PNO Test Report

№ PN118-1

Device on PROFINET IO

Pages / Attachments	**File Identifier**	**Department**
6 / 1		PROFI Interface Center
		Johnson City, TN, USA

Responsible Party	**Signature**	**Date**
Kyle McMillan	*[signature]*	FEB 17, 2014

Customer:	**Technical Contact Person:**
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Model_Name:	**Tritex PROFINET IO**
Vendor_Name:	**Exlar**
Revision:	1
Software/Firmware Release:	1.0.0
Hardware Release:	1.0
Application:	Drives
Vendor Ident Number:	**0x02A0**
Device Ident Number:	**0x0001**
GSD-File:	GSDML-V2.3-Tritex-PNIO-20140213.XML
MinDeviceInterval	8 ms
Used DAP(s) and Module Ident Numbers	DAP1, 0x00000001

Summary:

☒ suggested to be certified   ☐ restrictions   ☐ suggested <u>not</u> to be certified

Scope of test performed:

☒ Hardware	Auto_Negotiation, Auto_Polarity
☒ Interoperability	no problems detected
☒ Conformance Class	A
☒ Statemachine	RT_CLASS_1, RTA, LLDP
☒ Profiles	n/a

Hints and restrictions see chapter 5!

<u>Note:</u> The test of the device is made according to following relevant documents and script files:

- Test Specifications for PROFINET IO devices, Version 2.2.4 from Dec 2010
- Test Cases for PN-Tester for PROFINET IO devices, Version 2.2.4.16.21

Test report
According to the specified test areas:

1. <u>**Hardware Tests**</u>

Supported Options

☒   Device supports Auto_Negotiation

☒   Device supports Auto_Polarity

☐   Device supports Auto_Crossover

☒   Hardware works properly

☐   further remarks: *........*

BUS Connector

☐   standard RJ45

☒   standard M12

☐   standard SCRJ (FO connector)

☐   non-standard and ....

2. <u>Bus Transmission and Functionality</u>

Control Interval Monitoring

☒ working within the range of 3 to 6 Bus cycles

☐ deviation: ....

Data Cycle

☒ Data cycle within the specified range

☐ Data cycle not in specified range: ....

Addressing the Test Item

☒ test item can be addressed by DCP means

☐ test item can be addressed by DHCP means

☐ other addressability: ....

Vendor Identifier

☒ as issued

☐ limitations: ....

3. <u>Statemachine Tests</u>

☒ Functionality of Name and IP address assignment correct

☒ all following PROFINET IO functions are supported and are carried out without problems:
   Connect, RTC, RTA, Alarms

☒ Testcases according to version of testsystem/version electronic test cases passed

☐ errors: ....

4. <u>Interoperability</u>

Load Test

☒ load test complies with specifications

☐ special behaviour when: ....

Functional Test

☒ no restrictions could be determined

☐ restrictions when: ....

5. <u>EMC and Electrical Safety</u>

☐ Correct **test report** according to CE standard available

Alternatively:

☒ **Manufacturer's declaration**   according CE standard available

Alternatively:

    ☐ Correct **test report** according to IEC 61000-6-2 and IEC 61000-6-3 or EN 61000-6-2 and
           EN 61000-6-3 standard available

   or

    ☐ **Manufacturer's declaration** according to IEC 61000-6-2 and IEC 61000-6-3 or
           EN 61000-6-2 and EN 61000-6-3 standard available

   and

    ☐ Correct test report according to IEC 61010 or EN 61010 or EIC 61131-2 standard available

   or

    ☐ **Manufacturer's declaration**   according to IEC 61010 or EN 61010 or EIC 61131-2 standard
           available

☐ No correct EMC and Electrical Safety test reports or declarations available.

6. <u>PROFILES</u>

PROFIsafe

☐ this PROFINET IO Device has been successfully tested in combination with the PROFIsafe profile
     (see separate PROFIsafe test report)

PROFIdrive

☐ this this PROFINET IO Device has been successfully tested in combination with the PROFIdrive
     profile (see separate PROFIdrive test report)

7. <u>Supplementary Hints and other Restrictions</u>

Here, verbal descriptions of the following functions are reported:
- any errors or special behaviour with reference to the respective test area
- other test product peculiarities
- remarks concerning manufacturer explanations
- remarks concerning documentation comprehension

Hints:

PRODUCT VARIANTS	NAMES:	VERSION IDENTIFIER:
VENDOR DECLARATION ?	☐ YES	☐ NO
ALL PRODUCT VARIANTS TESTED WITH THE SAME RESULT ?	☐ YES	☐ NO

Device does not support auto-crossover. Okay via PND-023.

Restrictions:

- no -

8. <u>Attachments</u>

The only enclosures are the measurement reports or recordings which are to inform the customer or PROFIBUS User Organization about abnormal behaviour.

All recordings are stored in the test laboratory in two separate places accessible only by test laboratory personnel. The customer and PROFIBUS User Organization can receive all recordings on demand.

Here also the actual list of test apparatus and equipment used is added.

This documentation guarantees the test's reproducibility for 4 years.

Additionally forms, depending on the marked "Scope of test performed" at the cover sheet, are listed in this section, e.g. profile test specific results.

<u>**Attachments:**</u>

☒ **Test apparatus and equipment used (generally)**

☐ **for IRT functionality**

☐ **Additional attachments:**　........

Attachment № 1 to PNO Test Report

Used devices and apparatures for PROFINET Interoperability Test

Device Type	Vendor Name	Order-No. / others	HW/FW/SW/Name Version
Ethernet Switch Scalance X310FE	Siemens	6GK5 310-0BA00-2AA3	V3.3.1
Ethernet Switch Scalance X208	Siemens	6GK5 208-0BA10-2AA3	V4.2.5
Ethernet Switch Scalance X204IRT	Siemens	6GK5 204-0BA00-2BA3	V4.4.5
Ethernet Switch Scalance X202-2P IRT	Siemens	6GK5 202-2BH00-2BA3	V4.5.5
Ethernet Hub	Netgear	DS104	
Ethernet Tap	Comcraft	100UTP	
Wireshark Ethernet Sniffer	Cace Technologies	www.wireshark.org	1.4.4 Sniffer
STEP7 SIMATIC Manager Standard Configuration Tool	Siemens		V5.5 HF5, V5.5 SP2 Configuration Tool
CPU319-3 PN/DP IO Controllers	Siemens	6ES7 319-3EL00-0AB0 6ES7 319-3EL01-0AB0	V2.8.6, V3.2.7 , PN-CPU IO Controller
CPU416F-3 PN IO Controller	Siemens	6ES7 416-3FR05-0AB0	V5.3.0, PN-CPU IO Controller
CP443-1 Adv IO Controller	Siemens	6GK7-443-1EX41-0AB0	V1.1 IO Controller
ET200S, IM151-3 IO Device	Siemens	6ES7 151-3BA23-0AB0	V7.0.1 , ET200SPNIO IO Device
ET200M, IM153-4 IO Device	Siemens	6ES7 153-4AA00-0XB0	V1.04 IO Device
Phoenix Contact IO device	Phoenix Contact	ILB PN BK DI8 DO4 2TX-PAC	HW2 V2.31, PN-IO IO Device
PROFINET IO Tester (PN-Tester)	PI	---	V1.5, V21 IO Controller
PROFINET XML Viewer V2.25			
CP1616	Siemens	6GK1161-6AA00	IO Controller/ Device / Sniffer
SIMATIC NetPROFI	Siemens	-	V2.2.0
PC	Siemens	6AG4114-1RR72-6BC3	SIMATIC RackPC 847C
ProfinetCommander	PROFI Interface Center	www.profinetcommander.com	V3.10 IO Controller