

DF PROFI II PCIe

Installation Instructions

V1.6

27.02.2017

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Doc-ID.: DF PROFI II PCIe

Revision History

Version	Date	Description
V1.6	27.02.2017	KUNBUS branding
V1.5	30.07.2013	New Declaration of Conformity added
V1.4	23.09.2009	Technical data table extended
V1.3	04.08.2009	Document-Adjustment
V1.1	29.07.2008	CE Declaration corrected
V1.0	21.05.2008	Initial Version

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1 Installation of the Board

The DF PROFI II PCIe is a plug & play compatible board for PCI Express 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-Express X1 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.

Remark: When mounting, please follow the safety instructions for electronic modules against electrostatic charge.

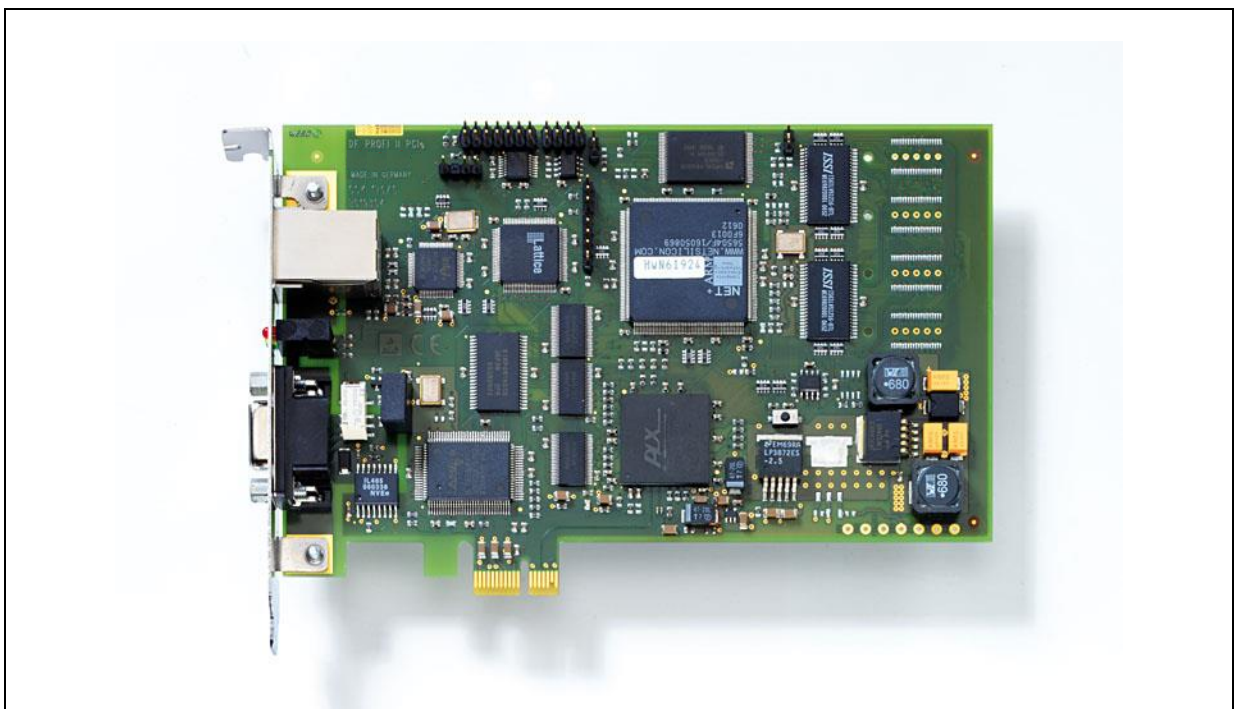


Figure 1: DF PROFI II PCIe Board

2 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: FNL is designed exclusively for PELV operation according to EN 60950 / EN 60204 / VDE 0805-1. Only protective extra-low voltages according to the defined standards may be used to supply and connect the alarm contact.



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.



Housing

Only staff authorized by KUNBUS is permitted to open the housing.

3 Pin Assignment

Pin Number	Signal	Function	Direction
1	-	shielding	
3	RxD/TxD-P	Data+	Input/Output
5	0V (potential free 80 mA)	Feeding of bus terminator	Input
6	5V (potential free 80 mA)	Feeding of bus terminator	Output
8	RxD/TxD-N	Data-	Input/Output

Table 1: Pin Assignment

Remark: To assure correct operation of the PROFIBUS, a terminating resistor must be mounted at each bus end (Purchase No.: 4000-7-002-H).

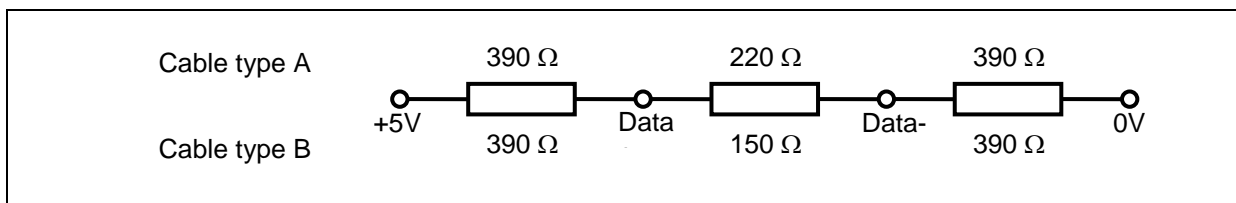


Figure 2: PROFIBUS Terminator

4 Description of the LEDs

 Green LED:

On: Firmware loaded and started

Off: Firmware not loaded

 Yellow LED:

On: PROFIBUS started

Off: PROFIBUS stopped

 Red LED:

On: PROFIBUS-Failure (min. one slave not connected to the bus or with external diagnosis)

Off: No PROFIBUS-Failure

5 Technical Data

Processor	Net+Arm 40, 33 MHz
PROFIBUS Controller	ASPC2, 48 MHz
Memory	1 Mbyte SRAM 2 Mbyte Flash Type Memory
PCI Interface	PCI-Express X1
PROFIBUS Interface	1 * Sub-D 9 pins
Interface Physics	RS485 (isolated)
PROFIBUS Data Rates	9600 Bit/s - 12000 KBit/s
Data Size of Process Image	max. 8 KByte
PROFIBUS Isolation Voltage	500 VDC
Power Consumption	+5 V / 1100 mA
Ambient Temperature Range	0 - 55 °C
Dimensions	175 mm * 107 mm

Table 2: Technical Data

6 Declaration of Conformity

EC Declaration of Conformity

We herewith declare that the product

DF PROFI II PCIe

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.


.....
(Joachim Kurpat, Head of Product Management)

Ettlingen, this 02.01.2017

ID: DoC-DF-PROFI-II-PCIe-0117-RoHS

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Figure 3: Declaration of Conformity, page 1

DF PROFI II PCI EXPRESS – EC DECLARATION OF CONFORMITY

I. MANUFACTURER

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

II. DESCRIPTION OF THE PRODUCT

Product: DF PROFI II PCIe

III. REGULATION REFERENCES

- European Requirements:
- 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

IV. MEANS OF COMPLIANCE

- Harmonized Standards:
- EN 55022:2006 + A1:2007
 - EN 55024:1998+A1:2001 + A2:2003
 - EN 50581:2012
- International Standards:
- n/a
- National Standards:
- none applied

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Figure 4: Declaration of Conformity, page 2

DF PROFI II PCI EXPRESS – EC DECLARATION OF CONFORMITY

V. STATEMENT TO THE USE OF RESTRICTED SUBSTANCES

The product DF PROFI II PCIe 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 PROFI II PCIe 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: DAT-P-218/06-00</p>
Role of the Test Lab:	<p>The Test Lab performed all measurements necessary to state conformance with the EMC directive 2004/108/EG. The results are recorded in test report P072630 dated 06.12.2007.</p> <p>According to DIN EN 55022:2006+A1:2007, chapter 6.2, the radiated emissions RF test is still valid.</p>

Figure 5: Declaration of Conformity, page 3

Final Page !