

IO-Link Block AOI Test Report

Date of Test: 12/27/2023

Name of Test Engineer: Kyle Hall + Nick Clute

Product Description of Tested Product: TBEN-L5-8JOL FW: 3.4.3.0

PLC used to Test Product: 1769-L30ERM5 V33.11

Version of StudioLogix used to Test Product: 33.00.00

Name of AOI File Tested: Turck-IOLink-AII-Full-AOIs-V0-2.LSK

Version of AOI File Tested: V0.1

Test Notes:

- Revision Control + labeling
- Universal Device Info didn't work to write App tag
- Generic Device AOI snap data doesn't work

Test Passed: Yes / No

Test Plan

- Import L5K into Studio, create catalog ACD, verify all IO-Link Blocks are present in project.
- Create Blank ACD Project for your Test PLC of choice.
- Drag over IO-Link Block Device and corresponding Block AOI from Catalog to Project
- Verify AOI Version matches Rev file and Revision Notes from txt file in github.
- Verify AOI Description matches txt file in github.
- Configure IP Address of local block.
- Bring copy of 8IOL AOI into Logic
- Create tag instances of AOI, Common Data, Read MSG, and Write MSG
- Tie TBEN I, O, and C Data to AOI
- Setup SEND MSG instructions with correct PATH, Service Code 4b, Class 67, Send and Receive Arrays to Common Data Send/Receive Arrays
- Setup Write MSG instructions the same but change Class to 68
- Download Program to PLC
- Check all DIs with signal (Note: All IO-Link Pins will not show LED but will show change of signal state, this is because IO-Link is still active just not throwing a diagnostic error)
- Check DXPs with output signal
- Plug IO-Link device into each port in turn and verify the right IOLDevice Output turns on and correct VID/DID shows up in the Common Data. Checking the VID/DID verifies the Read MSG was setup and working correctly.
- Trigger each IO-Link Port to DI setting and make sure the correct port is goes to DI.
- Trigger each DXP Disable Setting and make sure the correct port is disabled.
- Import Universal Device Info and point it at a port that has a device.
- Write the App Tag to the device. This tests the Write MSG is working correctly.
- Import Generic Device AOI and point it to each Port in turn, read an input and write an output. This will verify the Port Process data mapping.