PROJECT SNAPSHOT CATAPULT Compound Semiconductor Applications

SiC-MAP



4 > 7 TRL



9 MONTH PROJECT



Partners: ClaS-SiC Wafer Fab, CSA Catapult

CSA CATAPULT ROLE

PROJECT MANAGEMENT | RELIABILITY TESTING | MARKET AND SUPPLY CHAIN ANALYSIS



Project SiC-MAP (Silicon Carbide MOSFET Applications unlocked by PDK) takes the 1200V SiC MOSFET process, and develops it further to include 1700V and 3300V capability.

Aim: To make the PDK (Process Design Kit) available to customers with bespoke power device requirements to define a new device. This can then be fabricated at ClaS-SiC Wafer Fab in Scotland using standard design elements, process modules and processes.

- The PDK project will be of value to the PEMD supply chain, both in the UK and internationally
- SiC-MAP will support the UK in taking a position at the forefront of the emerging compound semiconductor (CS) industry
- The PDK will enable customers to have 1700V and 3300V SiC MOSFET devices tailored to their specific requirements. This will de-risk and shorten the time to market for new products

PROJECT BENEFITS



Positive environmental impact by increased efficiency of emerging clean power technologies



Accelerating faster manufacturing time of SiC MOSFET for end products and markets



This technology will be integral to the future of Power Electronics technologies that are the focus of the Clean Growth Challenge