# Achieve More With Embedded Systems

SICK AG and Silicon Software GmbH extend the SICK AppSpace eco-system

Waldkirch, April 2017 – SICK AG and Silicon Software GmbH are combining their expertise and working together to extend the SICK AppSpace eco-system with FPGA programming for embedded sensor and integration hardware. This collaboration is diversifying the range of application solutions available with sensors from SICK – even in areas such as industrial image processing. In addition to its own FPGA algorithms, in the future SICK will also use VisualApplets from Silicon Software for the graphical programming of tailored sensor and integration technologies. To ensure compatibility between VisualApplets and sensors from SICK, VisualApplets Embedder was implemented as a one-off solution. Both companies are market leaders in their respective fields and hope to use their combined knowledge to share in the strong growth in the sensor and image processing market.

This collaboration is allowing SICK to offer its customers the right sensor solution with an even more focused approach. The wide range of functions offered by VisualApplets – with over 200 operators – and the approach of FPGA programming using data flow models on a graphical user interface are opening up new markets and applications. “VisualApplets represents the logical next step for our SICK AppSpace software eco-system,” explains Detlef Deuil, Head of Product Management Vertical Integration Products. “For our in-house application software developers, and potentially for selected OEMs and system integrators as well, it is very easy to use real-time data processing in our sensor and integration hardware and implement powerful application solutions. All application developers from the various industrial sectors can benefit from the easy use and integration of VisualApplets in SICK products.”

**Shared synergy effects benefiting customers**

SICK offers a broad sensor and integration portfolio, ranging from compact sensors that are easy to operate, through configurable standalone solutions, and right the way up to flexibly programmable sensor systems for the most demanding of requirements. Access to SICK’s own sophisticated FPGA functions – and, in the future, to extensive operator libraries from Silicon Software – is being provided in order to minimize the complexity, costs, and risks associated with implementing programmable sensor solutions. From established modules, this creates new, perfectly tailored solutions suitable for any customer requirement in any industry.

“We are delighted that SICK was won over by our embedded concept and that the powerful functions of VisualApplets are being used in a wide range of sensor and integration technologies, enabling SICK AppSpace to be developed further,” adds Dr. Klaus-Henning Noffz, Chief Executive Officer at Silicon Software. “The reliable VisualApplets algorithms, which are used all over the world, will enable SICK to expand into new markets and industries. This will allow both companies to grow together and pass the beneficial effects of this synergy onto their customers.”

The collaboration between SICK and Silicon Software represents a union of two strong brands. The perfect coordination between the two companies extends beyond just their products: SICK has an international reach as a leading manufacturer in the sensor sector, and has extensive expertise in the field of hardware. As a technology leader for customizable FPGA programming and frame grabbers, Silicon Software GmbH represents the perfect partner in this case. This cooperation benefits customers in a range of industries, making it easier for them to access high-performance sensor solutions.

About VisualApplets

VisualApplets is the integrated development environment for real-time applications on FPGA processors in image processing. The solution is used for numerous industrial applications in a multitude of sectors. VisualApplets enables access to the FPGA processors of image processing hardware such as frame grabbers, industrial cameras, vision sensors, and image processing devices in order to implement custom image processing applications. The approach of mapping out FPGA programming using data flow models on a graphical user interface makes it easy for hardware and software developers as well as application engineers to create applet designs for complex image-processing procedures intuitively and in a short amount of time – even without hardware programming expertise. All programmed applications are executed on the FPGA hardware in real time.

About Silicon Software GmbH

Silicon Software GmbH produces and sells both standard products and custom OEM solutions with their hardware and software developments for vision and quality control in the field of automation. Its focus is on the intelligent image processing frame grabbers of the microEnable product series and the VisualApplets software for the graphical programming of FPGA vision processors.

SICK is one of the world’s leading producers of sensors and sensor solutions for industrial applications. Founded in 1946 by Dr.-Ing. e. h. Erwin Sick, the company with headquarters in Waldkirch im Breisgau near Freiburg ranks among the technological market leaders. With more than 50 subsidiaries and equity investments as well as numerous agencies, SICK maintains a presence around the globe. In the fiscal year 2015, SICK had more than 7,400 employees worldwide and achieved Group sales of just under EUR 1.3 billion.   
Additional information about SICK is available on the Internet at [http://www.sick.com](http://www.sick.com/) or by phone on +49 (0) 7681 202-4183.