

MERCEDES-BENZ X FRICKLY SYSTEMS

R&D Projects Realised Faster

Frickly Systems is developing a platform for rapid prototyping of automotive control units for Mercedes-Benz.

The Challenge

The development of new hardware and software products implies close coordination between different areas and experts and can be a slow and costly process. Mercedes-Benz faced this challenge when the software team at RTD/RTS wanted to have a development kit that would enable them to quickly test and iterate new concepts and algorithms for lower-end car control units. Together with Frickly Systems, they brought their vision of such a solution to reality.

The Solution

Frickly Systems specialises in transforming ideas into fully functional prototypes with minimal input from clients. Leveraging their expertise in electrical, mechanical, and software engineering, as well as in-house prototype manufacturing, they developed the first version of ARDEP (Automotive Rapid Development Platform) based on initial

input from Mercedes-Benz. This holistic approach enabled Frickly to effectively deliver a powerful development toolkit tailored to Mercedes-Benz's needs.

The Outcome

Over a six-month development period, Frickly delivered a small-series of PCBs equipped with multiple interfaces, including the automotive busses CAN, LIN, and numerous GPIOs, tailored for rapid integration and flexibility. In parallel, they developed a software framework designed to streamline deployment in test vehicles such as an EQS used in the SofDCar project, significantly reducing setup time and accelerating initial testing. Recognising the broader potential of the platform, not just for the RTD/RTS team but across other Mercedes-Benz R&D departments, Mercedes-Benz made the strategic decision to publish the project as open source, enabling wider collaboration and faster innovation throughout the organisation.

Frickly Systems

Frickly Systems develops technical products from vision to working prototypes fast and hassle-free

Frickly Systems accelerates time to market for complex product development by turning product visions into reality through its integrated hardware and software engineering teams.



Headquarters
Stuttgart, Germany

Founded
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No. Employees
11 – 50

Website
www.frickly.systems

Acknowledgement

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About STARTUP AUTOBAHN powered by Plug and Play

STARTUP AUTOBAHN powered by Plug and Play is an open innovation platform that provides an interface between innovative tech companies and industry-leading corporations.

The basis of the program is the partnership that develops between startups and the corporate business units. The two entities hold an equal footing from the get-go: together they evaluate the potential for a joint venture, move forward to pilot the technology, and work to achieve the ultimate goal – a successful production-ready implementation.

Designed with the intention to exceed startup acceleration, STARTUP AUTOBAHN powered by Plug and Play moderates a community for collaboration with a focus on implementable results.

Over the years, the platform has successfully cultivated over 500 projects with more than 350 startups since its founding in 2016. ■

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