

Project Title: Commercialization of 1MW SiC Devices Based High Speed Medium Voltage Motor Drive with Redundancy Operation

Objectives: Commercialize 1MW 4kV SiC based MVD with redundancy functions, high-speed operation and filter-less long cable operations.

Major Milestones: Industrial-level SiC based MVD with above functions.

Deliverables: Industrial-level SiC based MVD



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WBG Technology Impact

1. Light-weight and simple cooling system due to less power loss of SiC devices
2. Enable high-speed MVD operation due to fast switching of SiC devices
3. Fault-tolerance SiC device based system
4. Eliminate filters with long cable application

Additional impacts

1. Manufacture of SiC based Medium Voltage Drives in Houston, TX.
2. Large volume usage of SiC devices
3. Prepare the next generation of industry drive with more medium voltage SiC devices