



Overview

Current sensors and actuators are equipped with small but powerful microprocessors that introduce advanced features like parameterization and diagnostics to these devices. However, those features are currently not visible to standardized project planning tools.

IO-Link, the new bi-directional, digital, point-to-point communication standard (**IEC 61131-9**) offers now a standardized mapping of advanced sensor and actuator features into the automation tool environment.

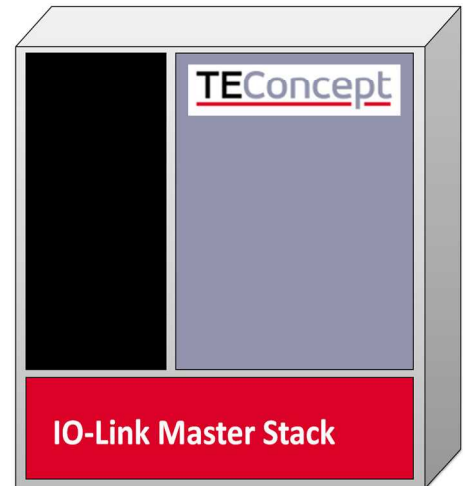
Our IO-Link **master** software stack allows **automation system** and **machine tool** providers an easy way to integrate state-of-the-art IO-Link technology into their products.

Features

- Complies to latest IO-Link communication specification
- Multi-port support. The number of ports only limited by hardware resources.
- Cycle times: 0,4ms @ 230,4 kBaud
2,3ms @ 38,4 kBaud
18ms @ 4,8 kBaud
- Footprint: RAM: ~8kByte + 2kByte/Port + ~2kB for every OS-Task (3 tasks are currently used)
Flash: ~30kB Stack
~2kB OS
- System load max. 20MHz/Port (COM3-speed)
- Software interface via shared parameters
- Control and test API
- Currently available drivers:

Processor	PHY
STM32	L6360
ATSAM91	E981-12
LPC43xx	LT2874
Kinetis KL43/17	MAX14824
SuperH SH7216	MAX14819
FM4 S6E2H	CCE4510
TI-Sitara	CM3120

- Supported development platforms:
Keil, IAR, GCC, LPCXpresso, KSDK, HEW, ...



Description

The IO-Link master firmware library provides full access to all features and services defined in the IO-Link Communication Specification V1.1. The stack supports all the important features like ISDU, Interleaved Mode and diagnostics handling with event details. FreeRTOS is used.

Deliverables

- Development license including IO-Link Master stack source code
- Manufacturing license
- Documentation with installation manual and hardware adaptation description
- API user guide
- Demo application
- Compiler & linker example setups
- IO-Link configuration tool with IODD interpreter

Additional Services

- Evaluations boards
- Software/Hardware design support
- Conformance tests (Master Tester)