

IO-Link v1.1.3 sensor software for P-NUCLEO-IOD01A1

Application	Application layer for communication with the master device		
Middleware	IO-Link Stack Library		
Hardware Abstraction	Hardware Abstraction Layer API	Board Support Package	
Hardware	Development boards NUCLEO-L053R8 NUCLEO-L073RZ	IO-Link communication transceiver device IC L6362A	MEMS sensors LSM9DS0, LSM33AGR, HTS221, LPS22HB
		Evaluation platform STEVAL-IOD003V1	Expansion board X-NUCLEO-IKS01A2

Features

- Software package to build applications for the L6362A device transceiver
- GPIO, UART and IRQ configuration
- Smart architecture based on IO-Link stack library and source code communicating through API
- Sample implementation available on NUCLEO-L053R8 and NUCLEO-L073RZ development boards

Description

The STSW-IOD01 software package runs on the NUCLEO-L053R8 and NUCLEO-L073RZ development boards and provides a straightforward platform for the evaluation of IO-Link sensor modules and the features of the L6362A transceiver.

The package includes an IO-Link Stack v.1.1.3 library and the drivers for the L6362A transceiver mounted on the STEVAL-IOD003V1 evaluation board, and MEMS sensors mounted on the X-NUCLEO-IKS01A2 expansion board.

The stack library (runtime limited to 30 minutes) contains the majority of the required IO-Link features, including Start-up, Pre-Operate, Operate, ISDU, and Events (excluding Data Storage and Block Parameter management).

The package includes the IODD configuration file to be uploaded to your IO-Link master system.

The STSW-IOD01 software, developed by TEConcept GmbH, is compatible with STM32CubeIDE 1.3.0, EWARM v8.32.3 and MDK-ARM v5.29.0.0 IDEs.

Product summary	
IO-Link v1.1.3 sensor software for P-NUCLEO-IOD01A1	STSW-IOD01
IO-Link communication transceiver device	L6362A
STM32 Nucleo pack for IO-Link multi-sensor device with Stack v1.1.3	P-NUCLEO-IOD01A1
IO-Link (PHY) device evaluation board based on L6362A	STEVAL-IOD003V1
Motion MEMS and environmental sensor expansion board	X-NUCLEO-IKS01A2
STM32 Nucleo-64 development board with STM32L053R8/STM32L073RZ	NUCLEO-L053R8/ NUCLEO-L073RZ
Applications	Factory Automation IO-Link connectivity

Revision history

Table 1. Document revision history

Date	Version	Changes
09-Jun-2020	1	Initial release.

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