



# LITEMAX LID15B01

## LED Driver

(1st Edition 9/7/2007 )

All information is subject to change without notice.

Approved by	Checked by	Prepared by
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## General

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The LID15B01 is designed to power High White LED Light Bar to a nominal power level of 24W(TYPICAL)

Intensity control(0-100%) is accomplished by the user providing a PWM signal at pin7 of LJ1. Enable control is accomplished at pin8 of LJ1(0V=on,5V=off)

## Specifications:

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- Vin=+10V to +14V  $\pm$ 10%
- Constant current and voltage function.
- No load voltage=30V
- LED Light Bar output Voltage=17V(TYPICAL)
- LED Light Bar output current=1.4A @100%(TYPICAL)
- Nominal LED Light Bar working frequency=125KHz  $\pm$ 5KHz
- PWM duty cycle range=0 to 100%
- Average electrical efficiency > 90%

## LED Application

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This specification is applied to LED converter unit for 15 " 72 pcs LED backlight

## Operating Characteristics

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Item	Symbol	Conditions	MIN.	TYP.	MAX.	Unit	Remark
Input Voltage	Vin		10.0	12.0	14.0	V	
Input Current (Low Brightness)	IinL	VIN=12V,Vadj=5V	0.0	-----	-----	mA	
Input Current (High Brightness)	IinH	VIN=12V,Vadj=0V	1.60	2.00	2.40	A	
LED Current (Low Brightness)	IoutL	VIN=12V,Vadj=5V	0.0	-----	-----	Arms	
LED Current (High Brightness)	IoutH	VIN=12V,Vadj=0V	1280	1350	1420	mA	
Working	Freq	VIN=12V,Vadj=0V	120	125	130		
PWM Frequency	Freq	VIN=12V	180	200	220	HZ	
Brightness Control	Vadj	Connection of Voltage	0.5	-----	4.8	V	
ON/OFF Control	Von/off	Normal Operation	2	-----	5	V	
Output Voltage	Vout	VIN=12V,Vadj=0V	16.0	17.0	18.0	V	
Efficiency	$\eta$	VIN=12V,Vadj=0V	90	-----	-----	%	

## Environment

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Operation Temperature	-20 ~ 70°C
Operation Humidity	90% Max. RH
Storage Temperature	-40 ~ 85°C
Storage Humidity	90% Max. RH

## Connector Socket

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Input Connector :LJ1 (JST B2B-PH-K-S or Compatible)

PIN No	Symbol	Description
1	Vin	DC+12V
2	Vin	DC+12V
3	Vin	DC+12V
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	Brightness	Brightness Control (PWM 0%~100%)
8	Control	ON/OFF Control 0.8V(OFF) 2~5V(ON)

Output Connector :LJ2,LJ3 (JST S2B-EH or Compatible)

PIN NO	Symbol	Description
1	Output	LED High Voltage( + )
2	Output	LED Low Voltage ( - )

