



OPC-UA DEVICE SERVER SOFTWARE DEVELOPMENT KITS

ADDING REAL VALUE TO YOUR AUTOMATION DEVICES

AT A GLANCE

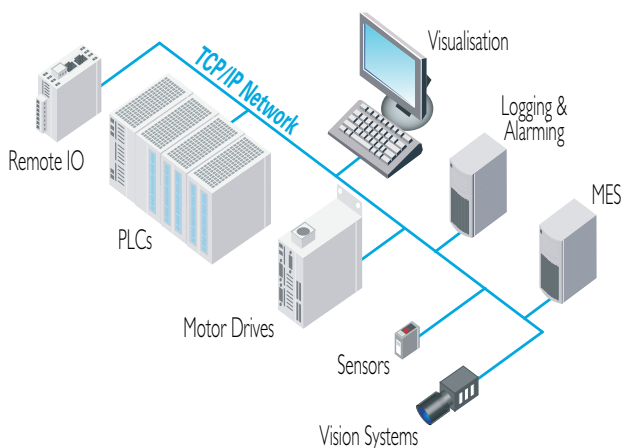
An OPC-UA Device Server Software Development Kit (SDK) from Embedded Labs allows you to quickly and easily embed an OPC-UA Server in your product. Our scalable, standards based SDKs can be integrated into every class of device, from discrete sensors and actuators to programmable controllers and beyond. Add real value to your product by enabling direct point and click configuration, management and monitoring from any OPC-UA Client.

BENEFITS OF EMBEDDED OPC-UA

Eliminate costly and time consuming configuration of register based data.

Enable direct point and click device configuration, management and monitoring from any OPC-UA Client.

Promote your device to be a first class citizen in the automation hierarchy. No longer do your customers need to marshal data through third party systems in order to move it to where it needs to be.



EMBEDDED OPC-UA SIMPLIFIES NETWORK ARCHITECTURE

WHAT IS OPC-UA?

OPC is a series of specifications supporting open connectivity via open standards. OPC-UA is the next generation of OPC developed by the OPC Foundation. Rapidly gaining traction in industrial and building automation, OPC-UA was designed from the ground up to be multi-platform and enables seamless communication between all components of an automation system and the enterprise.

Embedded Labs provides the only embedded OPC-UA solution that is scalable from the smallest devices to the most powerful embedded systems. We achieved this by developing our SDKs from first principles, implementing every line of code specifically for embedded systems.

WHY EMBED OPC-UA IN A DEVICE?

In the automation systems of today, end users need to visualise the behaviour of their processes and installations in real time to better understand them and maximise their cost-effectiveness. Devices are connected to the end user via other devices and applications that must all be configured in order to pass information up the chain. This configuration is complex enough that many installations expose only a small amount of the available information to the end user.

If every device was intelligent and on the network, end users could have access to all of the available information at any given time. Thanks to OPC-UA and Software Development Kits (SDKs) from Embedded Labs, intelligent networked devices are now a reality. Embedded Labs' OPC-UA SDKs allow the integration of a fully compliant, high performance OPC-UA Server directly into your device.

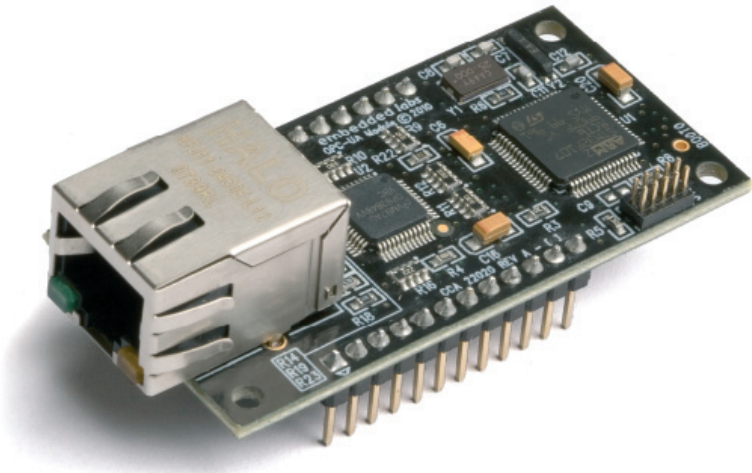
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Embedded Labs is the only vendor to offer OPC-UA Device Server SDKs tailored to every class of device. Whether your product is engineered for minimum unit cost or maximum performance we have the right solution for you.

OPC-UA DEVICE SERVER SDK FOR MICROCONTROLLERS

A software development kit that allows you to simply and easily add an OPC-UA Server to your microcontroller based product. With an emphasis on efficient RAM usage, the SDK is optimized for microcontrollers with 64kB – 512kB RAM.



fasaLINK OPC-UA Server Module reference design created by Embedded Labs with our OPC-UA Device Server SDK for Microcontrollers. The module is based on a 72MHz ARM Cortex-M3 microcontroller with 64kB RAM.

OPC-UA DEVICE SERVER SDK FOR MICROPROCESSORS

A software development kit for enhanced embedded systems based on high performance processors such as ARM9 and Intel Atom. With an emphasis on performance and large data sets, the SDK enables your device to serve thousands of variables to large numbers of concurrent clients. Typical targets have a 300MHz processor and 128MB RAM. The SDK runs on Windows, Windows Embedded, Windows CE, Linux, uLinux, VxWorks, QNX Neutrino and many others.

COMMON FEATURES OF BOTH SDKS

- RAM based Address Space that can be fully reconfigured on-the-fly.
- Based on a common ANSI C code base.
- Both SDKs use a common API allowing seamless migration of application code across targets.
- The number of sessions, subscriptions, monitored items and address space nodes supported is solely dependent on your available target resources.
- No heap based memory allocation is used to ensure maximum reliability.

TYPICAL APPLICATIONS

- Programmable Logic Controllers
- Sensors and Actuators Controllers
- Gateway Products for Protocol Translation
- Building Automation Controllers
- Drives and Servo-Amplifiers
- Smart Meters

BENEFITS OF EMBEDDED LABS SDKS

Robust, scalable solutions developed from first principles for embedded systems.

True ANSI C multiplatform software that runs on any OS or RTOS or even on bare-metal systems.

Supports the smallest RAM footprint in the industry and scales from 64kB microcontrollers up to ARM9, Intel Atom and beyond.

Incredibly easy to use with prototype development in days, not weeks or months.

Evaluation binaries available for a variety of targets and platforms.



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