

Vision retrofit solutions connect analogue and digital world

hema electronic at the FPGA Congress in Munich

At the FPGA Congress, which took place from **May 21st to 23rd, 2019 in the NH Hotel in Munich-Dornach**, hema electronic and cooperation partner Enclustra, the Swiss specialist for FPGA modules, showed with their latest embedded vision solutions how FPGA and SoC modules can quickly and easily connect analogue and digital infrastructures and thus facilitate and accelerate digital integration.

hema managing director Oliver Helzle gave a presentation on this topic entitled "Vision retrofit solutions using a concrete example". For hema "Retrofitting" means the conversion or upgrading of existing systems with modern digital technology. The advantages of this approach are functional expansion, increased efficiency and the longer availability of existing systems. As a technology service provider for the design and development of modular and customer-specific platforms, hema electronic is the ideal partner to master the challenges of new FPGA technologies. These high demands on new approaches and solutions – in the hardware as well as in the software area – are implemented by hema electronic in a customer-specific way.

What does a light bulb have in common with a subway and an FPGA? Oliver Helzle answered this question in his lecture. The participants listened attentively to his explanations of the challenges of embedded systems in infrastructures. Problems like the connection of analog sensors to new digital components were described using the example of railway technology. Aspects such as the low latency of data transmission and the fusion of different sensor data were also part of the presentation. A part of the solution of the case was the replacement of hardware-based special components by the combined hardware and software possibilities of modern FPGA systems. This will allow old and new subway cars in new and old stations to safely transport passengers in the future.

The FPGA Congress is organized annually by the trade journal ELEKTRONIKPRAXIS and the training center PLC2. The event presents user-oriented and progress-oriented solutions which can be quickly integrated into everyday development work. At this year's congress, more than 70 international experts presented papers on the 10 main topics of Applications, Automotive & Video, Board Level, Safety & Security, 5G & Tele-/Datacom, Language, Tutorials, Embedded, Basics and AI & Machine Learning. There were more than 100 technical presentations, hands-on tutorials and test developments on provided boards and computers.



The booth of hema electronic at the FPGA Congress in Munich-Dornach.

(Photo: hema electronic GmbH)