TPS92310 - 220VAC, 22W Non-isolated LED Driver with PFC for T8 Tube Application

(ACTIVE) PMP8002

Description & Features | Technical Documents | Support & Community

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Description

The main purpose of this reference design is to demonstrate a high performance and low component count 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:•198VAC to 264VAC, 50Hz Input Voltage •65V to 75V LED Voltage •280mA Regulated LED Current •88% Typical System Efficiency •High Power Factor>0.9 •Output Short-Circuit and Open-Circuit Protection.

Top View

TI Devices (1)

Get more information on the TI products in this reference design.

Part Number	Name	Product Family
TPS92310	Off-Line Primary Side Sensing LED Driver with PFC	LED Driver

Bill of Materials

Find the complete list of components in this reference design.

Download BOM

CAD/CAE Symbols

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

Texas Instruments and Accelerated Designs Inc. have collaborated together to provide TI customers with schematic symbols and PCB layout footprints for TI products.

Step 1: Download and install the Ultra Librarian software ZIP: 62MB

Step 2: Download the Symbol and Footprint .bxl file.

- read more -

Technical Documents

User Guides (3)

Title	Abstract	Type	Size (KB)	Date	Views
PMP8002 PCB Bottom		PDF	51	25 Sep 2012	217
PMP8002 Test Results (Rev. A)		PDF	213	29 May 2012	223
PMP8002 PCB top		PDF	63	14 Mar 2012	203

More Literature (2)

Title	Abstract	Type	Size (KB)	Date	Views
PMP8002 BOM (Rev. A)		PDF	98	29 May 2012	227
PMP8002 Schematic (Rev. A)		PDF	35	29 May 2012	265

Related Tools & Software

Software (1)

PMP8002 Gerber (Rev. A)
(ZIP, 291 KB) 139 views, 29 May 2012

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Videos

How to simplify your LED Lighting Lamp Designs

TI marketing engineer, John Perry discusses how the new TPS92411 Floating Switch for Offline AC Linear Direct Drive of LEDs can be used to simplify your LED lamp design by eliminating the need for inductors or transformers, allowing for a lower BOM cost and smaller solution size.

Posted: 01-Nov-2013
Duration: 2:13
Views: 1605
Tags: power, power management, led lighting, led bulb design, led lamps, led bulb replacement, tps92411, led driver,

Learn more about the TPS92411 - Click here!

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How to simplify your LED Lighting Lamp Designs

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