36Vdc-75Vdc Input, 5V/15A Active Clamp Forward, 1/8 Brick

(ACTIVE) PMP9126

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Description

This reference design generates a 5V/15A output from a 36V to 75V telecom input. The UCC2897A controls an active clamp forward converter power stage. The low gate charge and low RDSon of the CSD17501Q5A and CSD18502Q5B, implemented as a synchronous rectifiers, provides for a highly efficient design. This design is laid out in a standard eighth brick footprint and achieves efficiencies up to 94%. It uses only surface mount components, including ceramic output capacitors.

Bottom of Board | Active Clamp Forward

TI Devices (3)

Get more information on the TI products in this reference design.

Part Number	Name	Product Family
CSD17501Q5A	30V, N-Channel NexFET™ Power MOSFET with 20 Volt Vgs	Power MOSFET
CSD18502Q5B	40-V, N-Channel NexFET™ Power MOSFET	Power MOSFET
UCC2897A	Advanced Current-Mode Active Clamp PWM Controller	AC/DC and Isolated DC/DC Power Supply

Bill of Materials

Find the complete list of components in this reference design.

Download BOM

CAD/CAE Symbols

Part #	Package | Pins	CAD File (.bxl)	STEP Model (.stp)
CSD17501Q5A	SON (DQJ)| 8	Download	-
UCC2897A	TSSOP (PW) | 20	Download	Download
	VQFN (RGP) | 20	Download	-

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

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Technical Documents

User Guides (2)

Title	Abstract	Type	Size (KB)	Date	Views
PMP9126 PCB		PDF	346	22 Oct 2013	60
PMP9126 Test Results		PDF	2160	22 Oct 2013	66

More Literature (2)

Title	Abstract	Type	Size (KB)	Date	Views
PMP9126 Bill of Materials		PDF	80	22 Oct 2013	63
PMP9126 Schematic		PDF	142	22 Oct 2013	65

Related Tools & Software

Software (1)

PMP9126 Gerber
(ZIP, 212 KB) 50 views, 22 Oct 2013

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