TPS92310 - 220VAC, 13W Isolated Flyback LED driver with PFC

(ACTIVE) PMP8004

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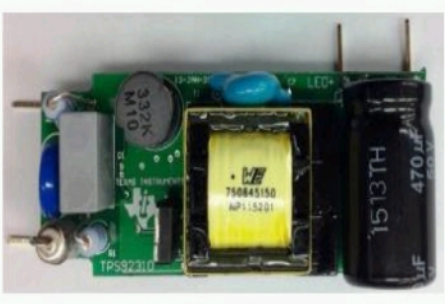

Top view

Description

The main purpose of this reference design is to demonstrate a high performance offline flyback LED driver with PFC based on TPS92310. This LED driver is designed for converting an AC input to a regulated LED current. The operating conditions and performance of the reference design are as follows: • 198VAC to 264VAC, 50Hz Input Voltage • 28V to 34V LED Voltage • 400mA Regulated LED Current • 87% Typical System Efficiency • High Power Factor > 0.9 • Output Short-Circuit and Open-Circuit Protection

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Fully assembled board (shown above) developed for testing and performance validation only, not available for sale.

Bill of Materials (BOM)

Find the complete list of components in this reference design.

Download BOM

Parametrics

	PMP8004
Vin (Max) (V)	264
Vin (Min) (V)	198
Vout (Nom) (V)	32
Iout (Max) (A)	.4
Output Power	12.8
Isolated/Non-Isolated	Isolated
Input Type	AC
Topology	Flyback- PFC

TI Devices (1)

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Part Number	Name	Product Family	Sample & Buy	Design Kits & Evaluation Modules
TPS92310	Off-Line Primary Side Sensing LED Driver with PFC	LED Driver	Sample & Buy	View Design Kits & Evaluation Modules

CAD/CAE symbols

Part #	Package | Pins	CAD File (.bxl)	STEP Model (.stp)
TPS92310	VSSOP (DGS) | 10	Download	Download

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Technical Documents

User Guides (1)

Title	Abstract	Type	Size (KB)	Date	Views
PMP8004 Test Results		PDF	535	14 Mar 2012	25

Selection Guides (1)

Title	Abstract	Type	Size (KB)	Date	Views
LED Lighting Bulb Replacement and Down Lighting Solutions		PDF	3927	11 Mar 2013	1,450

Design Files (4)

Title	Abstract	Type	Size (KB)	Date	Views
PMP8004 PCB		PDF	212	14 Mar 2012	25
PMP8004 Gerber		ZIP	236	14 Mar 2012	22
PMP8004 BOM		PDF	141	14 Mar 2012	36
PMP8004 Schematic		PDF	226	14 Mar 2012	55

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