

Production Engineer

This role is part of the NPI team within Engineering reporting to the Head of NPI.

The production engineer is a key member of the NPI Engineering team and will interface with the R&D team as well as the Operations and OEM partners. A major and essential part of the Product Engineers responsibilities will be defining and implementing the manufacturing test process. This position involves participation in both the design of new products and the manufacture of existing products, as related to qualification and manufacturing test. You will work with R&D engineers, providing input for Design for Test (DFT) and Design for Assembly (DFA) considerations, determining how system test will be performed, how products will be assembled and establishing pass/fail criteria as well as diagnostic methodologies. The role also entails working alongside the Production test department, diagnosing and isolating product failures, as well establishing test guidelines for new products. Another element of the role is working with the Quality and Procurement department to resolve problems with contract manufacturers.

This is a real opportunity to be the person who makes a substantial difference to how our products are built and tested, adding real value to the way we do things. If you are passionate about making a difference, then we want to talk to you!

Required knowledge, skills & ability

- Strong foundation in electronics and diagnostics skills, being able to fault find down to component level if required.
- Ability to write and maintain programs/scripts in a relevant scripting language, ie Python, Pearl etc.
- Extensive demonstrable skills in doing and implementing DFT, DFA, DFM and DFS in real products

Essential Functions

- Work alongside the R&D team on new projects, providing input for Design for Test (DFT).
- Investigate and introduce new manufacturing test technology and methodology to enhance production efficiency.
- Develop test strategy, implementing and optimize test setup/processes at the OEM including identification, specification, design and qualification of test fixtures, test equipment and diagnostic software.
- Creates test procedures for production, including but not limited to writing software and procedures to run and test equipment.
- Work alongside development as part of the NPI engineering team ensuring that best practice, DFM, DFA, DFT and DFS are implemented during product development.
- Perform testing, analysis and troubleshooting on circuit boards.
- Develops and conducts training sessions with Test personnel on test procedures and other technical issues.
- Generates and analyses test data and reports, to improve manufacturing processes.

- Interacts with vendors to determine causes of failure and develop solutions to resolve issues.
- Analyses failure data to identify trends, and respond to issues.
- Work with the production Test department and Production management to develop new and improve existing tools used in the manufacturing department.
- Participate in root cause analysis and corrective action responses of system failures during the qualification or manufacturing process.
- Participate in the material review board (MRB) to provide analysis and recommendations.
- Communicating consolidated project/programme requirements to a multi-disciplined team to safeguard deliveries
- Developing and maintaining key relationships with internal customers and key stakeholders
- Manage the manufacture of prototype hardware to support design proving and trials activities
- Ownership of Customer / field RCA investigations
- Ensuring accurate reporting of the product end to end development cycle against all aspects of project acceptance phases gates, and interpreting requirements back to design/manufacturing authorities
- This position will require occasional international travel

Essential attributes

- Good Degree in Production engineering, Electrical/Electronic engineering or equivalent
- Minimum 5 years' experience working in a Production Engineering Role in an electronics-based industry
- Demonstrable experience of PCB, PCBA, SMT, electromechanical assembly implementations and production support
- Demonstrable Test Development experience, ideally on embedded systems, including design, validation and commissioning of production test solutions
- Experience of DFM, DFA, DFT etc., in medium to high manufacturing environments
- Strong drive to improve all aspects of the design to enable its manufacture
- Experience working within a Manufacturing and Engineering environment
- Ability to manage time and work to strict deadlines as part of a team or independently
- Demonstrate excellent interpersonal, oral and written communication skills
- Capable of working to and delivering engineering drawings, sketches, or written instructions
- Computer literate, competent in Word, Excel, Project, CAD and PowerPoint
- Good working knowledge of best practice in production test
- Experience of outsourcing and dealing with suppliers throughout the world

Desirable, but not mandatory qualities may include:

- Experience of New Product Introduction (NPI)
- Experience in working within an ISO 9001 accredited or another regulated industry environment or equivalent
- Experience of plastic moulding and sheet metal forming techniques and processes
- Experience/ awareness of TPS, Lean, 5S, Six Sigma, RCA (Root Cause Analysis) techniques
- Experience of SMED techniques in high product mix production environments