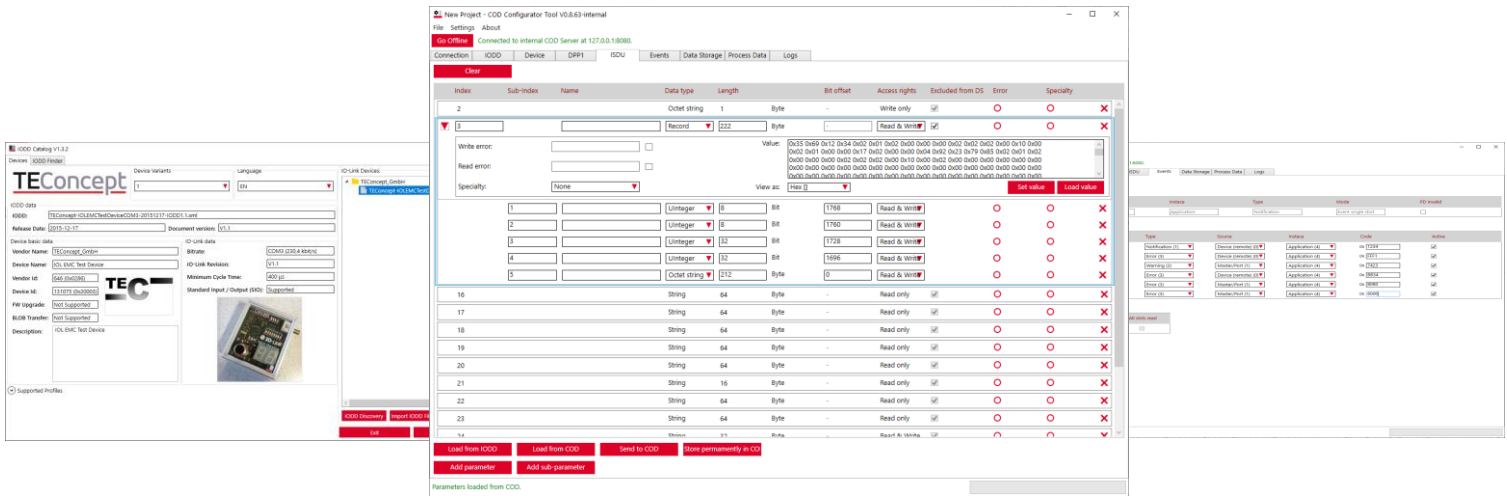




IO-Link Configurable-Observable Device



Overview

In the development of IO-Link Masters, there is often a strong need to test different edge cases. For example, how the IO-Link Master behaves at the largest data storage sizes, or how it reacts when the IO-Link Device does not respond or responds with a delay.

The Configurable-Observable Device (COD) offers a wide range of possibilities to extend the regular protocol tests with custom tests for IO-Link Masters.

In addition, COD can emulate any IO-Link Device based on its IODD.

Description

The COD is an IO-Link Device that can be configured and parameterized via REST API. The actual hardware communicates with the PC via USB. The REST API is provided by a PC-side server application called COD Communication Server.

Features

- REST API for configuration and observation in automated test systems
- PC application for easy configuration
- Emulate IO-Link Device by using its IODD
- Fully configurable dynamic ISDU parameter handling, with settable error generation for each index and sub-index
- Configurable DPP1 values (e.g., cycle time, process data, vendor and device ID, etc.)
- Event generation
- Process data mirroring, generation
- Observation of IO-Link communication and internal device variables (e.g., startup sequence, data storage flags)
- Error generation (e.g., emulation of a faulty device)
- Non-volatile memory to store configured parameters permanently

Advantages

- Easy integration in CI/CD pipelines
- Test data generation for testing Host side applications (e.g., IO-Link configurator tools)

Delivery

- 1 COD hardware
- PC configurator application
- COD Communication Server application

