

congatec presents the conga-ARkit, a reference platform for automation

The starter kit consists of both hardware and software as a design basis for PLC manufacturers

congatec AG presents the conga-ARkit, a complete solution package for the implementation of PLC functions.

This comprehensive package was developed in conjunction with 3S-Smart Software Solutions GmbH, Real-Time Systems GmbH and OSCAT ('Open Source Community for Automation Technology'). It addresses PLC manufacturers and companies that intend to integrate PLC functionality in their applications.

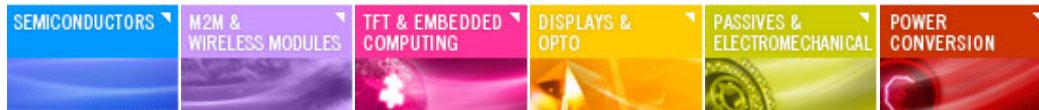
The conga-QA, a Qseven Computer-On-Module with the Intel® Atom™ Processor Z530, was chosen as the hardware basis. Due to its compact dimensions of just 7x7cm², this module can be easily integrated via top-hat rail housing. Additionally, it provides capable, future-oriented interfaces and can simultaneously run two separate operating systems thanks to hyper-threading and virtualization support. This makes the well-priced conga-QA the ideal platform for the majority of control and visualization tasks.

The kit includes a suitable evaluation carrier board to facilitate the use of the Qseven module. This provides access to all Qseven interfaces through standard connectors. Manufacturer-specific I/O components can then be flexibly configured and controlled via Ethernet/Ethercat or another suitable field bus.

The software package, which has been compiled on an entirely application-oriented basis, comes pre-installed on a bootable USB stick. This device uses hypervisor software to boot a Microsoft Windows XP operating system and a real-time capable OSADL Linux. The system resources of the Qseven module are assigned exclusively to each of the operating systems. These two subsystems communicate with each other via a virtual Ethernet port.

On the real-time side of things (the OSADL Linux system), a CoDeSys SP is operated as the PLC runtime system. The complete and real-time capable virtualization means that the PLC handler is entirely independent of the Windows system. Even a Windows 'Blue Screen of Death' or a fatal application error cannot affect the reliability of the control.

On the other side of things (the Windows system that is not real-time capable), the installation comprises the IEC 61131-3 programming system CoDeSys and the Open Source OSCAT Library (Open Source Community for Automation Technology, www.oscat.de). This comprehensive software tool allows control and visualization to be configured for automation tasks. The CoDeSys OPC server included in the package provides access to the real-time process data via corresponding OPC clients. Furthermore, the integrated visualization editor makes it easy to create visualization screens, even within the programming system.



The conga-ARkit contains a complete hardware infrastructure based on the Intel Atom Processor and a fully installed software environment, including the runtime environment. A compact CPU module measuring only 7x7cm² can handle visualization as well as the control tasks. It is hard to imagine a more compact and more powerful automation platform.

About 3S

3S-Smart Software Solutions GmbH is one of the leading European software manufacturers for automation technology. It focuses on developing and marketing CoDeSys, the IEC 61131-3-compliant programming system for control applications as well as CoDeSys SP, the corresponding platform-independent control system. The company has developed comprehensive automation software from the dedicated programming tool and offers integrated program enhancements for applications such as movement control and visualization with CoDeSys. The company's intense dialogue with its customers and the user-friendly nature of its products form the basis for the optimum support and advice it provides.

www.3s-software.com

About CoDeSys

CoDeSys is the leading hardware-independent programming system under Windows for creating control applications. CoDeSys is based on the international IEC 61131-3 standard, supports all the programming languages of this standard and provides complete backends (including compilers) for all commercially available processor types. CoDeSys makes it easy to develop and run control applications for all desired hardware types.

www.codesys.com

About OSCAT

OSCAT ('Open Source Community for Automation Technology') develops the *oscat.lib*, an Open Source, IEC61131-3-compliant library that serves as a framework for CoDeSys applications for the automation sector.

www.oscat.de

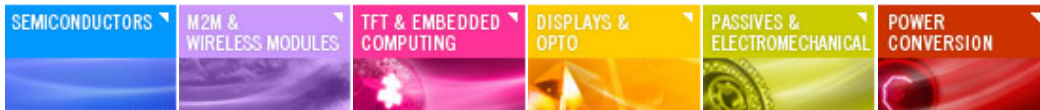
About Real-Time Systems GmbH

Real-Time Systems GmbH is a leading provider of real-time virtualization solutions, operating system technology and development services for the embedded real-time market. In addition to marketing its own products, RTS provides a variety of development services. Real-Time Systems GmbH has its headquarters in Ravensburg, Germany, and has a network of partners that stretches across Europe, USA and Asia.

www.real-time-systems.com

About OSADL

OSADL promotes and supports the development of Open Source Software for the automation industry. OSADL is an international association registered in Germany and recruits members from all over the world.



www.osadl.org

About congatec

congatec is an innovative and experienced manufacturer of embedded computer boards. The highly skilled employees have more than 200-manpower years of experience in the fast growing embedded computer industry. Based in Deggendorf, Germany, the company's objective is to engineer and market industrial computer modules based on standard form factors. congatec's products are available for all business segments and industries. Customers can be found in industrial control, medical, automotive supplies, aircraft and transportation fields. Typical applications are machine control, vending machines and visualization terminals. congatec's main know-how includes the support of our embedded BIOS features, excellent driver support as well as full-featured board support packages. Customers receive complete product lifecycle support starting early during the design-in stage. congatec products are manufactured by specialized contract manufacturers who fulfill the latest quality standards.



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