12V Input, 1.8V-5V Adjustable Output at 3A, Sync Buck

(ACTIVE) PMP4246

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Description

The PMP4246 reference design is configurable for a variety of output voltages ranging from 1.8V to 5V. This design uses the TPS54325 synchronous buck converter to step down from a 12V input source and provide up to 3A of output current. This design uses only ceramic capacitors for a compact and low-cost solution.

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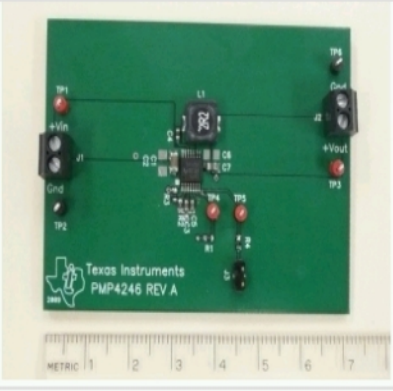

Fully assembled board (shown above) developed for testing and performance validation only, not available for sale.

Bill of Materials (BOM)

Find the complete list of components in this reference design.

Download BOM

Parametrics

	PMP4246
Vin (Min) (V)	9
Vin (Max) (V)	14
Vout (Nom) (V)	1.8
Iout (Max) (A)	3
Output Power	5.4
Isolated/Non-Isolated	Non-isolated
Input Type	DC
Topology	Buck- 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
TPS54325	4.5V to 18V Input, 3A Synchronous Step-Down SWIFT™ Converter	Converter (Integrated Switch)	Sample & Buy	View Design Kits & Evaluation Modules

CAD/CAE symbols

Part #	Package | Pins	CAD File (.bxl)	STEP Model (.stp)
TPS54325	HTSSOP (PWP) | 14	Download	Download

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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
PMP4246 Test Results		PDF	1490	15 Aug 2011	16

Design Files (2)

Title	Abstract	Type	Size (KB)	Date	Views
PMP4246 BOM		PDF	59	01 Aug 2011	19
PMP4246 Schematic		PDF	41	01 Aug 2011	19

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