

Appendix C



Experienced SiC MOSFET Device Engineer/Scientist

Based: Fife, Scotland – KY5

Salary Depending on Experience

About Us:

Beginning life as a new venture in 2017 with some \$50m in investment, here at Clas-SiC Wafer Fab Limited, we have completed the construction of a dedicated manufacturing facility for Silicon Carbide Power Semiconductors in Lochgelly, Fife and production is now well under way.

We have committed to using the Manufacturing Excellence framework as part of our drive to achieve early world class recognition with our unique value proposition of fast prototyping cycle times, enabling quick routes to market for our customers. Our values including 'Customers First'; 'Honesty & Integrity'; 'Open Communication'; 'Manage by the Facts' and 'Teamwork' help us to focus on what matters for our customers and our employees, every day.

As a result of our continuing progress, we now require an **Experienced SiC MOSFET Device Engineer/Scientist** with a proven track record in a design/characterisation environment to help our team continue the development of Clas-SiC's power SiC MOSFET programme.

The successful candidate will be expected to be a very strong contributor to all aspects of this programme, particularly in relation to SiC MOSFET design, characterisation and reliability, but also in relation to SiC MOSFET fabrication.

Besides having a great work environment and the opportunity to bring exciting changes to the semiconductor world, we are also growing fast – so if you would like to play a key role in contributing to our success, please get in touch with us!

If you would like to find out more about Clas-SiC then follow this link to our website: <https://www.clas-sic.com>.

More about the Role

This is a new & key role which will help the Company accelerate its high voltage SiC MOSFET development programme such that a mature, reliability proven Process Design Kit (PDK) can be provided as a compelling offering to potential customers.

You will be a confident individual, data-driven and will possess a sound understanding of SiC MOSFET device physics, characterisation, device parameter extraction and reliability testing & analysis.

Reporting to the Technology Manager, you will work with the integrated project team of layout, process and test engineering to develop all the required design, wafer fabrication and test/reliability processes, procedures and software routines to deliver a robust and well characterised MOSFET PDK, in support of the Company's overall SiC MOSFET PDK strategy.

Personal Profile

- High-performing self-starter, who uses own initiative, is self-motivated and committed
- Displays tenacity with a strong work ethic
- Demonstrates strong communication/interpersonal skills
- A team player, willing to work with team members and able to recognise and utilise their contributions for the success of the Company.

Education Requirements

- Doctorate, Masters or Honours Degree in Semiconductor Device Physics

Knowledge, Experience & Skills

- Thorough understanding of:
 - high voltage SiC MOSFET device physics and design. You will be familiar with the design parameters and design trade-offs that require to be considered for an SiC MOSFET, both for the active area of the device and also for the high voltage termination region;
 - the wafer level tests and test routines used to measure and characterise high voltage SiC MOSFET devices;
 - the wafer and package level reliability tests and test routines required to assure the delivery of a reliable high voltage SiC MOSFET device;
 - the data analysis and extraction routines required to determine key device characteristics and reliability parameters.
- Experienced in the use of manual & automatic wafer and package test hardware & software.
- Good grounding in project management principles and practices.
- Experienced and confident in directly interfacing with customers for both device development and ongoing production phases to leverage the best outcomes.
- Experienced in Intellectual Property capture and management.
- Excellent IT skills (Microsoft Office, TCAD, Layout/Design).
- Excellent communication skills, both written and verbal.

Key Responsibilities

- To deliver a robust, well characterised Process Design Kit.
- To develop and optimise SiC MOSFET electrical characterisation routines.
- To develop & optimise SiC MOSFET processes & modules for a variety of development projects.
- To interface with customers to understand & translate process requirements for Clas-SiC.
- To participate & occasionally lead Health and Safety activities within areas of responsibility.
- To continually update own knowledge on the trends in SiC technology & wafer processing and where appropriate apply these learnings.
- To document processes & procedures so that they are easily understood and followed.
- To provide input to the Clas-SiC technology roadmap.
- To strive to continually simplify processes & improve quality.
- To lower manufacturing costs with emphasis on yield improvement, reduction in variability and optimization of the factory.
- To own the supplier interface for tools within areas of responsibility.
- To clearly and succinctly document and report development work to support the establishment of Clas-SiC's intellectual property.
- To support project planning, monitoring and reporting.
- To author technical papers and present at conferences/trade shows.

Working Hours

40 hours per week

To apply, please submit your CV and covering letter to our HR Partner, Alison Melville at hr@greigmelvillehr.co.uk.

Clas-SiC Wafer Fab Limited is an equal opportunities employer

Closing date Friday 17 September 2021