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Worldwide (In English)

Low Voltage High Frequency Synchronous Buck Converter (5Vin to 1.5V@3A) Reference Design

(ACTIVE) PMP5832.4

Description & Features

Technical Documents

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## Description

The PMP5832 reference design provides a number of outputs that were designed to complete an entire system. These parts can be used together or individually for a number of different applications. These could be Automotive, Industrial, Consumer, etc. The schematic, test report and associated board files contain information for all 7 of the outputs.

TI's [Standard Terms and Conditions for Evaluation Modules](#) apply.

## Bill of Materials (BOM)

Find the complete list of components in this reference design.

[Download BOM](#)

## Parametrics

|                       | PMP5832.4         |
|-----------------------|-------------------|
| Vin (Max) (V)         | 5.5               |
| Vin (Min) (V)         | 4.5               |
| Vout (Nom) (V)        | 1.5               |
| Iout (Max) (A)        | 3                 |
| Output Power          | 4.5               |
| 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                          |
|-------------|-------------------------------------------------------|-------------------------------|----------------------------------|-----------------------------------------------------------|
| TPS54319    | 2.95V to 6V Input, 3A Synchronous Step-Down Converter | Converter (Integrated Switch) | <a href="#">Sample &amp; Buy</a> | <a href="#">View Design Kits &amp; Evaluation Modules</a> |

## CAD/CAE symbols

| Part #   | Package   Pins                  | CAD File (.bxl)          | STEP Model (.stp) |
|----------|---------------------------------|--------------------------|-------------------|
| TPS54319 | <a href="#">WQFN (RTE)</a>   16 | <a href="#">Download</a> | -                 |

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 .bxl file.

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## Technical Documents

## User Guides (1)

| Title                                | Abstract | Type | Size (KB) | Date        | Views |
|--------------------------------------|----------|------|-----------|-------------|-------|
| <a href="#">PMP5832 Test Results</a> |          | PDF  | 11037     | 16 Aug 2011 | 21    |

## Design Files (4)

| Title                             | Abstract | Type | Size (KB) | Date        | Views |
|-----------------------------------|----------|------|-----------|-------------|-------|
| <a href="#">PMP5832 Gerber</a>    |          | ZIP  | 251       | 18 Aug 2011 | 11    |
| <a href="#">PMP5832 PCB</a>       |          | PDF  | 368       | 18 Aug 2011 | 15    |
| <a href="#">PMP5832 BOM</a>       |          | PDF  | 67        | 02 Aug 2011 | 31    |
| <a href="#">PMP5832 Schematic</a> |          | PDF  | 224       | 02 Aug 2011 | 44    |

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Leading source for power reference designs

TI's industry leading PowerLab™ reference design library has now evolved into TI Designs. This video explains how to use the enhanced selection tool within TI Designs to quickly and efficiently search.

Posted: 08-Oct-2014

Duration: 1:00

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Tags: power management, power reference design, power management solutions, powerlab, power management designs, power design solutions, ti designs-power, ti designs, portable powerline power

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