

Industrial Communication Protocols for XMC7000

Advanced libraries for seamless enablement of more industrial applications

Industrial Communication Protocols for XMC7000 is an advanced software library offered by Infineon.

Infineon's [XMC7000 family](#) is a true programmable microcontroller for industrial applications, featuring single or dual Arm® Cortex®-M7 supported by a Cortex®-M0+, with up to 8-MB Flash and 1-MB SRAM, 10/100/1000 Ethernet, Controller Area Network Flexible Data-Rate (CAN FD), Secure Digital Host Controller (SDHC) supporting SD/SDIO/eMMC interfaces, and programmable analog and digital peripherals. The high-performance dual-core M7 allows Industrial communication protocols to run on one core and utilize the second core for control and housekeeping functions.

By making use of the XMC7000 existing interfaces, including Ethernet and Fieldbus, the Industrial Communication Protocol library facilitates the implementation of six different communication protocols: PROFINET RT®, EtherNet/IP®, CANopen®, CC-Link®, Modbus/TCP®, and EtherCAT Master®.

The XMC7000 family is supported by [ModusToolbox™](#), a unified development platform architected to provide a flexible and comprehensive development experience. The Industrial Communication Protocol stacks are integrated into ModusToolbox™, together with a GitHub repository, supporting access to always up-to-date, easily accessible libraries.

Industrial customers, including those without the expertise or the needed engineering resources, are now enabled to develop products using the pre-optimized industrial communication protocols. Furthermore, to accelerate application development, dedicated code examples are included, showcasing the use of each communication protocol.

For more Information visit [XMC7000](#).

Key features

Industrial communication protocols

- PROFINET RT®
- EtherNet/IP®
- CANopen®
- CC-Link®
- Modbus/TCP®
- EtherCAT Master®

All protocol libraries are included in ModusToolbox™

Key benefits

Enablement of industrial communication protocols

- One or multiple protocols can be used
- Pre-integrated protocols save time to market

ModusToolbox™ integration

- Ease of use with less complexity
- Multiple user-friendly code examples
- No need for deep expertise in Ethernet and Fieldbus protocols
- Faster time to market with less resources

GitHub Repository

- Up-to-date libraries
- Easily accessible
- Extensive documentation
- Superior user experience



PRODUCT BRIEF

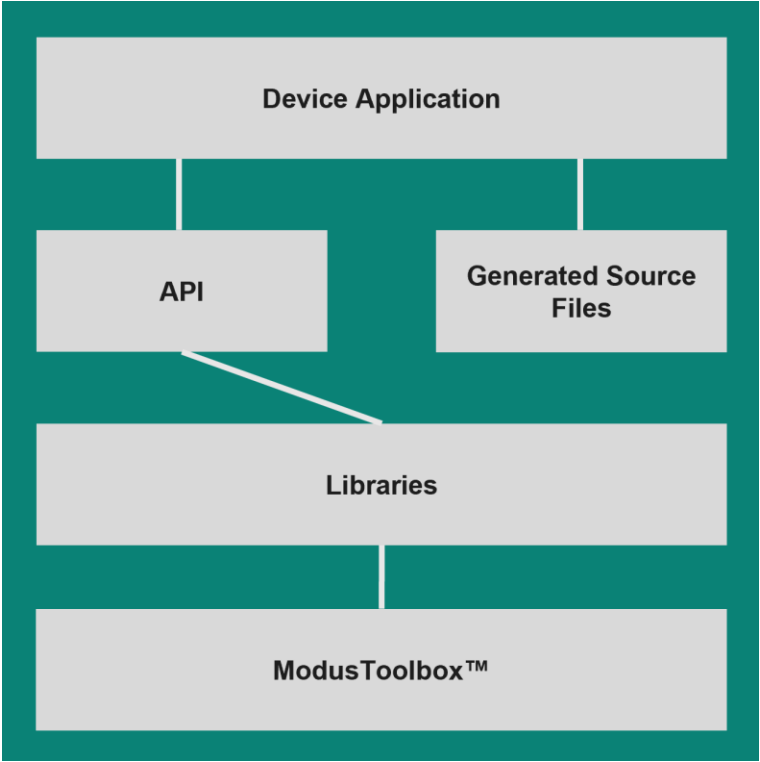
Key Applications

Industrial	Servo drives I/O modules Stepper motors Robotic arms PLC
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Ordering Part Numbers

OPN	Product	Description	Package
SP006113775	XMC7_SOFTWARE_PREMIUM	Industrial Communication Protocol software library	License
SP005829648	KIT_XMC72_EVK	The XMC7200 evaluation kit enable to evaluate and develop applications using the XMC7200D microcontroller	Evaluation Kit

Block Diagram



For further assistance go to <https://www.infineon.com/cms/en/about-infineon/company/contacts/support/>.
Visit community.infineon.com to ask questions in the Infineon developer community.



www.infineon.com

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