

Power Management Lab Kit

PMLK PRO



Overview

TI's PMLK Pro helps introduce students to low power, non-isolated DC/DC power supplies. The lab kit was developed in partnership with Professor Nicola Femia, a world renowned power expert on the faculty at the University of Salerno in Italy. It is comprised of 24 hands-on exercises based on four key topologies using the kit's five hardware boards. The experiments cover a variety of possible tests and measurements which can be performed with the boards. The boards have been designed to allow the investigation of the influence of physical parameters and operation conditions of a power supply on its own performances.

Students will learn the theory behind switching power supplies and linear regulators and delve into issues such as:

- Modes of Operation
- Efficiency
- Accuracy
- Power Magnetics
- Control
- Transient Response

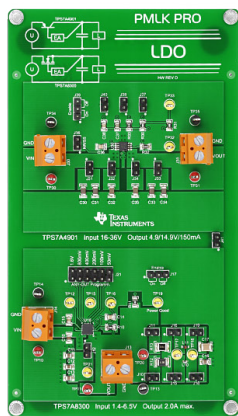
Limited free sample quantities to educators

Easily integrate the **PMLK PRO** into your power management courses!

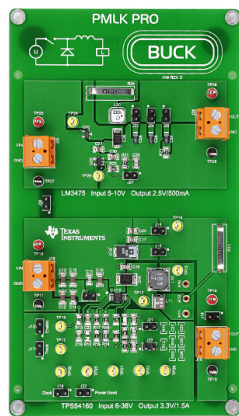
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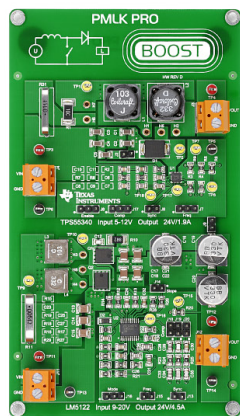
2 Hardware



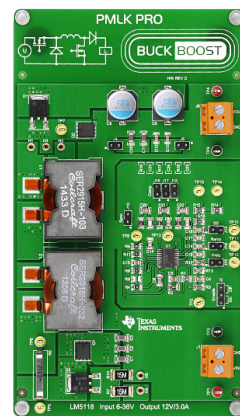
LDO
TPS7A4901
TPS7A8300



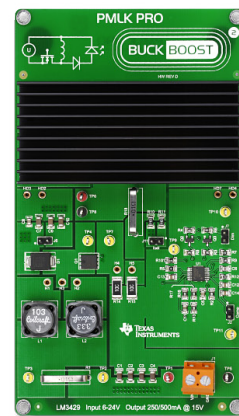
Buck
LM3475
TPS54160



Boost
LM5122
TPS55340



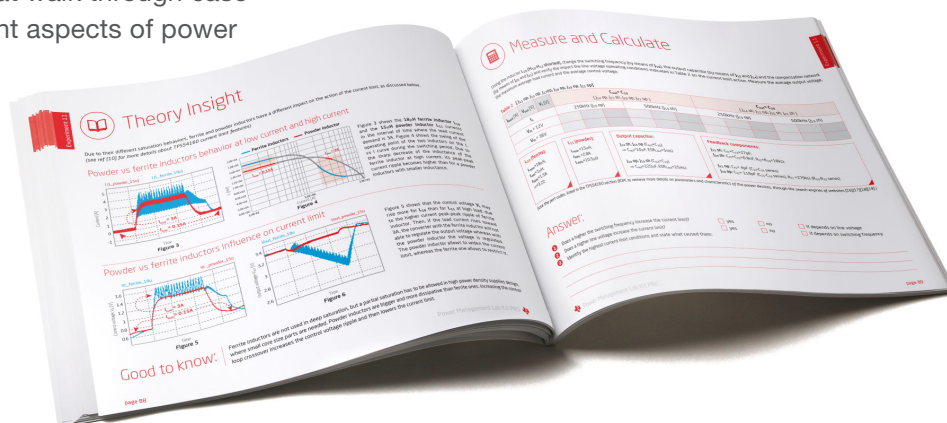
Buck-Boost
LM5118



Buck-Boost
LM3429

The **PMLK PRO lab manual**, written by Professor Nicola Femia, is comprised of 24 power lab experiments covering key power topologies. Each chapter has 6 experiments that walk through case studies demonstrating different aspects of power supply design tradeoffs:

- Chapter 1: LDO
- Chapter 2: Buck
- Chapter 3: Boost
- Chapter 4: Buck-Boost



WEBENCH®
Design Center

Students can optimize and simulate their PMLK PRO power design online using WEBENCH® Power Designer and simulation tools.

TI Worldwide Online Technical Support

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