



## Reliability Engineer

**Type:** Full-time  
**Reports To:** Director of Quality and Reliability  
**Location:** San Diego, U.S.A.

### Job Description and Responsibilities

- Product / Package / Process / Device Reliability Test and Qualification planning and execution.
- Define and publish reliability / qualification plan and report.
- Develop, debug and bring up reliability test hardware for HTOL, HTB (HTGB / HTRB), BHAST, ESD and Latch up.
- Perform reliability test data statistical analysis.
- Lead reliability / qualification failure analysis, and disposition.
- Drive corrective / improvement actions for reliability robustness.
- Drive reliability / qualification schedule to ensure product launch on time.
- Manage reliability service vendors on hardware preparation, setup and inline monitoring.
- Review qualification reports from suppliers such as foundries and assembly houses, to ensure suppliers' qualification activities can satisfy Silanna's needs.
- Establish and maintain Ongoing Reliability Monitoring Program and publish regular reports.
- Support PCN and ECN activities, guide engineering judgement of reliability test needs.

### Required Skills

- Prefer 10 years of experience in semiconductor product reliability engineering, including HTOL, ESD, Latch-up, package level moisture preconditioning, unbiased HAST, biased HAST or THB, Temperature Cycling, Power Temperature Cycling, Power Cycling, HTS.
- Familiar with preparation for Qualification including BIB/Socket, waveform, electrical bias, thermal effect and etc.
- Familiar with IEC, JEDEC, IPC and other industry standards related to semiconductor reliability, and know the science behind.
- Experience in development and implementation of HTOL solutions Power Management Products, like AC/DC, DC/DC and Power Device.
- Experience in Hardware development and setup for BHAST, HTB, ESD and Latch up.
- Familiar with product / device reliability behavior model and lifetime estimation.
- Knowledge of IC wafer process, IC package assembly, test, and reliability engineering
- Knowledge of wafer level reliability tests and board level reliability tests are highly desired.
- Familiar with reliability fail modes of silicon/packaging technologies and fail mechanisms with respect to reliability
- Understanding of failure analysis techniques, including CSAM, XRAY, curve tracing, FIB, EMMI, etc.
- Experience in leading product and process nonconformance: MRB, CAR, 8D and RMAs, failure analysis and reporting will ensure the team meets objectives.
- Must be a strong written and oral communicator, and multi-project management.
- Bachelor of Electrical Engineering is minimum, Master of Electrical Engineering is preferred.