# 85VAC-265VAC Input, 12V/3A Output Green-Mode Synchronous Flyback

(ACTIVE) PMP4820

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## Description

The PMP4820 reference design use the UCC28600 green-mode controller with a synchronous rectifier to provide good efficiency at heavy loads while maintaining low power consumption at light loads. The maximum load efficiency is over 87%, and the no load losses are less than 150mW.

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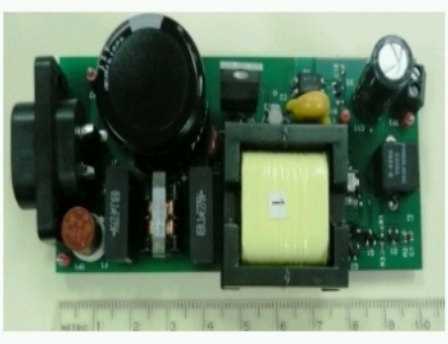

Picture of Top

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

| | PMP4820 |
|---|---|
| Vin (Min) (V) | 85 |
| Vin (Max) (V) | 265 |
| Vout (Nom) (V) | 12 |
| Iout (Max) (A) | 3 |
| Output Power | 36 |
| Isolated/Non-Isolated | Isolated |
| Input Type | AC |
| Topology | Flyback- Quasi Resonant<br>Flyback- DCM<br>Flyback- Synchronous |

## 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 |
|---|---|---|---|---|
| UCC28600 | 8-Pin Quasi Resonant Flyback Green Mode Controller | 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) |
|---|---|---|---|
| UCC28600 | SOIC (D) \| 8 | 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

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## Technical Documents

### User Guides (1)

| Title | Abstract | Type | Size (KB) | Date | Views |
|---|---|---|---|---|---|
| PMP4820 Test Results | | PDF | 1795 | 15 Aug 2011 | 18 |

### Design Files (2)

| Title | Abstract | Type | Size (KB) | Date | Views |
|---|---|---|---|---|---|
| PMP4820 BOM | | PDF | 64 | 01 Aug 2011 | 20 |
| PMP4820 Schematic | | PDF | 66 | 01 Aug 2011 | 19 |

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