



TEConcept

IO-Link Device Stack

V1.1.3

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-LinkTM, 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 software stack opens sensor and actuator manufacturers a cost efficient and easy way to integrate state-of-the-art IO-Link technology into their products.

Specifications

- Compliant to latest IO-Link communication specification
- Synchronous or asynchronous process data handling
- ISDU support
- Data storage
- Process synchronisation
- Footprint: RAM: ~0.4 kB, Flash: ~8-10kB
- System load ~ 50 % on 8-Bit processor @ 16 MHz.
- Porting to different μCs and IO-Link PHYs requires only an exchange of drivers.
- Currently available ports:

Microcontroller	PHY
ADUC7xx	HMT7742/8
ATmega64/324/328	L6362A
ATSAM3S	ZIOL2401
ATtiny	SN65HVD10x
C8051F31x/33x/37x/39x	TIOL-11x
EFM32	LT3669-2
Kinetis K02/K60	MAX14820/1
LPC11xx	MAX14827A/828
MSP430	MAX 22513
PIC32MXxxx	CCE4501/2
RL78/xxx	iC-GF(P)
STM32	
STM8L/STM8S	
(and many more)	



License model

- Royalty-free license
- One-year maintenance included
- Full source code

Deliverables

- Fully ported stack operational on the target hardware platform
- Driver for target processor architecture
- Driver for target IO-Link PHY
- IO-Link demo application
- Compiler and Linker setups for target development environment
- API reference manual

Additional Services

- IO-Link consulting and additional Technical support
- Customized IODD development
- IOL-Device and Master Hardware and Software design
- Supply of development tools like
 - USB master (1-port, 4-port),
 - Conformance Test systems
 - o IODD-Design tool
 - Reference designs