

Product Brief

Matrikon Embedded OPC UA SDK

Industrie 4.0 and IIoT ready OPC UA connectivity

The Industrial Internet of Things (IIoT) and Industrie 4.0 are rapidly transforming how M2M communications, control automation, and device-to-enterprise communications are implemented. In this emerging hyper-connected world, even the smallest devices will be expected to support secure standards-based data connectivity. Selected as the connectivity standard of choice for Industrie 4.0 applications, OPC UA is the single, most important data connectivity standard vendors need to implement in their devices to ensure their products can take part in and compete in the new world.

The **Matrikon Embedded OPC UA Software Development Kit (SDK)** is the fastest, easiest way to OPC UA enable your Infineon based systems. Without having to learn the intricacies of OPC UA and not having to debug OPC UA Server implementations, the Matrikon Embedded OPC UA SDK lets you confidently take your OPC UA enabled product to market faster.

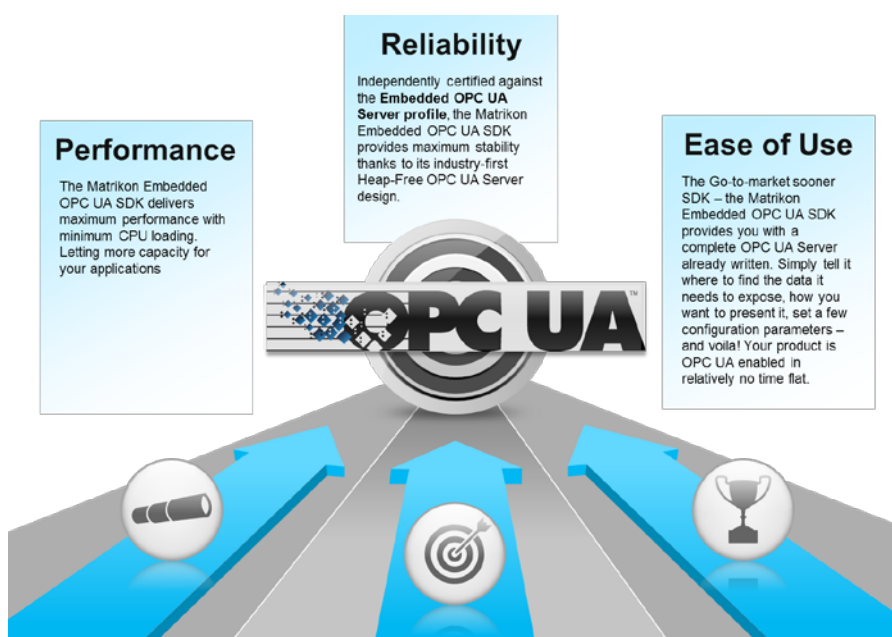


Target market and applications

- > Programmable logic controllers
- > Sensors and actuators
- > Gateways products for protocol translation
- > Building automation controllers
- > Drives and Servo-amplifiers
- > Smart meters

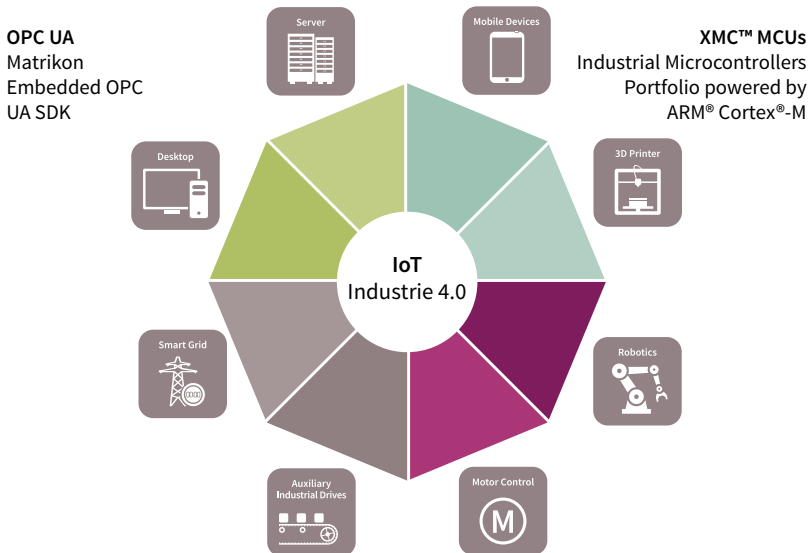
Features

- > Compact/high performance SDK
- > Reconfigurable, on the fly, address space
- > Flexible number of sessions, subscriptions, monitored items and node counts – solely dependent on resources
- > ANSI C linkable software
- > No heap memory allocation
- > Single source distribution:
Use same SDK for all target platforms
- > XMC™ MCUs – XMC4000 family



Matrikon Embedded OPC UA SDK

Industrie 4.0 and IIoT ready OPC UA connectivity



Officially certified Embedded OPC UA server

Certified by a third party certification lab that is recognized by the OPC Foundation, the Matrikon Embedded OPC UA SDK has been thoroughly tested for full compliance with the Embedded OPC UA Server Profile.

The smallest practical resource requirements

With the smallest implementation weighing in at less than 100 kB RAM, and typical implementations in the 100 kB-500 kB range –even resource constrained devices can be empowered with native OPC UA connectivity often without adding RAM or upgrading the CPU.

Optimized performance

Ground-up design, implementation, and optimization of the entire Matrikon OPC UA stack means that maximum CPU capacity is left for your applications.

Superior long term stability with fragmentation free memory use

Unlike typical OPC Foundation stack based OPC UA SDKs, the Matrikon Embedded OPC UA SDK can operate using a no-heap memory allocation mode, which means: your device's memory will not fragment over time providing you with maximum system stability.

Benefits

- > Fast drop-in UA server design
- > Stable thanks to no-heap design
- > Smallest RAM footprint: embed OPC UA in existing products, no hardware upgrades
- > Scalable functionality: use one UA SDK across all products lines
- > Continuous SDK updates ensure your products support latest OPC UA standard
- > Expert support for fastest ramp-up

System requirements

- > Written in C++
- > Program using Ansi C, C++, or Java (JNI)
- > Requires C++ compiler that conforms with ISO/IEC 14882:1998 (C++98)
- > Supports 32-bit processors and higher e.g. XMC4000 MCU family
www.infineon.com/xmc

More information

- > OPC UA SDK
www.matrikonopc.com/opc-ua/embedded/sdk.aspx
- > OPC UA Eval-Kit
www.matrikonopc.com/opc-ua/embedded/evaluation-kit.aspx
- > Hands-on:
www.matrikonopc.com/downloads/1292/index.aspx
- > Infineon:
www.infineon.com/matrikonopc

Published by
Infineon Technologies Austria AG
9500 Villach, Austria

© 2015 Infineon Technologies AG.
All Rights Reserved.

Please note!

THIS DOCUMENT IS FOR INFORMATION PURPOSES ONLY AND ANY INFORMATION GIVEN HEREIN SHALL IN NO EVENT BE REGARDED AS A WARRANTY, GUARANTEE OR DESCRIPTION OF ANY FUNCTIONALITY, CONDITIONS AND/OR QUALITY OF OUR PRODUCTS OR ANY SUITABILITY FOR A PARTICULAR PURPOSE. WITH REGARD TO THE TECHNICAL SPECIFICATIONS OF OUR PRODUCTS, WE KINDLY ASK YOU TO REFER TO THE RELEVANT PRODUCT DATA SHEETS PROVIDED BY US. OUR CUSTOMERS AND THEIR TECHNICAL DEPARTMENTS ARE REQUIRED TO EVALUATE THE SUITABILITY OF OUR PRODUCTS FOR THE INTENDED APPLICATION.

WE RESERVE THE RIGHT TO CHANGE THIS DOCUMENT AND/OR THE INFORMATION GIVEN HEREIN AT ANY TIME.

Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life endangering applications, including but not limited to medical, nuclear, military, life critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.