55V to 90V DC Input, 5V/10A Active Clamp Forward

(ACTIVE) PMP4751

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Description

This reference design uses the UCC2897A active clamp controller to generate an isolated 5V/50W output from a 55V to 90V input. Synchronous rectifiers allow this converter to achieve efficiencies up to 93%.

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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

	PMP4751
Vin (Max) (V)	90
Vin (Min) (V)	55
Vout (Nom) (V)	5
Iout (Max) (A)	10
Output Power	50
Isolated/Non-Isolated	Isolated
Input Type	DC
Topology	Forward- Active Clamp Forward- 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
UCC2897A	Advanced Current-Mode Active Clamp PWM 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)
UCC2897A	TSSOP (PW) | 20	Download	Download
	VQFN (RGP) | 20	Download	-

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Technical Documents

User Guides (1)

Title	Abstract	Type	Size (KB)	Date	Views
PMP4751 Test Results		PDF	1074	23 Mar 2012	14

Design Files (4)

Title	Abstract	Type	Size (KB)	Date	Views
PMP4751 PCB		PDF	89	23 Mar 2012	12
PMP4751 Gerber		ZIP	128	23 Mar 2012	10
PMP4751 BOM		PDF	29	23 Mar 2012	15
PMP4751 Schematic		PDF	78	23 Mar 2012	19

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