TPS92310 Universal 18W

(ACTIVE) PMP8006

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Description

The main purpose of this reference design is to demonstrate a high efficiency offline 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: 1.90VAC to 264VAC, 60/50HZ Input voltage;2.55V to 65V LED Forward Voltage;3.275mA Regulated LED Current;4.System Efficiency ≥ 90%;5.High Power Factor > 0.9;6.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

	PMP8006
Vin (Min) (V)	90
Vin (Max) (V)	264
Vout (Nom) (V)	60
Iout (Max) (A)	.28
Output Power	16.5
Isolated/Non-Isolated	Non-Isolated
Input Type	AC
Topology	Buck- Upside Down

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
PMP8006 Test Results		PDF	258	27 Jun 2012	44

Design Files (5)

Title	Abstract	Type	Size (KB)	Date	Views
PMP8006 PCB (Bottom)		PDF	105	27 Jun 2012	29
PMP8006 PCB (Top)		PDF	99	27 Jun 2012	29
PMP8006 Gerber		ZIP	2028	27 Jun 2012	27
PMP8006 BOM		PDF	17	27 Jun 2012	41
PMP8006 Schematic		PDF	76	27 Jun 2012	72

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