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Premium Optical Lamination of Clear and
Multi-Asp-Reflection Film
Optical Bonding AR and AG Glass, Touch
Panels, Optical Filters and Shields
US Value Add, Warranty, and Support
Performance and Backlight Repair
Display Optimization and Contract
Assembly
Consulting and Design Guidance



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

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:

- 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

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

Operating Characteristics

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	η	VIN=12V,Vadj=0V	90	-----	-----	%	

Environment

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

Connector Socket

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 (-)

Mechanical Characteristics

Dimension: 124mm*50mm*15mm

INPUT CONNECTOR
 LJ1:
 PIN1:VIN
 PIN2:VIN
 PIN3:VIN
 PIN4:GND
 PIN5:GND
 PIN6:GND
 PIN7:BRIGHTNESS
 PIN8:ON/OFF

