Non sync buck Hysteretic Controller for 9-18V input and 8V,3A output

(ACTIVE) PMP7771

Description & Features | Technical Documents | Support & Community | Order Now

View the Important Notice for TI Designs covering authorized use, intellectual property matters and disclaimers.

Description

This circuit is a non synchronous buck hysteretic controller. It uses a low ESR ceramic capacitor at the output and uses a series resistor to generate the ripple. It uses LM3489 which is a high efficiency PFET switching regulator controller. The PFET architecture also allows for low component count as well as ultra-low dropout, 100% duty cycle operation. Another benefit is high efficiency operation at light loads without an increase in output ripple.

TI's Standard Terms and Conditions for Evaluation Modules apply.

Bill of Materials (BOM)

Find the complete list of components in this reference design.

Download BOM

Parametrics

	PMP7771
Vin (Min) (V)	9
Vin (Max) (V)	18
Vout (Nom) (V)	8
Iout (Max) (A)	3
Output Power	24
Isolated/Non-Isolated	Non-Isolated
Input Type	DC
Topology	Buck- Non Sync

TI Devices (2)

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
LM3489	Hysteretic PFET Buck Controller with Enable Pin	Controller (External Switch)	Sample & Buy	View Design Kits & Evaluation Modules
LM3489-Q1	Automotive Grade 4.5-35V, Hysteretic Non-Synchronous PFET Buck Controller with Enable Pin	Controller (External Switch)	Sample & Buy	View Design Kits & Evaluation Modules

CAD/CAE symbols

Part #	Package | Pins	CAD File (.bxl)	STEP Model (.stp)
LM3489	VSSOP (DGK) | 8	Download	Download
LM3489-Q1	VSSOP (DGK) | 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

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

- read more -

Technical Documents

User Guides (1)

Title	Abstract	Type	Size (KB)	Date	Views
PMP7771 Test Results		PDF	230	09 Jan 2012	16

Design Files (2)

Title	Abstract	Type	Size (KB)	Date	Views
PMP7771 BOM		PDF	97	09 Jan 2012	16
PMP7771 Schematic		PDF	173	09 Jan 2012	20

Support & Community

TI E2E™ community

TI E2E™ Community

As a member of my.TI you can join the TI E2E™ Community where you can ask questions, share ideas and collaborate with fellow engineers and TI experts

Contents are provided "AS IS" by the respective TI and Community contributors and do not constitute TI specifications. See Terms of use.

Engage in the Community

- Amplifiers
- Broadband RF/IF & Digital Radio
- Clocks & Timers
- Data Converters
- DLP® & MEMS
- Interface
- Logic
- Power Management
- Wireless Connectivity

Wikis

Visit the TI Wiki

Videos

Leading source for power reference designs

TI's industry leading PowerLab™ reference design library has now evolved into TI Designs. This video explains how to use the enhanced selection tool within TI Designs to quickly and efficiently search

Posted: 08-Oct-2014
Duration: 1:00
Views: 728
Tags: power management, power reference design, power management solutions, powerlab, power management designs, power design solutions, ti designs-power, ti designs, portable powerline power

Click here to jump start your design with TI Designs for Power Management

Related Videos

Now Playing

Leading source for power reference designs

Play

Power Tip 58: Power supply grounding; which camp are you in?

Other Support

- TI E2E Community
- Contact Technical Support

Your History

Products You Recently Viewed

- BQ76930EVM
- PMP7767
- PRECISIONAMPLITUDECONTROL-REF
- PMP7762
- AMBIENTLIGHTADAPTIVELED-REF

TI is a global semiconductor design and manufacturing company. Innovate with 100,000+ analog ICs and embedded processors, along with software, tools and the industry's largest sales/support staff.

© Copyright 1995-2014 Texas Instruments Incorporated. All rights reserved.
Trademarks | Privacy policy | Terms of use | Terms of sale