



# PowerAmerica

Accelerating the Next Generation of  
SiC and GaN Power Electronics

## WHO WE ARE

PowerAmerica is a public-private partnership between industry, government, national labs, and academia, that is accelerating the commercialization of wide bandgap semiconductor technology. These energy efficient silicon carbide and gallium nitride technologies improve the performance of a wide range of products and systems, including electric vehicles, battery chargers, renewable energy and defense systems. In doing so, silicon carbide and gallium nitride technology is expanding U.S. manufacturing and creating new jobs.

**NC STATE**  
UNIVERSITY



U.S. DEPARTMENT OF  
**ENERGY**

Office of **ENERGY EFFICIENCY  
& RENEWABLE ENERGY**

**ADVANCED MANUFACTURING OFFICE**

## WHAT WE DO



**REDUCE THE COST** of wide bandgap semiconductors to make them comparable to the silicon semiconductors widely available today.



**IMPROVE RELIABILITY** by funding projects that demonstrate performance and encourage adoption by manufacturers and end users.



**ENHANCE PERFORMANCE CAPABILITIES** and work to address technical issues at all levels of design, manufacturing, packaging and qualification.



**BRING TOGETHER ALL FACETS OF THE SUPPLY CHAIN** and form a network of collaboration between manufacturers and end users.



**ACCELERATE THE DEVELOPMENT OF AN ADVANCED MANUFACTURING WORKFORCE** through a variety of educational initiatives focused on working professionals, community college, undergraduate and graduate levels.

# BENEFITS OF JOINING POWERAMERICA

- ▶ Access to the best source of business and technical information about developments in wide bandgap technology, including our many member universities.
- ▶ Access to intellectual property from PowerAmerica-funded projects.
- ▶ Driving updates to SiC and GaN technology roadmaps.
- ▶ Device designs according to member specs and applications, and cost-effective manufacturing high volume U.S. fabs.
- ▶ Testing services for devices and modules.
- ▶ Timely access to PowerAmerica device bank engineering samples.
- ▶ Technical webinars focused on SiC and GaN technology developments from our university and industry partners.
- ▶ Access to future workforce through exclusive online portal of undergraduate/graduate students studying SiC and GaN technology.
- ▶ Semi-annual member meetings focused on SiC and GaN business and technology developments and networking with industry leaders.
- ▶ Promotion of SiC and GaN technology through media and trade shows.

## WHAT OUR MEMBERS ARE SAYING

"One of the best networked and active organizations that I've ever been a part of. They are so focused on aligning goals that it automatically brings folks from all over the industry together in collaboration. We have already made more than a few strategic business relationships."

—**Ryan Kennedy,**  
AtomPower

"PowerAmerica has advanced John Deere's wide bandgap power electronics R&D work by more than five years."

—**Brij Singh,**  
John Deere

"We are involved because one of the single most important things PowerAmerica is doing is changing the mindset of the customer community. When a PowerAmerica project demonstrates a first, it gets the attention of the users."

—**John Palmour,**  
Wolfspeed