

Project Title:

Commercial SiC Power Device Foundry Development

Objectives:

Enable fast, easy, efficient SiC Foundry access

Major Milestones:

Process Installation Kit, Epi Evaluation, Fab Monitors

Significant Equipment Acquisition:

No equipment acquisition in BP4

Deliverables:

Customer Technology Development Progress Status

SiC Production Status



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WBG Technology Impact

1. Most production SiC devices today are produced on 4" wafers, mostly in captive fabs. Leveraging the area of 6" wafers, along with the aggregated volumes of multiple device partners can allow competition with Si.
2. Timeframe for commercialization.
Commercialization will begin in BP4
3. Cost structure of a large 6" Si foundry has the potential to drive device cost to < \$0.10/amp for 600V devices and <\$0.30/amp for 1200V devices

Additional impacts

Since 2001 70+ fabs in the U.S. have discontinued operations. PowerAmerica offers a business continuity model that can be adopted by other facilities that are no longer competitive in Si.