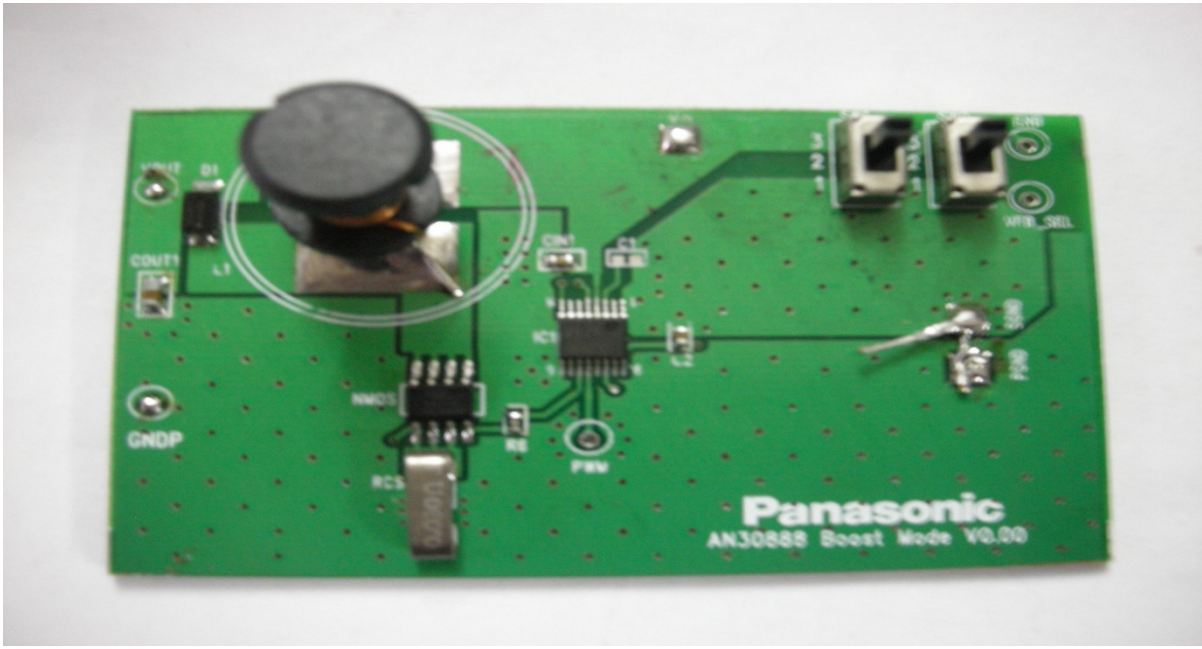
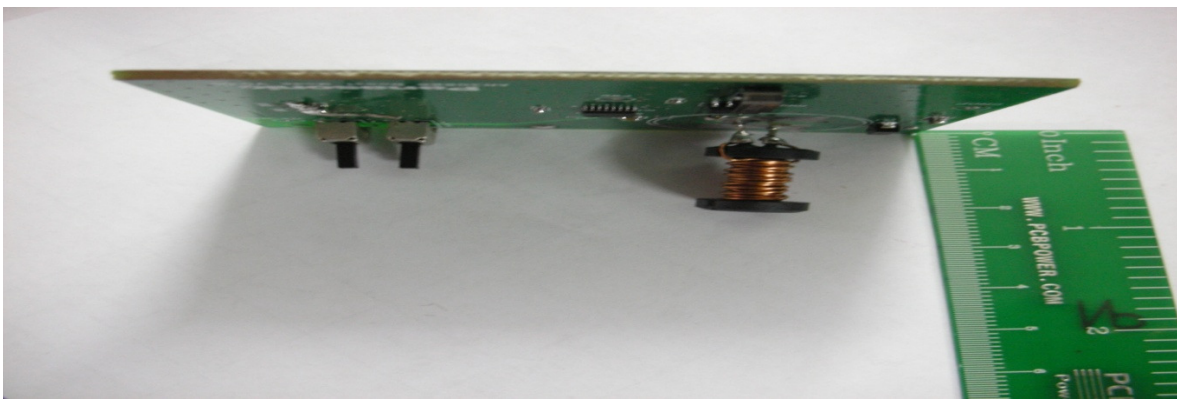


# SM AN3088A 22 WATT LED LANTERN BOARD (V1.0)

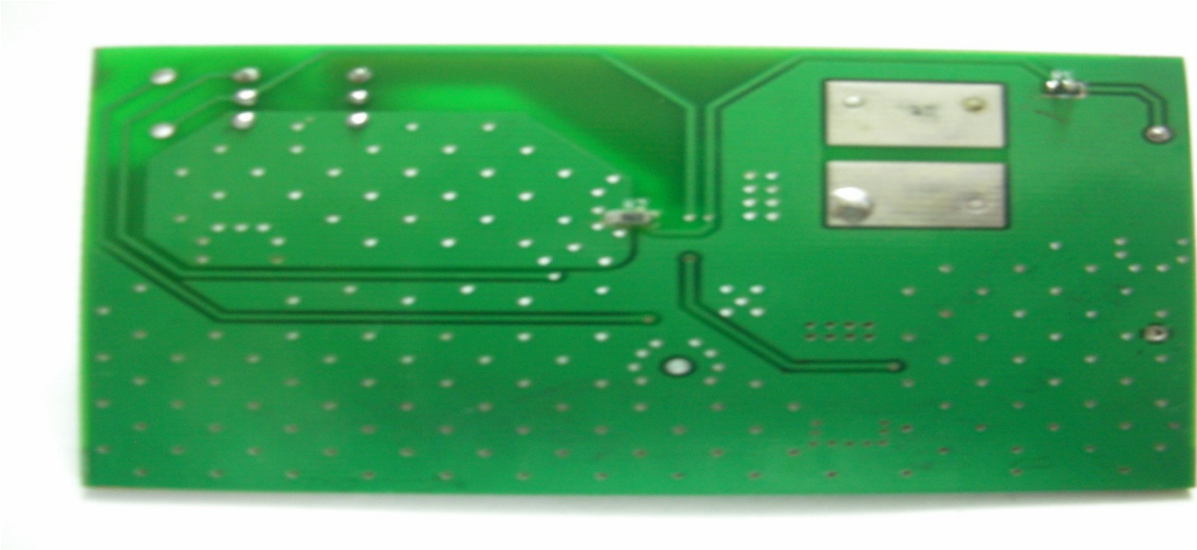
## TOP VIEW



## SIDE VIEW



**BOTTOM VIEW**



**REVISION HISTORY**

Name	Date	Reason for changes	Version
AN3088A 22 WATT LANTERN CARD	25/8/2011	First version released	1.0

**INTRODUCTION**

AN30888A/AN30888B is a Buck or Boost or Buck-Boost DCDC controller that drives an external power NMOS transistor. It is suitable for driving a wide range of LEDs including power or high brightness (HB) LEDs And standard or low power LEDs. Therefore, It can be used in various LED lighting applications. It has the flexibility of being configured as either boost or buck or buck-boost converter depending on the number of LEDs and input voltage requirement. These three configurations can be achieved by changing external component arrangement and connectivity. AN30888A can operate with input voltage range from 3V to a maximum of 20V. AN30888B can operate with input voltage range from 3V to a maximum of 15V. For

Both the part numbers, in Boost or Buck-Boost Mode, the operating voltage ranges from 3V to 12V. Depending on the operating mode, with an external MOSFET a constant current up to few Amperes can be provided

## ❖ FEATURES

- Supply voltage range : 3 V to 20 V (AN30888A)
- Configurable as Buck or Boost or Buck-Boost
- Maximum output current can reach up to a few Amperes depending on:

External MOSFET rating

- Mode of operation
- Current mode control architecture
- LED dimming function available by using:
- PWM signal Reference voltage : 30mV or 200 mV
- Low standby current consumption
- Built-in protection mechanisms
- Under voltage lock out
- Over voltage protection
- Soft start function

## ❖ SPECIFICATIONS

Parameter	Symbol	Rating	Unit	Notes
Supply voltage	VDD	21	V	*1
GND pin current	I <sub>gnd</sub>	-----	A	-----
Power dissipation	PD	135	Mw	*2
Operating ambience temperature	T <sub>opr</sub>	-25 to +85	°C	*3
Storage temperature	T <sub>stg</sub>	-55 to +125	°C	*3

## ❖ POWER SUPPLY SECTION

- Input Voltage: 3 V to 20 V
- Output power: depending on: External MOSFET rating

## ❖ APPLICATION

- General LED based indoor and outdoor lighting
- LED lanterns, Emergency lights
- White LED backlight for LCD panels
- Camping lights & Flashlights
- LED lighting modules
- LED Street light modules