



'Ever Researching for a Brighter World'

Job Description – SYSTEM ARCHITECT

in our Program and Product Management Team at
Nichia Automotive Innovation Center GmbH (Würselen, near Aachen).

Summary of Position

The System Architect in the Program & Product Management team is responsible for leading the design, optimization, and release of LED and laser based automotive front lighting product solutions while providing technical leadership to small teams.

Success in this role means delivering high-quality, manufacturable solutions, managing supplier and customer relationships, driving innovation, mentoring junior staff, and contributing strategically to NAIC development goals.

Your Key Responsibilities

- **Product & Process Design**

- System Knowledge Collection: Collect system and application knowledge.
- Design Support: Counsel the design and development of product and process solutions.
- Documentation: Assist in creating and maintaining product documentation and specifications.
- Design Review Participation: Participate in design reviews and apply technical standards and company procedures.
- Cross-Disciplinary: Be the link between mechanical, electrical, optical and thermal disciplines.
- Validation Support: Support validation activities according to automotive quality standards (IATF 16949).

- **Supplier & Customer Interaction**

- Supplier Management: Manage internal and external supplier relationships autonomously.

- Specification Assistance: Assist in developing component specifications, support purchasing activities.
- Customer Meeting Participation Participate in customer meetings together with senior engineers.
- Requirement Support: Collaborate with customers and internal experts to create product specifications.
- Technical Collaboration: Support business development and sales activities with technical expertise.

- **Work Execution & Leadership**

- Task Execution: Define and structure work packages from broad project objectives
- Target Contribution: Create and execute team strategies to achieve technical and business targets.
- Progress Reporting: Provide regular updates on progress and potential risks.

- **Equipment & Tools**

- Tool Evaluation Support: Support the selection and evaluation of development equipment and software.
- Laboratory Operation: Operate laboratory and production equipment safely and correctly.
- Tool Maintenance Support: Assist in ensuring operational readiness, maintenance, and calibration of engineering tools.

- **Innovation & Strategic Development**

- Technology Research Support: Expand knowledge by Support benchmarking, technology scouting, conference visits, workshops and fair visits.
- Innovation Contribution: Contribute to innovation funnel and strategic roadmaps of NAIC
- IP Support: Provide input to the innovation funnel and support IP-related activities.

- **Additional Responsibilities & Process Improvement**

- Cross-Functional Contribution: Contribute to cross-functional collaboration within Nichia.

- Continuous Improvement: Support a culture of innovation, quality, and continuous improvement.
- Travel Readiness: Occasionally travel to attend meetings, trainings, conferences, or events.
- Process Optimization Support: Identify areas for improvement within assigned tasks and support implementation of solutions.
- Professional Development: Commit to continuous learning and professional development.

Your Qualifications

- You are hands-on and driven by curiosity and technical depth.
- You absorb new information rapidly and structure it independently.
- You are comfortable diving into complex physical domains - optical, thermal, electrical, mechanical - and understanding how they interact.
- You think analytically and work from first principles when needed.
- You enjoy translating abstract theory into practical experiments and measurable results.
- You are able to overlay and structure diverse requirements to form a coherent system concept.
- You aim to deeply understand how and why systems work - not just whether they function.
- You likely hold a strong academic background in Physics, Mechanical Engineering, Systems Engineering or a related field.
- You are eager to grow into a system-level thinker and contribute to future-oriented technologies.

Your Education and Experience

- Degree: Universal degree in Physics or Engineering, preferably with a PhD degree.

Supervisory Responsibility

- Not a supervisory position

Reporting

- Reports to: Manager – Automotive Innovation Center

Shine with Us – What makes our Team so bright

- You will join a team that operates in a start-up-like environment with flat hierarchies, fast decision-making processes, and strong alignment with our global headquarters in Japan.
- The role includes practical and theoretical work.
- Creating real customer impact is central to our work, with a strong focus on end-user applications and meaningful outcomes.
- NAIC stands out as a high-tech, dynamic, and highly competent organization that consistently pushes boundaries.
- Our activities span service design, product development, and innovation, offering a diverse and engaging professional environment.

Your application

If you are highly motivated and have a distinct ability to work in teams, please send your CV and a motivation letter in English per e-mail to our Human Resources department at Career-Germany@nichia.com.

