Buck, Linear (5V @ 3A) for Fleet Management

(ACTIVE) PMP2807.1

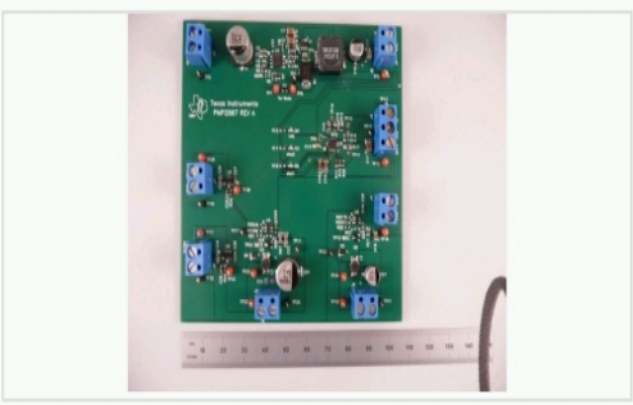
Description & Features | Technical Documents | Support & Community | Order Now

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

Description

This is a 4.2V,2A lithium battery charging system off the wide 7V to 42V automotive range. TPS40200 plus external FET switcher provides 5V @ 3A. BQ24070 is the battery charger. TPS64203 switcher plus external FET each used to provide 3.3V and 1.8V. TPS73033 and TPS73018 linear regulators provide low noise 3.3V and 1.8V outputs.

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



Top view

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

	PMP2807.1
Vin (Min) (V)	7
Vin (Max) (V)	42
Vout (Nom) (V)	5
Iout (Max) (A)	3
Output Power	15
Isolated/Non-Isolated	Non-Isolated
Input Type	DC
Topology	Linear Regulator

TI Devices (5)

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
BQ24070	Li-Ion Charger with Dynamic Power-Path Management, Output regulated to 4.4V	Battery Management Products	Sample & Buy	View Design Kits & Evaluation Modules
TPS40200	Wide Input Non-Synchronous Buck DC/DC Controller	Controller (External Switch)	Sample & Buy	View Design Kits & Evaluation

Show More

CAD/CAE symbols

Part #	Package | Pins	CAD File (.bxl)	STEP Model (.stp)
BQ24070	VQFN (RHL) | 20	Download	-
TPS40200	SOIC (D) | 8	Download	Download
	VSON (DRB) | 8	Download	-
TPS64203	SOT (DBV) | 6	Download	Download
TPS73018	SOT (DBV) | 5	Download	Download
	DSBGA (YZQ) | 5	Download	-
TPS73033	SOT (DBV) | 5	Download	Download
	DSBGA (YZQ) | 5	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
PMP2807 TEST RESULTS		PDF	1212	17 Jan 2011	27

Design Files (2)

Title	Abstract	Type	Size (KB)	Date	Views
PMP2807 BOM		PDF	23	17 Jan 2011	40
PMP2807 SCHEMATIC		PDF	168	17 Jan 2011	51

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

Leading source for power reference designs

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

- ths4140evm
- PMP2399.3
- ths4131evm
- dem-opa-so-2b
- PMP1581.1

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