

108VAC-305VAC Input, 3.6V/5mA Flyback Reference Design



(ACTIVE) PMP9742

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Key Document

[PMP9742 Test Results](#) (PDF 1025 KB)
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Description

This low power flyback supply is designed to minimize the total input current while supplying a low power 3.6V/5mA output. The output is functionally isolated from the input, but not for safety. The physical size is minimized by using the UCC28910 controller with integrated high-voltage MOSFET and primary-side regulation.

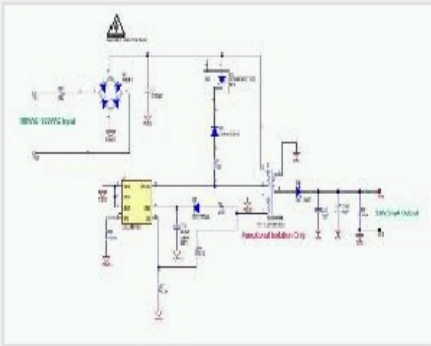
Features

- Less than 500µA input current for loads less than 4mA
- Wide 108-305VAC input range
- Small form factor (25mm x 18mm x 20mm)
- Function isolation
- Test report available

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Schematic/Block Diagram

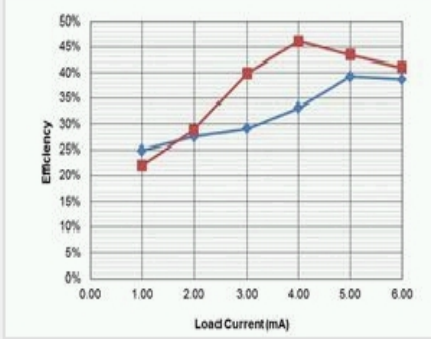
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Design Guide

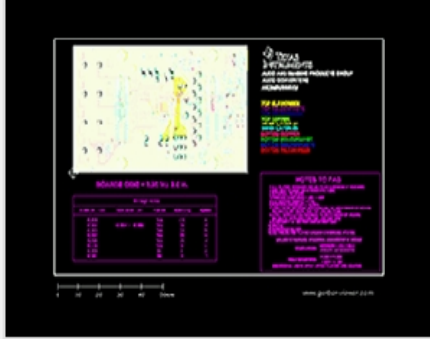
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Design Files

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Bill of Materials (BOM)

Find the complete list of components in this reference design.

Download BOM

Parametrics

	PMP9742
Vin (Min) (V)	108
Vin (Max) (V)	305
Vout (Nom) (V)	3.6
Iout (Max) (A)	.005
Output Power	.018
Isolated/Non-Isolated	Isolated
Input Type	AC
Topology	Flyback- DCM Flyback- Integrated Switch Flyback- Quasi Resonant

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](#)

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Technical Documents

User guides (1)

Title	Abstract	Type	Size (KB)	Date	Views	TI Recommends
PMP9742 Test Results		PDF	1025	16 Jul 2015	9	✓

Design files (4)

Title	Abstract	Type	Size (KB)	Date	Views
PMP9742 Gerber		ZIP	159	16 Jul 2015	1 1
PMP9742 Assembly Drawing		PDF	49	16 Jul 2015	0
PMP9742 BOM		PDF	79	16 Jul 2015	1 1
PMP9742 Schematic		PDF	110	16 Jul 2015	10

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