



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 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	CCE4501
ATmega64/324/328	HMT7742
ATSAM3S	iC-GF
ATtiny	L6362A
C8051F31x/33x/37x/39x	LT3669-2
EFM32	MAX14820
Kinetis K02/K60	MAX14821
LPC11xx	SN65HVD101
MSP430	ZIOL2401
PIC32MXxxx	... (to be continued)
RL78/xxx	
STM32	
STM8L/STM8S	
... (to be continued)	

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
 - IODD-Design tool
 - Reference designs