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# **progressivKI: Support of the development of efficient and safe electronic systems for future automotive applications with automated driving functions using a modular structured AI platform**



In order to optimally support and automate design processes for future automotive electronics systems, the use of AI methods is absolutely necessary - due to the significantly increasing system complexity on the way to autonomous and electrically driven vehicles. Through the use of AI, functionally safe electronic systems could be developed faster and more reliably. In this way, a significant acceleration of innovation should be achieved. The goal of the progressivKI project is to develop a generalised AI-supported design process for automotive electronics systems. The partners involved in the project (1 Tier1; 2 Tier2; 1 EDA company; 8 SMEs; 6 R&D institutions and 1 SME cloud provider (GAIA-X interface)) cover all necessary components of the value chain. The use of AI methods in the respective design processes is intended to accelerate system development and at the same time improve the validation of the functional safety of electronic automotive components. A modular AI platform is being developed that can be used flexibly via secure, encrypted and intelligent connectors to the individual (distributed) modules and subsystems. A link with GAIA-X will also be realised via these connectors. By means of AI-supported feedback and integrated domain-specific knowledge, the electronics developer is to be supported in the design creation of complex systems, thus making the entire design process more efficient. In addition, procedures will be developed in progressivKI to evaluate and ensure the quality of the training and learning processes of the implemented AI methods. The developed system is to be prototypically implemented and applied and demonstrated using two applications [PCB design]and [IC design/intelligent sensor technology].

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- [Fraunhofer Einrichtung Elektronische Nanosysteme \(ENAS\)](#)
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## Website:

<https://www.edacentrum.de/progressivki/>

## Used Abbreviations

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Abbreviation	Meaning
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PR Project Report

SPR Short Project Report

PN Project News

FPR Final Project Report

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