PROFIBUS

PROFIcard

APPLICATION

With over 500,000 nodes installed worldwide, PROFIBUS is the world´s leading vendor-independent open fieldbus. The PCcard integrates mobile instruments for measurement, installation and service into PROFIBUS networks.

The widespread PCMCIA slots provided by a rapidly increasing number of notebooks, together with a PROFIBUS PC-card, build an efficient platform for PROFIBUS tools and applications.

Softing´s PROFIcard supports the following modes of operation:

- FMS master or slave
- DP master class 1 and class 2
- Enhanced DP functions (DP/V1)
- FDL (Fieldbus Data Link)

A uniform PROFIBUS interface is provided for all the modes listed above.

SCOPE OF FUNCTIONS

PROFIcard provides the complete PROFIBUS protocol stack for FMS and DP specified in EN 50 170, part 2. Intelligent communication capabilities are ensured through the microprocessor SAB 80C165. Because PROFIBUS ASIC ASPC2 handles essential parts of the Data Link Layer (e.g., frame identification and evaluation), transfer rates up to 12 Mbit/s are possible.

As a physical bus connection, the PROFIcard incorporates a galvanically isolated RS-485 interface connected via a 9-pin Sub-D male connector.

Data is exchanged with the host processor via a 16 Kbyte dual-port RAM (DPRAM).

As an option, Softing offers DDE Servers for easy integration of PROFIBUS communication into standard application software packages. These comprise SCADA (Supervisory Control and Data Acquisition), MMI (Man-Machine Interface) or configuration and programming software. In addition, drivers are offered for various operating systems.

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TECHNICAL DATA

Hardware

Unit	PCMCIA type II, V2.1
CPU	Microprocessor SAB 80C165
Memory	16 Kbytes dual-port RAM (DPRAM)
Supported PC interrupts	All which are provided by the host system
PROFIBUS ASIC	Siemens ASPC2
Physical interfaces	Galvanically isolated RS-485
Connector type	9-pin Sub-D male
Connector pinning	According to EN 50 170
Power supply	+5 V (±5 %); typ. 350 mA
Permissible ambient conditions	Operating temperature: 0 °C up to 55 °C; storage temperature: -20 °C up to 65 °C
Baud rate	9.6 Kbit/s up to 12 Mbit/s

Firmware

PROFIBUS services	■ FMS Client and Server ■ DP Master class 1 and class 2 ■ DPV1 Master services ■ FDL access; Management services

Hardware requirements

IBM PC/AT or 100 % compatible, with PCMCIA socket type II

Software requirements

To use the PROFIcard in applications, one of the following software packages is required:

- **Option 1: PROFI-DMK-NT**
  PROFIBUS Application Program Interface (PAPI) for Windows NT; demo programs; PAPI user manual (English version); Windows NT driver
- **Option 2: PROFI-DMK-1**
  PROFIBUS Application Programming Interface (PAPI) for Windows (16-bit) or MS-DOS PROFIBUS program library and DLL; demo program; PAPI user manual (English version)
- **Option 3: DDE Server for Windows (16-bit) and Windows NT**
  - FMS Client
  - DP Master class 1
  - Function block for S5-95U, S7-300; symbolic configuration manager

Scope of delivery

- PC card hardware
- PC card firmware
- Single-user license
- Hardware user manual (English version)

Ordering information

PB-PCcard

According to the software requirements, optionally:

- PROFI-DMK-NT
- PROFI-DMK-1
- OPC Server (for ordering information, see corresponding Data Sheet)
- DDE Server (for ordering information, see corresponding Data Sheet)

Edition 2.00

Please ask for more information and assistance

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