

## New Product Announcement

**AL3066** 

# Four-channel LED Driver with Boost Controller for Medium-sized LCD Panels

The AL3066 is a highefficiency boost controller plus 4-channel LED driver for W-LED backlight applications.

The LED current of the 4 channels is programmed from 20mA to 250mA with one external resistor. The LED current accuracy is  $\pm 3\%$ , with current matching between any channel is  $\pm 1.5\%$  (typical).

The AL3066 supports two dimming modes: direct PWM dimming, PWM to analog dimming.

Robust protection features include cycle by cycle current limit, soft-start, programmable OVP, short-circuit protection of LEDs, Inductor, V<sub>OUT</sub> and Schottky Diode plus Open Protection LEDs and Schottky Diode.

The IC is available in SO-16 package.



#### The Diodes Advantage

#### **Simple Solution for Medium sized LCD panels**

- Regulates 4 LED strings at up to 250mA per string Simple solution for medium sized LCD panels for TVs
- Supports both PWM and PWM to DC dimming
   Uses multiple dimming modes to achieve wide dynamic brightness control
- 10V Gate Driver for Boost Controller
  Supports simple enhancement of popular MOSFETs
- High LED current precision (±3%) and channel matching(±1.5%)
   Guarantee the consistency of panel brightness both between channels and between ICs
- Extensive Protection functions: (current limit, soft-start, programmable OVP, OTP, open/short LED protection, Schottky Diode Short and Open Protection, Inductor Short-Circuit Protection and V<sub>OUT</sub> Short protection

Increases system robustness

#### **Applications**

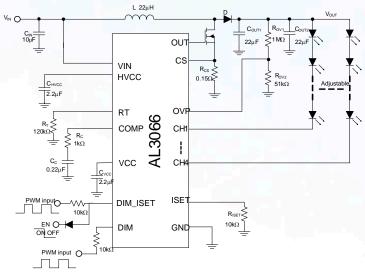
- TV/Monitor LCD panel backlight
- DC-DC boost LED Lighting



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#### **Typical Application Schematic**



#### **Product Portfolio**

Part Number	Min. Input Voltage	Max. Input Voltage	VCC/HVCC Voltage	LED Channel Number	Max.LED Voltage	Max. LED Current	LED current Accuracy	Switching Freq (Max)	LED Dir Con	trol	Operating Temperature Range	Package Outline
	V	V	V	<u></u>	V	mA	+/- %	kHz	Analog	PWM	°C	
AP3064	4.5	40	5/-	1-4	100	220	8	100-1000	N	Y	-40 ~ 85	SO-16
AL3065	4.5	40	5/-	1-4	100	400	3	100-1000	Y	Υ	-40 ~ 85	SO-16
AL3066	4.5	40	5/10	1-4	100	400	3	100-1000	Υ	Υ	-40 ~ 85	SO-16

To find out more information:

Product page <a href="http://www.diodes.com/catalog/LED">http://www.diodes.com/catalog/LED</a> Drivers for Displays Backlights 68

Datasheet <a href="http://www.diodes.com/">http://www.diodes.com/</a> files/datasheets/AL3066.pdf

#### **Ordering Information**

	Package		13"Tape & Reel			
Part Number	code	Package	Quantity	Part Number Suffix		
AL3066S16-13	S16	SO-16	2,500	-13		