

TEConcept

IO-Link Device Stack V1.1.3

Overview

Current sensors and actuators are equipped with small but powerful microprocessors that introduce advanced features such as 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**) now offers standard-ized mapping of advanced sensor and actuator features into the automation tool environment.

Our IO-Link software stack provides 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 V1.1.3 IO-Link communication specification
- Compatibility mode to support V1.1.2 test systems
- Synchronous or asynchronous process data handling
- 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:

Issue date: 2023-11-03

Microcontroller	PHY
ADUC7xx	CCE4501/2
ATmega64/324/328	HMT7742/8
ATSAM3S	iC-GF
ATtiny	L6362A, L6364
C8051F31x/33x/37x/39x	LT3669-2
EFM32	MAX14820/1/7/8
Kinetis K02/K60	MAX22513
LPC11xx	ZIOL2401
MSP430	SN65HVD101
PIC32MXxxx	TIOL 111
RL78/xxx	and more on request
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
- Options: BLOB, Firmware Update and Parameter Handler available
- Supply of development tools such as
 - USB master (1-port, 4-port)
 - o Conformance Test systems
 - o IODD-Design tool
 - o Reference designs

TEConcept GmbH | Wentzingerstr. 21 | 79106 Freiburg | Tel. +49 761 214 436 40 | info@teconcept.de