ME OPTICAL PACKAGING DESIGN ENGINEER

LOCATION: Culver City, CA

Relocation may be provided.

JOB DESCRIPTION:
Senior Electo-optics Packaging Engineer will spearhead mechanical development of next generation integrated optics modules, specialized in designing high-performance, EO modules in a compact form factor. This position requires experience with broad design, analysis, and simulation of optoelectronics, materials, IC assembly, and packaging of integrated optical assemblies. The candidate will apply customer form-factor and environmental constraints to guide the design of optical and electrical hardware, realizing micro-radian alignment stabilities in dynamic temperature, shock, and vibration environments.

The candidate will be responsible for designing and verifying optical-mechanical structures, thermal integrity and durability, and perform optical/thermal/package structural design, analysis, simulation, and verification. Must be able to work independently to model components and assemblies using CAE/CAD tools; FEA structural analysis, including linear, nonlinear and dynamic studies using software; Familiar with high thermal conductivity materials, thermal analysis, and coupled-physics involving thermal–structural, thermal-mechanical stress and thermo-electric analysis; Hands-on experience in with SolidWorks, ANSYS, and COMSOL.

Perform thermal/mechanical/optical analysis using ANSYS and other FEA design/simulation tools. 3D packaging design experience is preferred.

REQUIREMENTS:
To qualify for consideration, candidates must have the following skills to qualify

- 10 years direct experience in development of optical and IC packaging and assembly processes.
- Experienced with optical bench design
- Experience with engineering tools for fiber alignment, with wire bonding, flip-chip bonding and fiber packaging
- Knowledge and practical experience in characterization of semiconductor lasers and photodiodes
- Strong academic background and knowledge of microelectronics, optoelectronics packaging design and assembly, and experienced with low outgassing adhesives
- Knowledgeable in packaging technologies and processes, familiar with glass/ceramic/metal material properties and multilayer materials interfaces after bonding, flip-chip/BGA/PCBA/Flex design reliability and processing. Experience in 3D opto or IC packaging design and process
- Practical experience with SolidWorks and FEA simulation tools (e.g., ANSYS)
- Knowledgeable in materials property and process, yield analysis and enhancement, failure mode and analysis, quality tools, such as DOE, SPC, and Six-Sigma process and analysis; Familiar with Industry Test Standards, such as JEDEC, EIA, Telcordia, Mil-Std, etc.

EDUCATION:
BS degree in Mechanical or Electrical Engineering, Physics, Applied Physics, or equivalent, MS or PhD preferred.

APPLY:
If you are qualified and interested in being considered for this position, email a copy of your resume in MS Word PDF to HR1@apichip.com

COMPANY:
APIC Corporation is an emerging market leader in the development and production of highly integrated photonic and electronic solutions. Founded to advance the research, development, and production of highly integrated photonic technology, and committed to continued leadership in advanced photonic integrated circuits, APIC forged strategic academic and industrial partnerships and cultivated relationships with key partners in manufacturing, marketing, and product development to achieve our goals. APIC provides a fast paced and challenging environment, and a management team with a long history of exceptional

performance complemented by a technical staff with world-renowned scientific credentials. APIC offers competitive salaries and benefits. U.S. Citizenship or permanent resident status required.