Installation Instruction
DF PROFINET IO PCI

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1 Disclaimer

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

3 Installation on the Board

The DF PROFINET IO PCIe 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 PCIe 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.
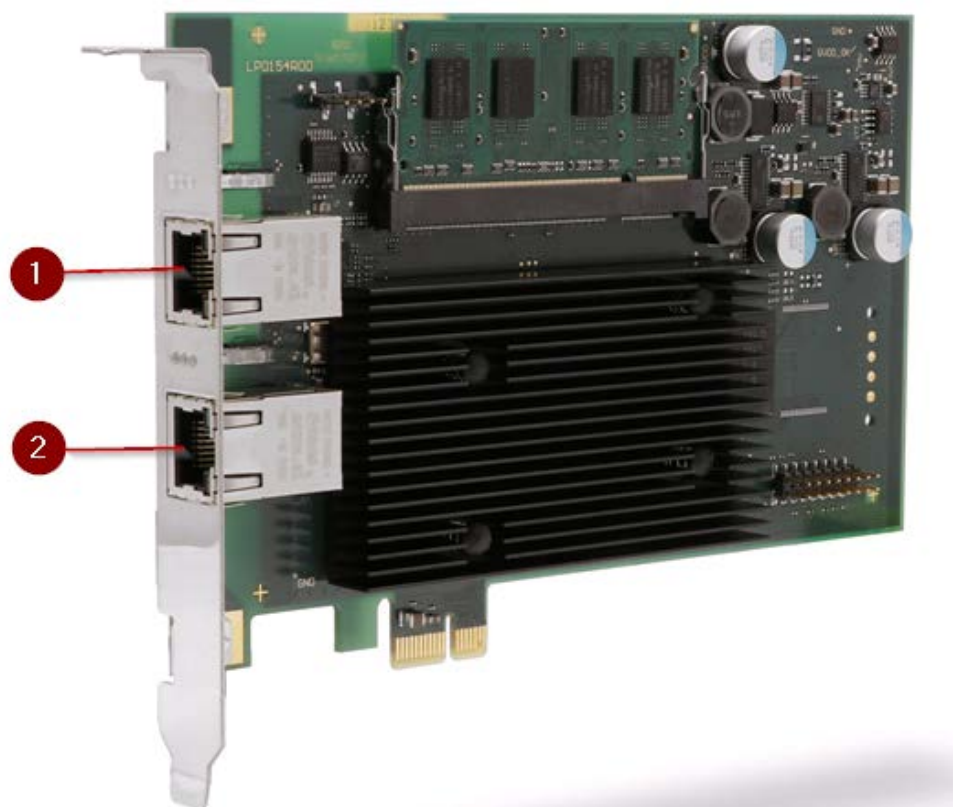
DF PROFINET IO PCIe – Board

| 1 | LAN socket for controller functionality |
| 2 | LAN socket for device functionality |

4 Description of the LEDs

LED	State	Meaning
Green	on	Firmware loaded and started
	off	Firmware not loaded
Yellow	on	PROFINET IO started
	off	PROFINET IO stopped
Red	Operation as PROFINET IO Controller on Ethernet Interface 1	
	on	PROFINET IO-Failure (min. one device not connected to the PROFINET IO network or with external diagnosis)
	off	No PROFINET IO-Failure
	Operation as PROFINET IO Device on Ethernet Interface 2	
	on	PROFINET IO-Failure (No active PROFINET IO controller connected)
	off	No PROFINET IO-Failure

5 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 and 3.3 V supported)
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