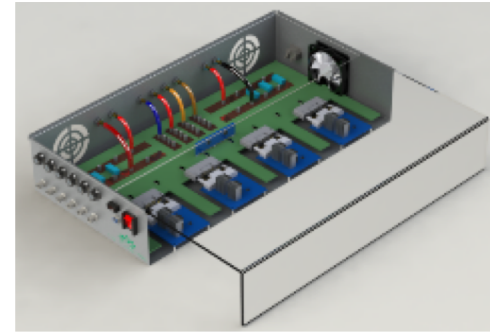


Project Title: Extending the “Power Electronics Teaching Lab Incorporating WBG Semiconductors Switches and Circuits” for Wide-Scale Availability.

Objectives: (1) to develop rugged, manufacturing-ready educational boards and (2) to create an online repository containing videos, hardware design materials, and teaching lab documents.

Task No. BP5-5.18
 PI: Dr. Babak Parkhideh
 Email: BParkhideh@uncc.edu
 Phone: 704-687-1959

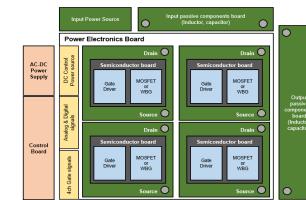
Ruggedized hardware



Online resources



Modular education board



WBG Technology Impact

1. Wide dissemination of the multi-function modular WBG power electronics education boards allowing “play-and-play” different semiconductor modules
2. Application sector: Academia teaching lab for students and industry training session for professionals
3. Expand WBG teaching lab and increase the number of trained WBG power electronics engineers

Accomplishments/Outcomes

Accomplishments

1. Final education board manufacturing-ready packet with a ruggedized hardware design.
2. Online course contents

Outcome

1. Safer and More reliable (ruggedized) hardware to be available for other institutions and online modules that students can remotely access to utilize the hardware and perform the experiments developed at UNC Charlotte.