

Microfabrication Process Engineer

Company and Job Description

Enachip is a fast-growing VC-funded startup company in the semiconductor microfabrication space. Our highly technical team is developing and commercializing unique proprietary magnetic materials and ground breaking microfabrication process that enable integrated power management solutions and positively impacting the way to power future electronic devices.

Enachip seeks a motivated and creative individual to work in a fast-paced, market-oriented R&D team environment, applying MEMS process technologies to fabricate Wafer Level Magnetics for power management applications and other market verticals. A strong preference will be given to individuals with experience in thin film photolithography and electrodeposition/electroplating techniques, process integration/process transfer and characterization of devices, DOE setup and failure predictions. Candidate will be expected to offer creative insights and solutions for R&D and production problems, to develop and characterize process modules that will be part of a standard fabrication platform and to help execute and analyze device design and fabrication experiments and to carry out written and oral reporting.

The Process Engineer is responsible for

- Process flow and integration towards fabrication of micro-magnetic devices
- Work with engineering and cross-functional teams to design and develop new devices and fabrication processes compatible with volume manufacturing
- Develop new techniques to support the processing needs and improve the current capabilities
- Create and analyze statistically designed experiments to effectively evaluate process corners to identify major risks and ensure margin for high volume applications
- Interpret and analyze data from magnetic device characterization procedures and contribute to the development of new characterization methods and procedures
- Work independently and collaboratively; provide assistance on assignments with other engineers and cleanroom operators as needed
- Collect, analyze, document, and report data
- Contribute ideas for new fabrication processes, and refinements to current and upcoming process flows
- Participate in root cause analysis, corrective actions, and help the team in process improvements
- Follow instructions, safety regulations, and compliance requirements

Required Skills:

- Statistical analysis software experience such as JMP, SAS, Minitab
- A strong background in communication, negotiation, DOE setup, data analysis and reporting
- MEMS process integration and process transfer expertise, particularly in polysilicon/nitride systems
- Characterization experience and metrology in optical microscopy, profilometer, SEM, FIB, surface science analysis, interferometry, electrical testing, etc.
- Vacuum metallic and dielectric thin film deposition (sputtering, evaporation)
- Photo-resist spinning, contact, non-contact, and stepper photolithography
- Wet and reactive ion-etching and thin film deposition techniques
- Basic knowledge of the design of experiments (DOE) methods

- The ability of multitasking in a team or as an individual contributor
- Detail-orientation and having the initiative to improve current standard
- Effective oral and written communication and computer skills
- Good laboratory hygiene and organization skills
- Experience in 2D and 3D CAD design and lithography mask layout

Education and Experiences:

- Masters or Doctorate degree in Engineering or similar field (eg. Electrical Engineering, Chemical Engineering, Materials Science, Mechanical Engineering, Physics or related discipline) with a focus on microfabrication and MEMS
- 1-5 years of MEMS or semiconductor process experience in volume applications
- Must be authorized to work in the U.S.

Benefits:

- Health insurance
- Dental insurance
- Vision insurance
- Flexible spending account
- Paid time off

Other:

- EnaChip offers a great work environment, professional development, challenging careers, and competitive compensation.
- EnaChip is an Equal Opportunity Employer. Employment decisions are made without regard to race, color, religion, national or ethnic origin, sex, sexual orientation, gender identity or expression, age, disability, protected veteran status, or other characteristics protected by law.
- EnaChip is NOT accepting unsolicited assistance from search firms. All resumes submitted by search firms to any employee of EnaChip in any fashion without a valid written search agreement in place will be deemed the sole property of EnaChip. No fee will be paid if a candidate is hired by WTS based upon an unsolicited referral.

Job Types: Full-time

COVID-19 considerations:

EnaChip Inc. is complying with CDC recommendations regarding COVID-19.