness control and matching between lamps

▪ **60V maximum input voltage range**

Safely operates from 12V_{AC/DC}, 24V_{AC/DC} and 48V rails.

Drives up to 15 LEDs in Buck & in excess of 20 LEDs in series in Boost.

Supports most Load Dump requirements

▪ **Multi-topology device**

1 device can be used in buck lighting, boost light and buck-boost lighting apps.

▪ **LED thermal management via external thermistor**

Improves reliability of LED lamps.

▪ **Separate 1000:1 PWM dimming capability**

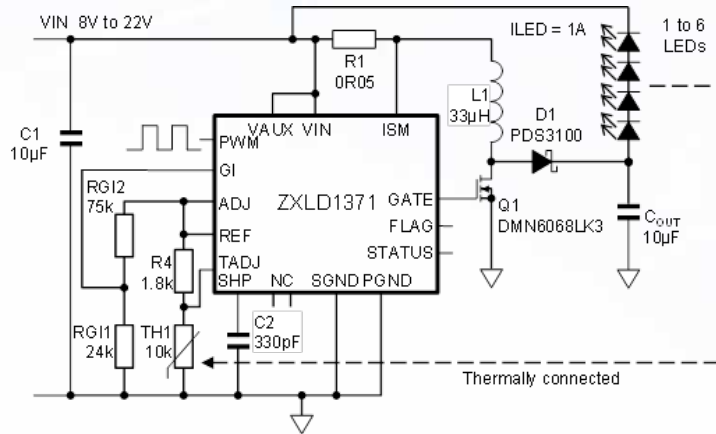
Improves dynamic range of dimming at lower light levels.

Applications

- 3+W Buck LED Driver
- Daylight Running Lamps
- 1W/3W Boost LED Driver
- 1W/3W Buck-boost LED Driver



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	ZXLD1350 ZXLD1352	ZXLD1360	ZXLD1356	ZXLD1362 ZXLD1366	ZXLD1370	ZXLD1371	ZXLD1374
Temp range	-40 ~ 105°C	-40 ~ 125°C	-40 ~ 125°C	-40 ~ 125°C	-40 ~ 125°C	-40 ~ 125°C	-40 ~ 125°C
V _{IN}	7 ~ 30V	7 ~ 30V	6 ~ 60V	6 ~ 60V	60V→6.3V	60V→5.0V	60V→6.3V
LED Current	380mA	1A	550mA	1A	External FET	External FET	1.5A
Accuracy	5/4%	5%	2.5%	5/2.5%	2%	2%	2%
Frequency	1MHz	1MHz	1MHz	1MHz	1MHz	1MHz	1MHz
Package θ _{JC} (°C/W)	TSOT23-5 (200)	TSOT23-5 (33)	TSOT23-5 (33) DFN3030-6 (14)	TSOT23-5 (33) DFN3030-6 (14) SO-8EP (7)	TSSOP-16EP (23)	TSSOP-16EP (23)	TSSOP-20EP (4)
Topology	Buck	Buck	Buck	Buck	Buck, Boost, Buck-boost	Buck, Boost, Buck-boost	Buck, Boost, Buck-boost
Dimming Control	PWM/DC	PWM/DC	PWM/DC	PWM/DC	PWM/DC	PWM/DC	PWM/DC
Status	MP	MP	MP	MP	MP	New Product	MP

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Device	Packaging	Pack mark	Reel size	Tape width	Quantity
ZXLD1371EST16TC ZXLD1371QESTTC	TSSOP-16-EP	ZXLD 1371 YYWW	13" 330mm	15mm	2500

All variants are in packages that are "Green" Molding Compound (No Br, Sb) with Lead Free Finish/RoHS Compliant

To find out more information:

Product page <http://www.diodes.com/products/catalog/detail.php?item-id=8731>

Datasheet <http://www.diodes.com/datasheets/ZXLD1371.pdf>