

3-ph E-Meter. Input voltage: 2 and 3 phase; outputs: 16.5V@300mA, 12V@500mA, 3.3V@100mA, 1.9V@15

(ACTIVE) PMP7146 1

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Description

The PMP7146 has been designed especially for E-meters with PLC (power line communication) on board. The input filter shows high impedance to the PLC transmitter and the controller LM5021 works in constant switching frequency. A settable skip-mode improves the efficiency at light load. Two Bucks and an LDO supply the power to the digital section of the E-meter.

TI Devices (4)

Get more information on the TI products in this reference design

Part Number	Name	Product Family
LM5021	AC-DC Current Mode PWM Controller	Controller (External Switch)
TPS54040	3.5V to 42V Input, 0.5A Step-Down Converter with Eco-Mode	Converter (Integrated Switch)
TPS62240	2.25MHz 300mA Step-Down Converter in 2x2mm SONTSOT23 Package	Converter (Integrated Switch)
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Bill of Materials

Find the complete list of components in this reference design



CAD/CAE Symbols

Part #	Package Pins	CAD File (.bxd)	STEP Model (.stp)
LM5021	 VSSOP (DGK) 8	Download	Download
	 PDIP (P) 8	Download	Download
TPS54040	 HVSSOP (DGQ) 10	Download	Download
TPS62240	 SOT (DDC) 5	Download	-
	 WSON (DRV) 6	Download	-
TPS76933	 SOT (DBV) 5	Download	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 .hxl file

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Technical Documents

User Guides (1)

Title	Abstract	Type	Size (KB)	Date	Views
PMP7146 Test Results		PDF	986	20 Sep 2013	132

More literature (2)

Title	Abstract	Type	Size (KB)	Date	Views
 PMP7146 BOM		PDF	21	20 Sep 2013	141
 PMP7146 Schematic		PDF	102	20 Sep 2013	311

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Power Tip 56: Estimate PWB interconnect inductance

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