SiP Package Development Specialist (m/f/d)

Ihre Aufgaben

The SiP Package Development Specialist (m/f/d) is responsible for following tasks:

- Defining technically viable and cost-effective System-in-Package (SiP) concepts using bare-die known-good-die components, passives and, in later phases, multi-vendor chiplets
- Selecting and assessing package architectures, substrate and interposer technologies, interconnect concepts, materials and assembly processes against product requirements
- Coordinating packaging feasibility work with external manufacturing partners such as outsourced semiconductor assembly and test providers and pilot lines
- Responsibility for package technology requirements, design rules, cost assumptions, technical risks and concept documentation throughout feasibility and demonstrator activities
- Ensuring that package concepts consider manufacturability, testability, reliability, supply-chain constraints and future automotive qualification needs
- Deriving package-level requirements from product architecture, component data and environmental, electrical, thermal, mechanical, reliability and cost targets
- Developing and comparing 2D, 2.5D and 3D SiP concepts, including organic substrates, redistribution-layer structures, interposers, embedded components and appropriate die-attach and interconnect options
- Defining preliminary package stack-ups, material systems, bump and pad concepts, die placement constraints, assembly flows and package design rules
- Assessing the suitability and availability of bare-die known-good-die components, passives and chiplets for integration into proposed SiP concepts
- Leading package technology trade-off studies covering performance, size, thermal behavior, reliability, manufacturability, yield, schedule, supply risk and cost
- Coordinating concept reviews and feasibility studies with outsourced semiconductor assembly and test providers, substrate suppliers, foundries, pilot lines and engineering partners
- Defining inputs, boundary conditions and acceptance criteria for electrical, thermal, thermo-mechanical and reliability simulations
- Establishing package specifications, architecture documents, design-rule baselines, bills of material and technical decision records
- Supporting prototype planning, design reviews, failure analysis and the transfer of learning into reusable SiP design guidelines
- Monitoring relevant packaging technologies, supplier capabilities and industry standards and translate findings into the AESS SiP technology roadmap

Job ID
REF12749R

Arbeitsbereich
Engineering

Standort
Regensburg

Leadership Level
Leading Self

Ansprechpartner
Sarah Schwarz

Rechtliche Einheit
AUMOVIO Germany GmbH

Ihr Profil

- Academic degree in Electrical Engineering, Microelectronics or comparable qualification
- In-depth experience in semiconductor technology
- Long-term experience in IC design methodology and EDA tools
- Several years of experience in semiconductor package development, advanced packaging, System-in-Package or heterogeneous integration
- In-depth knowledge of package substrates, redistribution layers, interposers, die attach, wire bonding, flip chip, micro-bumps, underfills, molding compounds and thermal interface materials
- Profound experience in package architecture trade-offs involving electrical, thermal, mechanical, reliability, manufacturability and cost constraints
- Experience in working with outsourced semiconductor assembly and test providers, substrate suppliers, foundries or semiconductor pilot lines
- Deep knowledge of package design rules, assembly process flows, design for manufacturability and package qualification principles
- Deep knowledge of automotive semiconductor reliability expectations and relevant qualification and quality methods is preferred
- Experience in technical supplier assessment, feasibility studies and structured risk analysis is preferred
- System thinking by translating product needs into balanced package concepts and clear technical requirements
- Business fluent English language skills (written and spoken), German language skills desirable
- Initiative - self-confident, takes ownership and acts proactively
- Ability to learn continuously by being open and flexible to new tasks/fields
- Good Communication skills
- Technical judgement skills
- Partner management skills
- Documentation discipline
- Customer focus - anticipating and understanding the customers' needs
- Motivation and Inspiration
- Team player and contributes towards team goals

Applications from severely handicapped people are welcome.

Unser Angebot

- Next to the interesting daily work the region around Regensburg is offering a high recreational value and quality of life.
- Profit from extensive benefits at the location such as different canteens and cafeterias, a continuing education and training, health management, physiotherapy and much more.
- We offer an attractive salary as well as the possibility of hybrid and cross-border mobile work.
- For an improved work-life balance we support you with various initiatives for a better compatibility of family and career such as flexible work time model, part-time option, sabbatical, etc.

- You can expect a highly motivated team as well as diverse topics and projects in the global environment of the automotive industry.
- We are promoting lifelong Learning combined with personal and professional development.
- You are looking for an individual working time model? We support part-time work.

You would like to learn more about our additional services? Click here.

Ready to take your career to the next level? The future of mobility isn't just anyone's job. Make it yours! **Join AUMOVIO. Own What's Next.**

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Since its spin-off in September 2025 AUMOVIO continues the business of the former Continental group sector Automotive as an independent company. The technology and electronics company offers a wide-ranging portfolio that makes mobility safe, exciting, connected, and autonomous. This includes sensor solutions, displays, braking and comfort systems as well as comprehensive expertise in software, architecture platforms, and assistance systems for software-defined vehicles. In the fiscal year 2024 the business areas, which now belong to AUMOVIO, generated sales of 19.6 billion Euro. The company is headquartered in Frankfurt, Germany and has about 87.000 employees in more than 100 locations worldwide.