

**Vishay Custom Magnetics** 

## **Power-Pole Electronics FPGA Controller Assembly**



## FEATURES

- Programmable on-board analog-to-digital converter for performing digital closed-loop experiments
- Pre-programmed for performing Power Electronics Lab experiments
- 10-key keypad and LCD interface as a user interface
- Breadboard cable provided for additional prototyping signal conditioning circuitry
- Programmable for custom user applications

## DESCRIPTION

Vishay is a proud provider of the hardware for the Power Electronics Lab, based on the approach in the textbook Power Electronics: Converters, Applications and Design.

The FPGA-based control PCA (printed circuit assembly) is a standalone controller for performing experiments in the Power Electronics Lab, based on the approach in the textbook Power Electronics: Converters, Applications and Design, written by Ned Mohan, Tore M. Undeland, and William P. Robbins; and the Electric Drives Lab, based on the approach in the textbook Electric Machines and Drives: A First Course by Ned Mohan.

The controller is equipped with an analog / digital interface compatible with the power-pole PCA to facilitate various PWM control functions without requiring the use of an interfacing PC.

This product is commonly used with Vishay product number 75771: 37-Pin DSUB Cable and 87784: 8-Pin Encoder Cable. Both cables are also used in Power Electronics Lab experiments.