

Senior Laser Development Engineer

Job Objectives

Design and develop optoelectronics devices, including but not limited to FP lasers, DFB lasers, gain chips, SLEDs, semiconductor optical amplifier, electro-absorption modulator/laser, photonics integrated circuits and their packaged modules, as well as photonics systems such as external cavity lasers to meet design goals and requirements.

Responsibilities

- Perform simulation of optoelectronic devices (CrossLight, ALDS, Optiwave), optical ray tracing (Zemax, Optalix), thermal (Solidworks) and electrical (5Spice) properties of optoelectronics devices
- Analysis of optoelectronics device epi growth and wafer fabrication process integration, device functional and reliability performance characterization and test results, referencing to the state-of-art, simulated performance, data-mining internal test-results data-base, and refine design, fabrication specifications, and simulation model and parameters to optimize fit between design and measured outcomes
- Report generation of design and simulation outcome with support of experimental data, where available
- Build up database of optoelectronics device design white papers, and management of all design documentation repository
- Maintenance of all engineering software, as well as training of new users to the respective software
- Define and develop device test and characterization methodologies to extract basic intrinsic parameters of optoelectronics devices
- All other reasonable duties, as assigned

Requirements

- Minimum 8 years' working experience with technical background in optoelectronics and wafer fab processes in optical laser component, photonics device system and sub-system
- Proven working experience in optoelectronics design and program/project management in the manufacturing industry
- Excellent written and verbal communication skills
- Proven organizational skills and multi-tasking skills