

CASE STUDY — DEVICE CERTIFICATION

IO-LINK REENGINEERING & CERTIFICATION SUPPORT

Support for a customer's IO-Link device on its way to certification, with a PLC sample application built to validate and demonstrate it.

IO-Link

Device taken toward certification

PLC

Sample application built

ISDU

PDIN · PDOOUT · M-Sequence data

Ladder

Logic · tag database · command map

SECTOR

IO-Link device manufacturer

SCOPE

Reengineering & certification support

DELIVERABLE

PLC sample application

01 Overview

Support for a customer's IO-Link device on its way to certification, with a PLC sample application built to validate and demonstrate it.

02 Challenges

The customer had developed an IO-Link device using a proprietary stack provided by a vendor. However, they faced several challenges:

A Limited PLC expertise

Limited on-site PLC expertise and insufficient knowledge of IO-Link integration with PLC systems.

B Progressing toward certification and validation

The product was in the system testing phase, but the main hurdle was progressing toward certification and validation from the customer's perspective. Due to resource constraints on PLC development, providing a sample application for their customers to use as a PLC integration guide became a significant challenge.

03 Solution

Our team understood their requirement and proposed below solution:

01 Technical datasheet of the IO-Link device

Fetch the technical datasheet of their custom IO Link device product w.r.t ISDU commands index/PDOOUT/PDIN info/M-Sequence type, cycle time etc.

02 PLC vendor with an IO-Link library

Looked into the market and identified a PLC vendor who provides the IO Link library for communicating with the IO Link device due to time crunch.

03 Test logic, tag database and command mapping

Built a testing logic with appropriate ladder logic, created tag database data structures and command mapping unit to communicate with the IO Link device from Vendor PLC.

04 Benefits

KEY BENEFITS

- ✓ The sample app built was then verified by the customer and the same was used by their customer to validate the functionality.
- ✓ Used the same PLC setup for system testing activity and proceed for certification once all features were tested functionally.

Taking an IO-Link device to certification?

We support reengineering and certification, and build the PLC sample application that validates and demonstrates your device.

contact@ojasq.com | www.ojasq.com