

PART NUMBER (型号) TDA4863 ICE2HS01G ICE3BR4765JG BCR450

SUPPLIER (供应商)



DESCRIPTION

This application note introduced a high efficiency LED driver solution by Infineon. It targets on application where streetlighting or outdoor lighting application. Overall efficiency can achieve 92% or above. By multiple driving rail, this design increased overall reliability as well as product quality.

描述

这个应用笔记介绍了Infineon的高效LED驱动方案。主要针对路灯照明和户外照明。整体效率能做到≥92%。通过多级并用，提高了整体可靠性和产品的性能。

TARGET APPLICATION

Streetlamp, floodlight, outdoor lighting application

目标应用

路灯，泛光灯，室外照明

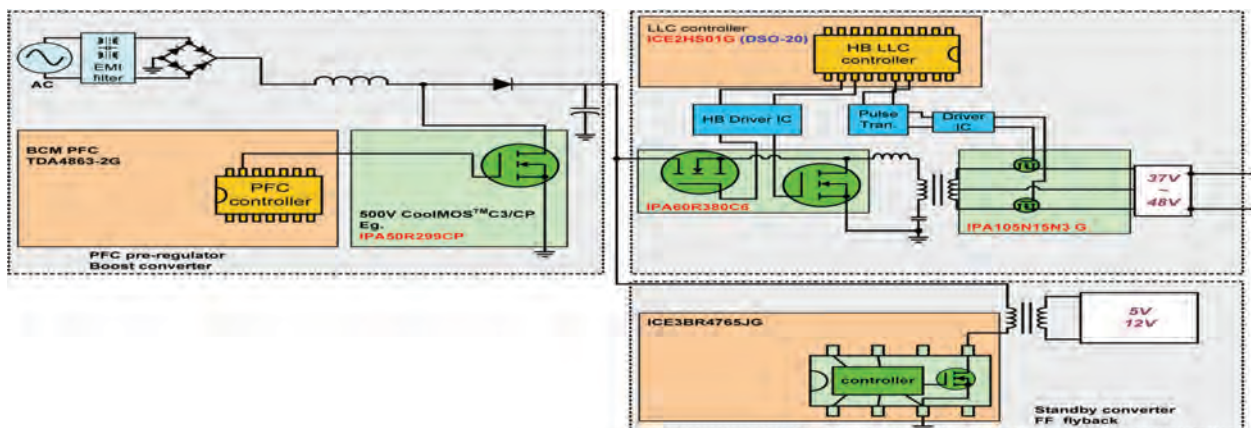
APPLICATION CIRCUIT FEATURES (应用电路特性)

- Peak Power 最大功率：** 120W (瓦)
- Input Voltage 输入电压：** 90V - 264V (伏)
- Output Voltage 输出电压：** 37V - 48V primary stage AC/DC输出
- Estimated Efficiency 预计效率：** 90% or above 90%或以上
- Regulation 校准：** +/-3%
- Power Factor 功率因数：** ≥0.92
- Driving Current 驱动电流：** 700mA (毫安)
- Output Channel 输出通道：** 4 channels 4路
- Operating Temperature 工作温度：** -20°C to 50°C

Electrical Testing Figures (电气测试参数)

Input (输入)		Output (输出)			Total System Efficiency 整体效率	
AC Voltage (V) 交流电压	Power (W) 输入功率	PFC 功率校正因素	DC Voltage (V) 输出直流电压	Total Current (A) 输出直流		Power (W) 输出功率
130	112.9	0.992	39.84	2.56	102.0	90.34%
150	112.3	0.987	39.77	2.57	102.2	91.01%
170	111.8	0.979	39.73	2.57	102.1	91.33%
190	111.1	0.963	39.70	2.57	102.0	91.84%
210	110.7	0.958	39.65	2.57	101.9	92.05%
230	110.2	0.943	39.45	2.57	101.4	92.00%
250	110.2	0.926	39.54	2.57	101.6	92.21%
265	110.2	0.910	39.50	2.57	101.5	92.16%

APPLICATION CIRCUIT (应用电路图)



4 Channels LED Driver BCR450 Board
BCR450 LED 驱动半 4路输出