Universal AC input 20V/100mA Non-isolated High-side Buck Converter Reference Design

(ACTIVE) PMP4443

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Description

The PMP4443 reference designs is a 20V /0.1A universal input solution that implements an intergrated MOSFET controller UCC28910. It achieve low standby power, good efficiency and thermal performance. The PMP4443 reference design is also EMC compliant.

Features

- Lower standby power loss
- High efficiency
- EMC compliant
- Low components count
- Good thermal performance

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

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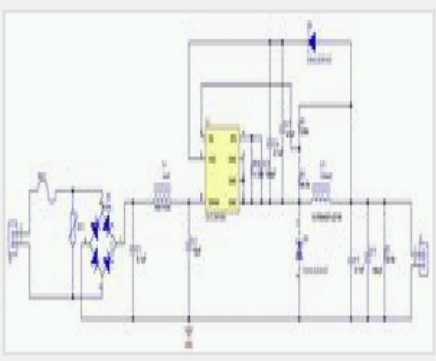
Schematic/Block Diagram

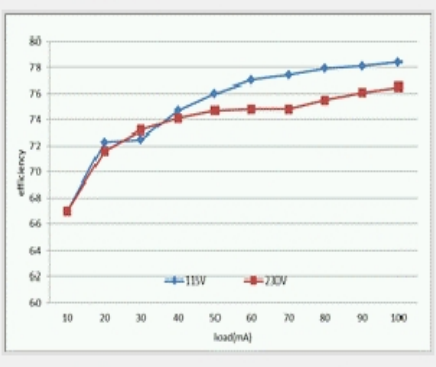
Quickly understand overall system functionality.



Download Schematic

Test Data

Get results faster with test and simulation data that's been verified.



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Design Files

Download ready-to-use system files to speed your design process. Get Viewer.

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Bill of Materials (BOM)

Find the complete list of components in this reference design.

Download BOM

Parametrics

	PMP4443
Vin (Min) (V)	85
Vin (Max) (V)	265
Vout (Nom) (V)	20
Iout (Max) (A)	.1
Output Power	2
Isolated/Non-Isolated	Non-Isolated
Input Type	AC
Topology	Buck- Non Sync

TI Devices (1)

Order samples, get tools and find more information on the TI products in this reference design.

Part Number	Name	Product Family	Sample & Buy	Design Kits & Evaluation Modules
UCC28910	700V Flyback Switcher with Constant-Voltage Constant-Current and Primary-side Control	AC/DC and Isolated DC/DC Power Supply	Sample & Buy	View Design Kits & Evaluation Modules

CAD/CAE symbols

Part #	Package | Pins	CAD File (.bxl)	STEP Model (.stp)
UCC28910	SOIC (D) | 7	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 (1)

Title	Abstract	Type	Size (KB)	Date	Views
PMP4443 Test Results		PDF	665	24 Apr 2015	0

Design files (3)

Title	Abstract	Type	Size (KB)	Date	Views
PMP4443 CAD Files		ZIP	284	24 Apr 2015	0
PMP4443 BOM		PDF	39	24 Apr 2015	0
PMP4443 Schematic		PDF	85	24 Apr 2015	0

Applications

- Refrigerators & Freezers

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TI E2E™ community

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