TEConcept

IO-Link Device Stack V1.1.4

Overview

Current sensors and actuators are equipped with small but powerful microprocessors that introduce advanced features such as parameterization and diagnostics to these devices. **IO-Link™**, is a bi-directional, digital, point-to-point communication standard (**IEC 61131-9**) which offers standardized 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 V1.1.4 IO-Link communication specification
- Synchronous or asynchronous process data handling
- Data storage
- Process synchronisation
- Footprint: RAM: ~2.5 kB, Flash: ~12 kB
- Porting to different µCs and IO-Link PHYs requires only an exchange of drivers
- Any combination of following portings is available:

Microcontroller	PHY
ATmega	CCE4501/2
ATSAMD	HMT7742/8
dsPIC33	iC-GF
GD32Fx	L6362A, L6364
HC32Fx	LT3669-2
MAX32660	MAX1482x
MSP430, MSPM0	MAX22513/5
NXP LPXxx, S32xx, i.MX	MAX22516/22
PSoC	RH4Z2501
RL78/xxx	SN65HVD101
STM32xxx	TIOL112
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)
  - Conformance Test systems
  - IODD-Design tool
  - Reference designs