



DF PROFINET IO PCI

Installation Instructions

V1.3/31.03.2017

Revision History

Version	Date	Description	Resp.
V1.3	31.03.2017	KUNBUS Branding	JKU
V1.2	01.04.2015	Review	SKR/AME
V1.1	06.11.2013	Technical data changed	JK
V1.0	16.08.2013	First Release	JK

Version	Product Manager	Project Manager Software
V1.3	Joachim Kurpat	Andreas Metz

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1 Safety Instructions



WARNING: Disregarding this warning may result in damage to equipment and/or serious personal injury. Only qualified personnel may start up and operate this device. According to the safety instructions in this text, qualified personnel are persons who are authorized to start up, to ground, and to mark devices, systems, and equipment according to the standards of safety technology. In addition, these persons must be familiar with all warning instructions and maintenance measures in this text.



WARNING: The DF PROFINET IO PCI board is designed exclusively for PELV operation according to EN 60950/EN 60204/VDE 0805-1.



Shielding

The shielding ground of the connected twisted pair cables is electrically connected to the female connector. When connecting network segments, avoid ground loops, potential transfers, and voltage equalization currents via the braided shield.



NOTE: Electrostatic discharge!

The device contains components that can be damaged or destroyed by electrostatic discharge. When handling the device, observe the necessary safety precautions against electrostatic discharge (ESD), in accordance with EN 61340-5-1 and EN 61340-5-2, as well as IEC 61340-5-1 and IEC 61340-5-2.

2 Installation of the Board

The DF PROFINET IO PCI is a Plug&Play-compatible board for 5V and 3.3 V 32-Bit PCI-Slots. The configuration entirely takes place by means of the delivered software or the BIOS of your PC respectively. Thus, no jumpers or DIP-switch adjustments are necessary.

To mount the board, please proceed as follows:

- Switch off your PC and unplug the mains plug!
- Remove the screws of the PC cage and lift off the cover. If necessary, please see also the operating instructions of your PC.
- Select a free PCI slot.
- Remove the slot cover and plug the DF board into the determined slot. Pay attention to a proper adjustment of the board in the guidance (avoid canting!).
- Screw down the board.
- Fix the cover again and screw it down.

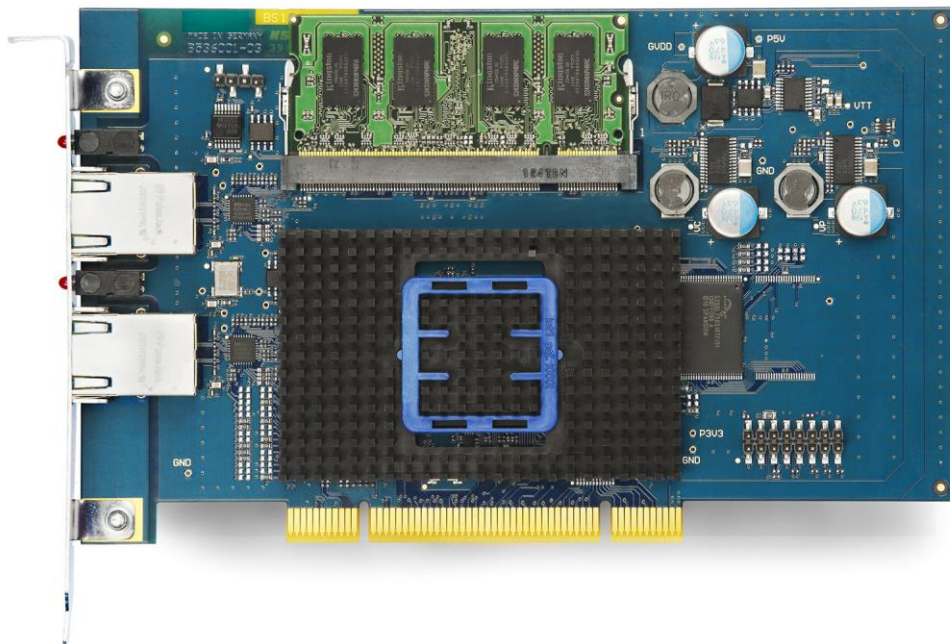


Figure 1: DF PROFINET IO PCI - Board

3 Description of the LED's

 Green LED:

On: Firmware loaded and started

Off: Firmware not loaded

 Yellow LED:

On: PROFINET IO started

Off: PROFINET IO stopped

 Red LED:

On: PROFINET IO-Failure

Off: No PROFINET IO-Failure

4 Technical Data

Functionality	PN IO Controller
PN IO Specification	V 2.3
PN IO Performance Class	Class B (<= 1 ms)
Processor	1.3 GHz Freescale PowerQUICC III
Memory	1 GB DDR II 32 MB Flash Memory
PCI Interface	PCI Rev. 2.2, 32 Bit (5 V und 3.3 V unterstützt)
Ethernet Interface	RJ45 100 Base-T(X)
Data Size of Process Image	16 KB
Power Consumption	Typical 7W
Ambient Temperature Range	0°C – 55°C
Dimensions	188 mm x 126 mm x 20mm

Table 1: Technical Data

5 CE-Conformity Declaration



EC Declaration of Conformity

We herewith declare that the product

DF PROFINET IO PCI

complies with the requirements laid down in the Directives and/or Regulations listed overleaf.

1. The object of this declaration is the product as described in section II.
2. The assessment of compliance of this product with regulations identified in section III has been carried out in accordance with procedures defined in section VI.

This declaration is issued under the sole responsibility of KUNBUS GmbH. I declare on behalf of the Management of KUNBUS GmbH that the product described in section II has been assessed to

- meet the essential requirements of the regulatory provisions identified in section III, and
- considered in isolation, conform with the harmonized and other standards identified in section IV, and
- therefore, can be labelled with the CE mark.

A handwritten signature in blue ink, appearing to read "J. Kurpat".

(Joachim Kurpat, Head of Product Management)

Ettlingen, this 02.01.2017

ID: DoC-DF-PROFINET-IO_PCI-0117-RoHS

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DF PROFINET IO PCI – EC DECLARATION OF CONFORMITY

I. MANUFACTURER

Name:	KUNBUS GmbH
Address:	Heerweg 15C 73770 Denkendorf Germany

II. DESCRIPTION OF THE PRODUCT

Product:	DF PROFINET IO PCI
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III. REGULATION REFERENCES

European Requirements:	<ul style="list-style-type: none"> • Directive 2004/108/EC of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility • Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment • Commission Delegated Directive 2012/50/EU of 10 October 2012 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for applications containing lead • Commission Delegated Directive 2012/51/EU of 10 October 2012 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for applications containing cadmium
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IV. MEANS OF COMPLIANCE

Harmonized Standards:	<ul style="list-style-type: none"> • EN 55022:2006 + A1:2007 • EN 55024:1998+A1:2001 + A2:2003 • EN 50581:2012
International Standards:	<ul style="list-style-type: none"> • n/a
National Standards:	<ul style="list-style-type: none"> • none applied

DF PROFINET IO PCI – EC DECLARATION OF CONFORMITY

V. STATEMENT TO THE USE OF RESTRICTED SUBSTANCES

The product DF PROFINET IO PCI is in conformance with the requirements laid down in the EC Directive 2011/65/EU (RoHS Directive) Articles 4 and 7.

The directive restricts the use of the six substances specified in its Annex II and listed at right up to the maximum concentration values by weight of homogeneous materials:	<ul style="list-style-type: none"> • Lead (Pb) 0.1% • Mercury (Hg) 0.1% • Cadmium (Cd) 0.01% • Hexavalent Chromium (Cr6+) 0.1% • Polybrominated Biphenyls (PBB) 0.1% • Polybrominated Diphenyl Ethers (PBDE) 0.1%
Applications exempted in line with Annex III	<ul style="list-style-type: none"> • None

VI. DESCRIPTION OF THE ASSESSMENT PROCEDURE

Role of the Manufacturer:	<ul style="list-style-type: none"> • The manufacturer was responsible for the conception, design and manufacturing of the DF PROFINET IO PCI laid down in the necessary documents, drawings and schemes. The compliance of the constituent with the requirements listed in section III has been examined by means of assessment and, if applicable, measurements using equipment suitable for this purpose.
Assessment Module(s) used:	<ul style="list-style-type: none"> • The Assessment of Conformance has been performed in accordance with Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products. • Module A has been chosen for the assessment.

If applicable:

Accredited Test Lab:	<p>MECTRONIC Prüflabor GmbH Werner-von-Siemens-Str. 2 64319 Pfungstadt Germany Accreditation ID: TTI-P-G 075/92-01</p>
Role of the Test Lab:	<p>The Test Lab performed all measurements necessary to state conformance with the EMC directive 89/336/EG. The results are recorded in test report P041386 dated 06.12.2004.</p> <p>The changes of the DIN EN 55024: 2003-10 and DIN EN 55022: 2007-04 are minor changes in the test and measurement setup and will not affect the test results.</p> <p>According to DIN EN 55022:2006+A1:2007, chapter 6.2, the radiated emissions RF test is still valid.</p>