



# Welcome to the World of Solectrix!



The company's headquarters, located in Fürth, Germany, was built in 2019. The Solectrix building houses both Solectrix GmbH and Solectrix Systems GmbH with a total of over 150 employees.





# Solectrix GmbH Design House for Embedded Systems

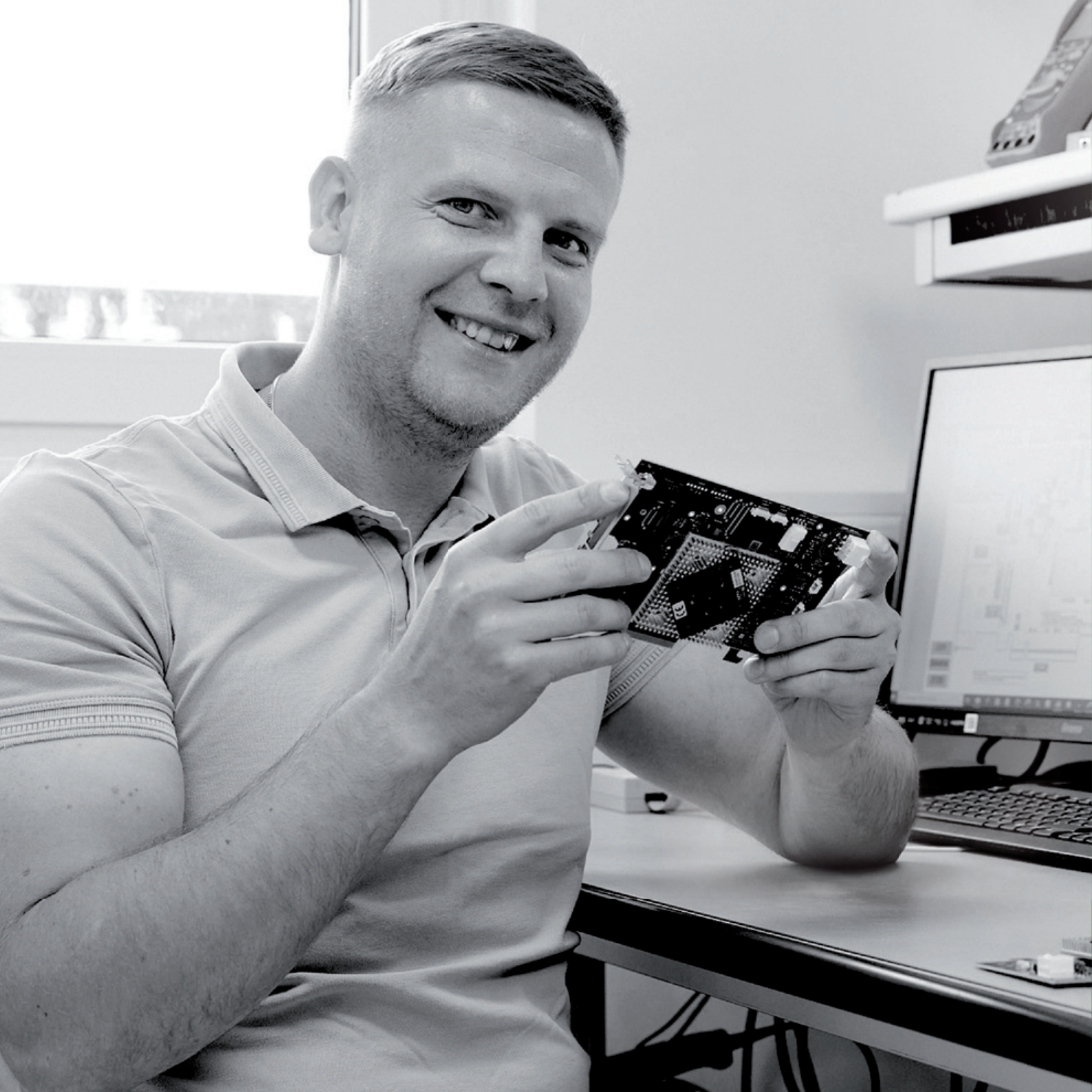


Embedded electronics technology puts forward a multitude of complex requirements that cannot be met with simple standards but require exclusive solutions of the highest quality. Founded in 2005 as a design house for embedded systems, Solectrix GmbH defines itself precisely at this point: Innovative thinking in embedded electronics at the highest level.

The main areas of expertise are the development of customized high-end electronics solutions, electronic components, firmware, modular software, and complete devices and systems.







# Solectrix Systems GmbH Production and Sales



The production of our own – or your – products is carried out by our production and sales company Solectrix Systems GmbH, which was founded especially for this purpose in 2008. Being able to do this in the modern laboratory and production facilities of our company building gives us the space for flexibility and ensures the level of quality we strive for.

In addition to the production of customized systems and devices to the highest quality standards, from prototype to series, Solectrix Systems is also entrusted with the manufacturing, selling and distribution of Solectrix products. As a matter of course, the company also provides comprehensive technical customer support and ensures long-term availability for customer systems and components (lifecycle management).







# Technology-Driven and Customer-Focused



Our highly experienced engineers have always risen to all technological challenges, implementing cutting-edge technology.

They provide a high level of reliability and the necessary flexibility to ensure that your project exceeds both technical standards and market expectations.

We are your local partner. What does that mean? We share your values, your ambitious goals and, most likely, your time zone. Our customers appreciate the direct, personal contact with the managing directors, a close connection to project managers who care, and a lively and open exchange of information. For us these are essential elements of a friendly and trusting relationship.





# Our Roots: Cameras, Lasers and Medical Devices



We value longstanding cooperations, and so many of our customer relationships go back to the early days of Solectrix.

One example that we are particularly proud of is our work for ARRI, a global leader in the field of camera and lighting systems. Our collaboration began in 2007 and culminated in two milestone developments in the digital pro camera field: The original ALEXA, which set the bar for digital filmmaking and quickly became the most popular camera for big Hollywood productions, and the massive ALEXA 65, dubbed “the world’s first 65 mm digital camera” thanks to its 6.5K image sensor.

A second early and long-running collaboration saw our industrial team involved in the development of laser scanner systems, with many safety-critical elements and complex supervisory systems.

Our most enduring collaboration began in 2005 and resulted in the joint development of handheld medical devices for a major player in that field. To this day, the medical development team that arose from this ongoing collaboration remains one of the main pillars of our company, working on diagnosis, treatment and supervision devices for our long-time partner.





# The Key to Our Success: Our Employees



In our demanding field, experience is important, and so are personal relationships.

The company has grown to over 150 people over time, and we are proud that many of them have been with us for five, ten or even fifteen years, growing into increasingly important roles.

Creating solutions and achieving success together is our goal. In this, we always have the well-being of our staff in mind. Therefore, we provide various employee benefits, offer flexible work arrangements, and always make sure to create a feel-good atmosphere and a working environment that inspires people.

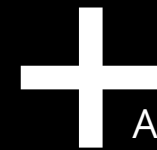


IMAGING



AUTOMOTIVE

# Profound Expertise



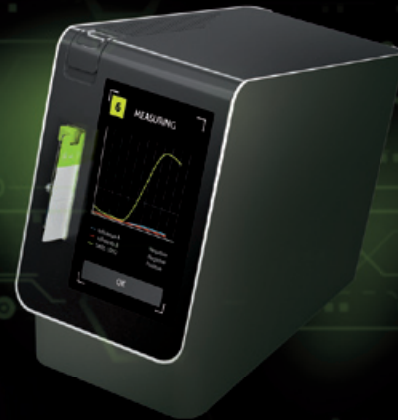
As a design house for embedded systems we cover a very wide range of markets.

This always comes with a slight risk of being perceived as a jack of all trades, master of none. But the reality is that Solectrix has grown to its current size by focusing on innovative, cutting-edge development work in a number of fields.

And it is the resulting knowledge that facilitates our most valuable contributions to our customers' projects. Hence, we want to highlight a few areas in which our expertise truly gets to shine.



INDUSTRIAL



MEDICAL



# Medical



**We are your reliable partner for research and development services for medical systems – customized according to your specifications.**

We cover all components such as hardware, software, FPGA and mechanics. Solectrix develops complete tailor-made medical devices, system solutions for IVD devices and point-of-care technologies (POCT) based on our modular device platforms.

Mobile devices, temperature control solutions or medical 3D-imaging and microscopy are part of our portfolio. Qualification and verification services and independent support for the certification of your systems are provided as a part of this.







# Automotive



**A major milestone for Solectrix was the joint development of the first series-produced digital mirror replacement system for trucks together with MEKRA Lang.**

Today, Solectrix is an imaginative development partner for OEMs and suppliers, significantly involved in numerous technology projects and customer-specific series projects such as the development of Ethernet-based camera systems, FPGA- or microcontroller-based embedded solutions, and technology development in the field of image processing. Applications include the implementation of artificial intelligence via Convolutional Neural Networks (CNNs) and the development of safety-relevant systems according to the ASIL classification (Automotive Safety Integrity Level).

A custom-tailored generic software development process (Automotive SPICE) and a quality management certified according to ISO 9001 enable efficient work in compliance with the highest quality standards.





# Industrial



**We provide strong embedded systems that meet the special demands of industrial environments.**

We have been using our cross-sector expertise to develop smart solutions for the most varied of industrial devices and machines, hitting the spot with a harmonious interplay of functional hardware, perfectly fitting FPGA firmware, modular software and custom-made mechanics.

Modules and carrier boards from Solectrix can be found in fields as diverse as mechanical and plant engineering, motor control, aerospace and automation controllers. They include measurement and control systems, laser scanners and controllers, with a particular focus on safety-relevant components.





# Imaging



**We are always ready for the latest challenges in image processing and the development of embedded camera systems.**

With our own algorithms for processing steps like defective pixel correction, de-mosaicing or image enhancement we achieve excellent results using highly efficient FPGA- or software-based solutions with a maximum of flexibility.

We handle high frame rates and resolutions (4K and beyond), we offer stereoscopic 3D with synchronous image processing for „real 3D“, and we strive to support even the very latest in sensor technology sporting unprecedented features. Synchronous recording and playback of multiple video streams, streaming, fast prototyping as well as real-time processing and analysis of images and video streams can also be adapted to the needs of any imaging project thanks to flexible architectures.









Thank you for staying with us until you reached this page.  
Now that you know so much about Solectrix, we would like  
to get to know you. Come and visit us - we look forward to  
welcoming you and supporting your project.

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