



## Packaging Engineer Job Description

### Desired Technical Skills:

- Knowledge of semiconductor packaging processes such as dicing, cleaving die-attach and wire-bonding, seam sealing and fiber optic coupling and associated semi-automatic and fully automatic machines
- Knowledge of packaging materials and suppliers/vendors for substrates, epoxies, solders and packages including those used for photonics (laser diode) packaging
- Basic understanding of material properties of packaging materials such as CTE, thermal conductivity, glass transition temperature, viscosity, outgassing, etc. Ability to select packaging materials based on properties and their interactions for improving thermal performance, reducing stress and improving package reliability
- Familiarity with CAD software (Solid works or other) including thermal and stress analysis Experience designing jigs and fixtures, PNP tooling, die-attach tooling, selection of capillaries, etc
- Knowledge of single-mode photonics packaging including gaussian beam propagation, lens design/selection for collimating and focusing single-mode lasers, active alignment techniques, and design of optical benches is a plus
- Basic understanding of Statistical Process Control, and quality metrics for packages
- Ability to specify assembly equipment, source equipment, develop acceptance criteria, install in production, and ramp to volume
- Demonstrated hands-on problem-solving skills to resolve process, packaging, and equipment issues in a timely manner to enable the smooth functioning of production
- Knowledge of failure analysis techniques related to semiconductors/packaging materials is a plus – metallographic cross-sectioning, SEM/EDX, FTIR, Auger, FIB, etc

### Soft Skills

- Strong written and verbal communication skills
- Ability to take initiative and drive results to achieve company goals
- Ability to work in a multi-disciplinary team, build working relationships, and collaborate effectively with people to execute on projects
- Good time management skills

### ABOUT PHOTODIGM

For over 20 years Photodigm, Inc. has been the only 100% U.S.-based semiconductor manufacturer of single spatial and longitudinal mode DBR (Distributed Bragg Reflector) laser diodes. DBR lasers are essential to quantum sensing and atomic clock manufacturers, optical

metrology and sensing, and laser spectroscopy. Headquartered in Richardson, Texas, they design and produce fixed wavelength diode lasers best known for their accuracy and reliability.

### **BENEFITS**

- Compensation will be commensurate with experience
- Health and Dental Insurance
- Disability Insurance
- Paid Time Off
- 401K

Photodigm, Inc. is an equal-opportunity employer. All qualified applicants will receive consideration for employment without regard to race, ethnicity, color, national origin, sex (including pregnancy, sex stereotyping, gender identity, gender expression or transgender status), religion, age, marital status, sexual orientation, military/veteran status, physical disability, genetic information/history or any other personal characteristic protected by law.