

PNO Test Report



Department

02.02.2010

Date

ComDeC Fürth

Siemens AG I IA CE DE DP3

№ PN070-1

Device on PROFINET IO

Pages / Attachments 5 / 1

Responsible Party

Klaus Götz

Signature

File Identifier

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| Customer: | Technical Contact Person: | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--|--|--|--|
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| | e-mail: josef.koprek@kuebler.com | | | | |
| Model_Name: | Sendix absolute | | | | |
| Vendor_Name: | KUEBLER GMBH | | | | |
| Revision: | 1 | | | | |
| Software/Firmware Release: | V1.1.4 | | | | |
| Hardware Release | 1 | | | | |
| Application: | Sendix 58xx with encoder profile version 4.1 | | | | |
| Vendor Ident Number: | 0x0198 | | | | |
| Device Ident Number: | 0x0001 | | | | |
| GSD-File: | GSDML-V2.2-Kuebler-SendixAbsolute-20100113.XML / Version 2.2 Date july 2008 | | | | |
| MinDeviceInterval1 msUsed DAP(s) and Module Ident NumbersDAP 2: 58xx_EncoderProfile_4.1, 0x00000030 | | | | | |

| Summary: | | |
|-----------------------------------|--------------|--------------------------------------|
| igtimes suggested to be certified | restrictions | suggested <u>not</u> to be certified |
| | | |

Scope of test performed:

| Hardware | Auto_Negotiation, Auto_Polarity, Auto_Crossover |
|------------------|-------------------------------------------------|
| Interoperability | no problems detected |
| 🖾 GSD | Version 2.2, Date 28.01.2010 |
| Statemachine | tested functionality see chapter 7 |
| Profiles | - no profiles tested - |

Hints and restrictions see chapter 7!

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

- Test Specifications for PROFINET IO devices, Version 2.2.2 from Jan 2008
- Test Cases for PN-Tester for PROFINET IO devices, Version 2.2.2.14.18

Test report

According to the specified test areas:

1. Hardware Tests

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
- non-standard, but includes all mandatory signals and sufficient description of the implementation: see Chapter 7
- non-standard and

2. Bus Transmission and Functionality

Control Interval Monitoring

- \boxtimes 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

- \boxtimes test item can be addressed by DCP means
- test item can be addressed by DHCP means
- other addressability:

Vendor Identifier

- as issued
- limitations:

3. Statemachine Tests

- 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. Interoperability

Load Test

- ☑ load test complies with specifications
- special behaviour when:

Functional Test

- \boxtimes no restrictions could be determined
- restrictions when:

5. EMC and Electrical Safety

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. PROFILES

No profiles tested

PROFIsafe

this PROFINET IO Device has been successfully tested in combination with the PROFIsafe profile

PROFIdrive

this PROFINET IO Device has been successfully tested in combination with the PROFIdrive profile

7. Supplementary Hints and other Restrictions

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:

Tested functionality according to standard:

RT_CLASS_1, RT_CLASS_2, RT_CLASS_3, RTA, LLDP, SNMP, MIB-II and LLDP-MIB, PTCP The device has got 2 Ports for PROFINET IO with M12 connectors.

No user Alarms triggerable at test.

The IRT testing was done with testsystem annex "spirta109" according to PROFINET IO IRT Test Cases V0.896 from June 2009.

Restrictions:

- no -

8. Attachments

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.

Attachments:

- Test apparatus and equipment used (generally)
 - Additional attachments:



Attachment № 1 to PNO Test Report



Used devices and apparatures for PROFINET Interoperability Test

| Addres | s | | | | | | | Stand |
|-------------------|---------------|-------------------|-----------------|---------|---------|------------------------|-------|-----------------------|
| MAC | IP | Device Type | | Vendor- | Device- | | | |
| | | | Vendor Name | ID | ID | Order-No. / others | Place | HW/FW/SW/Name |
| | | Ethernet-Switch | Siemens | | | Scalance X208 | PL | |
| 08:00:06:94:7E:4D | 192.168.0.101 | Ethernet-Switch | Siemens | 0x002A | 0x0A01 | Scalance X204irt | PL | 1/V4.2.14/pnio204irt |
| 00:A0:45:04:37:76 | 192.168.0.37 | IL PN BK DI8 DO4 | Phoenix Contact | 0x00B0 | 0x000A | 2703994 | PL | 2/V2.0.0/il-pn-bk-2tx |
| 00:0F:69:00:10:9A | 192.168.0.31 | MDX61B+DFE32B | SEW Eurodrive | 0x010A | 0x0001 | 182x xxx x | PL | 10/V1.0.0/movidrive |
| | | Ethernet-Switch | Siemens | | | Scalance X108 | PL | |
| 08:00:06:29:D8:4E | 192.168.0.21 | PP17 | Siemens | 0x002A | 0x0401 | 6AV3 688-4EY06-0AA0 | PL | 1/V5.0.4/pp17-ii-pn |
| 00:0E:F0:05:00:5F | 192.168.0.35 | CPX-Terminal | Festo | 0x014D | 0x0101 | TN197330 | PL | 12/V3.0.12/cpx |
| 00:0E:8C:84:81:57 | 192.168.0.99 | CPU319F-3 PN/DP | Siemens | 0x002A | 0x0101 | 6ES7 318-3FL00-0AB0 | PL | 1/V2.7.0/cpu319f |
| 08:00:06:6B:87:12 | 192.168.0.100 | CPU317-2 PN | Siemens | 0x002A | 0x0101 | 6ES7 317-2EK13-0AB0 | PL | 1/V2.5 0/cpu317 |
| 08:00:06:6B:F5:BF | 192.168.0.33 | ET200S, IM151-3 | Siemens | 0x002A | 0x0301 | 6ES7 151-3AA10-0AB0 | PL | 1/V2.0.0/et200s-2 |
| 00:0E:8C:84:5B:F7 | 192.168.0.23 | ET200M, IM153-4 | Siemens | 0x002A | 0x0302 | 6ES7 153-4AA00-0XB0 | PL | 1/V1.0.1/et200m-1 |
| 08:00:06:6B:81:20 | 192.168.0.32 | ET200S, IM151-3 | Siemens | 0x002A | 0x0301 | 6ES7 151-3AA00-0AB0 | PL | 1/V2.0.0/et200s-3 |
| 08:00:06:6B:F6:13 | 192.168.0.34 | ET200S, IM151-3 | Siemens | 0x002A | 0x0301 | 6ES7 151-3AA10-0AB0 | PL | 1/V2.0.0/et200s-1 |
| 00:0E:8C:84:47:F1 | 192.168.0.22 | ET200pro, IM154-4 | Siemens | 0x002A | 0x0305 | 6ES7 154-4AB10-0AB0 | PL | 1/V5.0.0/et200pro-1 |
| 00:03:12:04:00:60 | 192.168.0.102 | PNHaube | TR Electronic | 0x0153 | 0x0102 | CEV65M_LA66_PN | PL | 1/V3.1.0/pnhaube001 |
| 00:30:11:03:33:75 | 192.168.0.96 | S302-YQ | Siebert | 0x0161 | 0x0003 | S(X)302-YQ | PL | 1/V2.0.1/S302-yq |
| 00:30:05:14:64:7C | 192.168.0.51 | PROFINET IO | | | | | | PROFINET IO Tester |
| | | Tester (MoTest) | Itm | | | LAN-card within PC9151 | PL | 1.5 |
| | | | | | | | | |