5-12V input; Synchronous Inverter; -5.2V 2.5-3.8A Output

(ACTIVE) PMP7395

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Description

The PMP7395 reference design uses TPS54620 to power a Synchronous Inverter. Both FETs are internal to the TPS54620. This can replace older designs with external FETs. Electrical and Thermal test results shown for 5Vin -5.2Vout at up to 2.5A out and 12Vin -5.2Vout at up to 3.8A. An on board dynamic load allows rapid load transients to be tested.

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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

	PMP7395
Vin (Min) (V)	4.5
Vin (Max) (V)	13.2
Vout (Nom) (V)	-5.2
Iout (Max) (A)	3.8
Output Power	19.76
Isolated/Non-Isolated	Non-Isolated
Input Type	DC
Topology	Buck Boost- 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
TPS54620	4.5V to 17V Input, 6A 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)
TPS54620	VQFN (RGY) | 14	Download	-
	VQFN (RHL) | 14	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
PMP7395 Test Results		PDF	507	23 Apr 2012	14

Design Files (2)

Title	Abstract	Type	Size (KB)	Date	Views
PMP7395 Schematic		PDF	55	27 Apr 2012	26
PMP7395 BOM		PDF	29	23 Apr 2012	16

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