

**Subject**  
**OB3379 Demo Board Manual**

Board Model: LD60V0.75A3379.00

Doc. No.: OB\_DOC\_DBM\_337900

**Description:**

The performance of LED backlight power supply for LCD backlight application is presented. It is designed with OB3379 which integrates a buck converter. The detailed, schematic, BOM, PCB layout and test data are also described.

The test data in this report is by White LED array.

**Revision History**

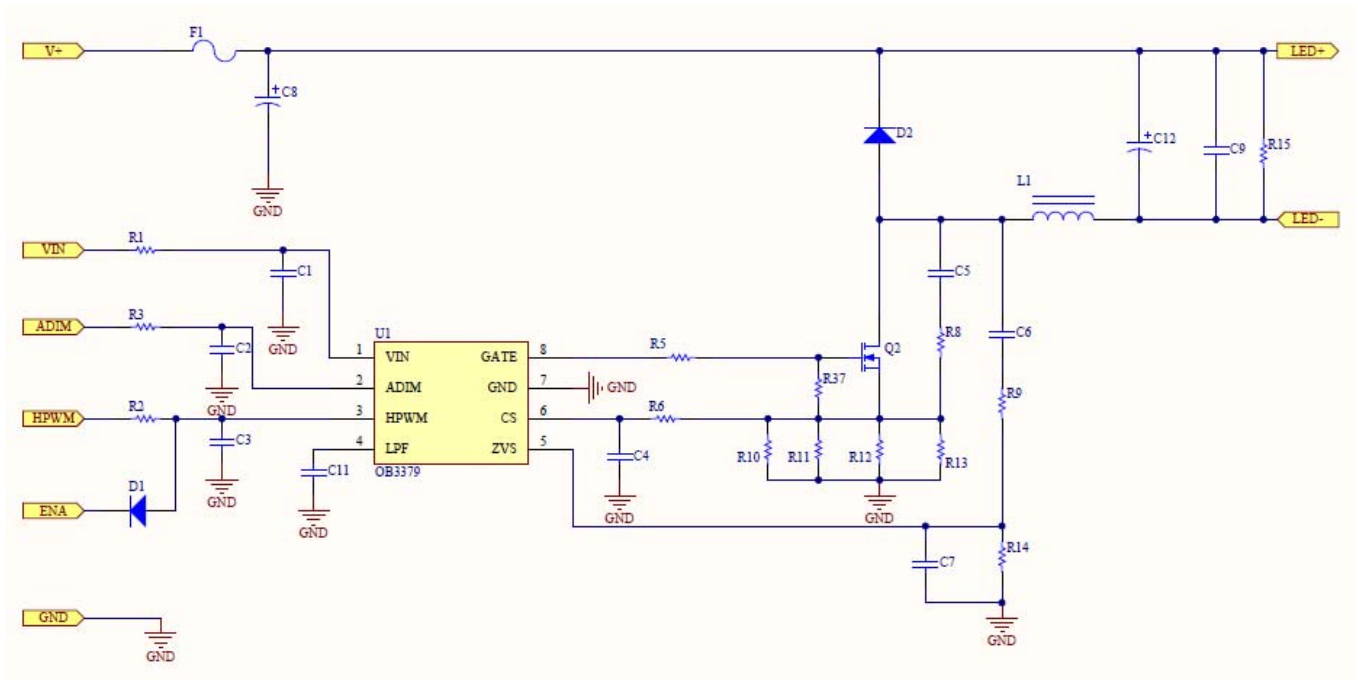
Revise Date	Version	Reason/Issue
2021-09-01	00	First Issue

## 1. Board Information

### 1.1. Features

- Low system cost and high efficiency
- Analog and PWM to analog combination dimming
- Comprehensive protections coverage covers LED open, LED+ to LED- short, Diode/Inductor short, CS open, OTP etc.
- No visible flicker and audio noise free

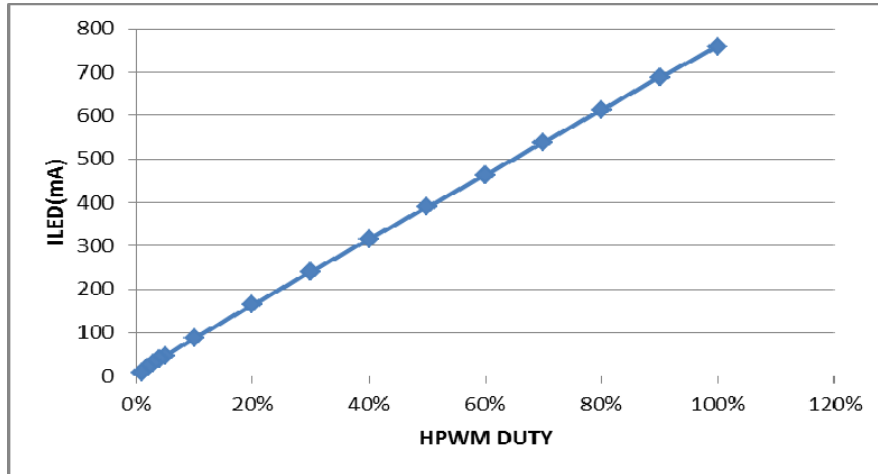
### 1.2. Electrical Schematic



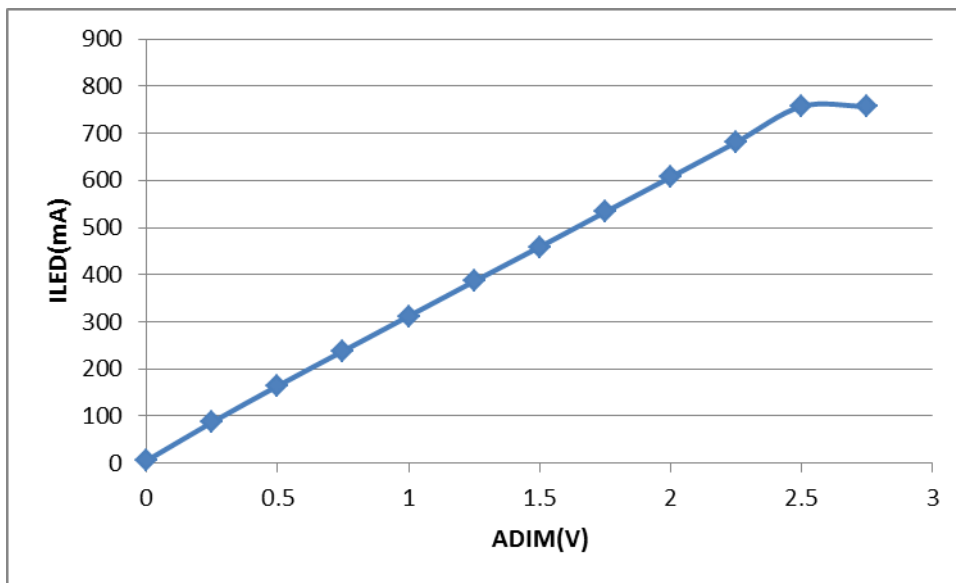
## 2. Test Data & Waveform

### 3.1 LED Current regulation

#### 3.1.1 HPWM 15khz dimming @ ADIM=2.5V



#### 3.1.2 ADIM dimming @ HPWM 100%



### 3.1.3 Steady state

Io(A)	VIN=80V	VIN=85V	VIN=90V	Precision VS VIN
Vout=30V	753.81	752.9	752.24	0.21%
Vout=60V	758.46	757.5	756.8	0.22%
Precision VS Vo	0.61%	0.61%	0.60%	

### 3.1.4 Efficiency Test

	VIN=80V	VIN=85V	VIN=90V
Vout=30V	95.6%	95.7%	95.5%
Vout=60V	97.48%	97.5%	97.48%

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