



Senior NPI Engineer / Product Leader for wafer level packaged detectors and IR imager modules

Job Description:

Meridian Innovation is recruiting a skillful senior NPI engineer / product leader, to coordinate the development of new thermal imager module solutions and to improve the overall reliability. The candidate will be part of a highly talented and committed group to implement state-of-the-art thermal imagers for the mass market.

Wafer Level Package enables the packaging of all imagers on a wafer at the same time. Two wafers, sensor and cap wafers, are bonded together to hermetically seal the sensors from environmental influences and create predefined condition within the detector cavity for functional capabilities. After the packaging is performed, bond pads are exposed in order to enable the dies on the wafer to be tested via a probe card, which is attached to a PCB to evaluate the imagers.

Testing of the die's functionality after packaged is crucial in order to determine sensitivity and yield of the imager on the wafer. An automated process between probe-station and the thermal image dies should enable pre-analysis of the whole wafer prior to dicing for mass production.

An optical system mounted on a PCBA, including the thermal imager forming a camera module, is to be tested and calibrated before being shipped to the customer. Coordinating the development of such thermal camera module design is a very important step to guarantee a robust and mass-production finished product.

Basic Qualifications

- A self-motivated, creative and hard-working person with an entrepreneur mind set.
- Adaptability and willingness to learn new approaches, solutions and skills.
- Excellent communication skill and team player.
- Capable of developing novel solutions to given problems.
- Open minded for new opinions and inputs.
- Minimum 5 years of relevant working experience in NPI environment.
- Experience in miniaturized camera systems product development and design would be a plus.
- Manufacturing flow knowledge of camera modules with determination of failure modes during mass production is highly beneficial.
- Excellent project management skills are required.
- Market and customer analysis, requirements development, business case, product design and manufacturing strategy.
- Create specifications, prioritize requirements and maintain a roadmap of the product being developed.
- Act as the subject matter expert for the product's capabilities in pre-and post-sales discussions.

- Collaborate with the engineering team who designed the product to clarify requirements and specifications.
- Bachelors, Masters or PhD degree from an accredited college in a related discipline, or equivalent experience/combined education.

Desired skills

- Work closely with R&D and project engineers during prototype phase to develop a robust concept for new thermal imager modules.
- Lead and motivate project team members to achieve prototype objective and target.
- Participate actively in all NPI / product development activities and work closely with project team members to ensure smooth transition into mass production.
- Work closely with customers and vendors to achieve a high yield, mass producible thermal imager module.
- Support team with new ideas on product design.
- Ability to understand business and technical requirements, capture and summarize key points, and communicate them at levels appropriate to your audience.
- Ability to work effectively with all areas of the organization, from engineering to sales.
- Define a strategy for the product's evolution to support business and customer needs.
- Create specifications, prioritize requirements and maintain a roadmap of the product being developed.
- Coordinate reliability tests for further improvement of module stability, minimizing possible failure mechanisms.
- A strong understanding of miniaturized camera modules, including sensor chip, uController, PCB and lens system.
- Excellent written and verbal communication skills.
- Knowledge on PCB design is a bonus.

Job Location(s): Singapore

Please contact Meridian Innovation (HK) LTD: hr@meridianinno.com