KPA EtherCAT Master Development Kit

KPA EtherCAT Master Development Kit (MDK) enables OEMs to integrate KPA EtherCAT Master (Master) functionality. The MDK is available for various platforms and any of the following real-time operating systems (OS): INtime, RTX64, Linux, Xenomai, QNX, VxWorks, FreeRTOS, Windows.

NOTE

Some OS like Windows XP, CE6/7, OnTime RTOS-32, PikeOS, RTAI are ported, but not actively supported.

Introduction

The MDK consists out of up to seven parts.

Master runtime package (MRT) with licenses

- Binaries and user manuals (development manuals included in MIP)
- 1x KPA EtherCAT Master Standard License (ETG 1500 "class A" master)
- 1x KPA EtherCAT Master Full (ETG 1500 "class A" including all Features and Extensions)

Master integration package (MIP)

- Master Core API
- Operation System Abstraction Layer (OSAL) (optionally in source code)
- Remote Procedure Call (RPC) Server (optionally in source code)
- More than 20 samples in source code and documents:
 - Master architecture, white paper
 - MDK manuals, programmers guide
 - API (Application Programming Interface) help

KPA Master RPC - Server KPA EtherCAT Studio Core library API User Application OSAL OS/Hardware

EtherCAT Studio executables

- KPA EtherCAT Studio Premium run-time including all plug-ins and user manuals for configuration and diagnostics of EtherCAT® network
- 1x KPA EtherCAT Studio license

Support and maintenance (S&M)

- Technical support and updates of EtherCAT Master/Studio for selected OS with access to Ticket System for one year
- Prolongation on annual base upon request

MDK tutorials

- How to use KPA EtherCAT Master for selected OS
- How to use KPA EtherCAT Studio with Master for selected OS

KPA MDK Flyer



• How to configure EtherCAT network, DC, modules and other specifics

Optional IP-Cores and drivers (depending on target platform and OS)

- Encrypted Binaries of IP-Cores
- OS dependent drivers in binary and optionally source code

Optional custom build

- custom OSAL implementation (including custom drivers and own OS support)
- custom BSP selection/implementation
- custom toolchain (specific compiler versions)
- target integration

Optional Products based on MDK (see separate documents): Master and OSAL in source code, Motion Development Kit.

MDK and MDK Trial comparison

| Item | Criteria | MDK | MDK Trial |
|------|--------------------------------------|------------------------------|------------------------------|
| | Purpose | Development | Evaluation |
| 1 | Master Integration Package (MIP) | Yes | Yes |
| 2 | MDK Tutorials | Yes | Yes |
| 3 | Licenses for Master Runtime (MRT) | 2 ^[1] | Trial ^[2] |
| 4 | KPA EtherCAT Studio License | Premium unlimited | Trial ^[3] |
| 5 | Support & Maintenance ^[4] | 1 year | 3 months |
| 6 | FPGA IP-Core(s) with drivers | encrypted IPs ^[5] | encrypted IPs ^[5] |
| 7 | Optional custom build | Yes | Yes |
| 8 | Optional RPC Client package | Yes | Yes |
| 9 | Optional Python Interface Library | Yes | Yes |

¹1x Standard license and 1x Full license.

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email: sales@koenig-pa.de tel.: +49 9128 725 330 tel.: +49 9123 960 5796 All company processes, from a product order to technical support, are managed according to our quality management system.

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²Trial Master uses trial license and works for one hour in Operational.

³Trial Studio uses trial License, works only with Trial Master and has limited functionality.

⁴S&M-conditions you find on our customer portal area.

⁵Depending on OS drivers are provided as a static libraries or kernel modules with source code upon request.