

PROFIBUS DP Slave Interface (PBI-0)

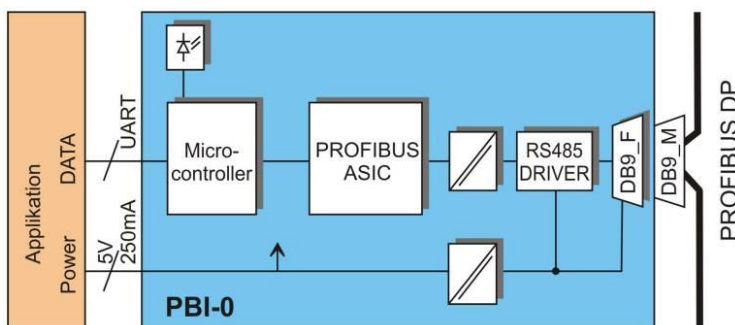
Overview

The PBI-0 implements PROFIBUS DP Slave functionality according to IEC 61158. It acts as a transceiver to the 2 line serial PROFIBUS DP network and a user application.

The PBI-0 allows unlimited operation on every PROFIBUS DP network because of PNO certified components used (PROFIBUS-ASIC, RS-485-Transceiver...). All defined baud rates for the PROFIBUS-DP network are supported. Optional Slave Address switches are implemented (two rotary switches) to allow an easy and simple field installation of the device.

Referencing to the ISO-OSI-model this interface allows the implementation of layer 1 to layer 6.

Block Diagram



Technology

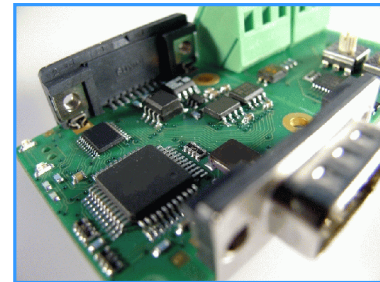
The μ Controller is based on 8051-technology and allows also a low power operation with 3.3V power supply instead of standardized 5V.

The PBI-0 offers signal isolation between PROFIBUS network and the user application to allow high reliability according to EMC related disturbance. Additionally the supply for the active bus termination is isolated from the user application.

The user application must offer a simple 2 line serial UART line and a sufficient power supply for the PBI-0.

Delivery Content

The PROFIBUS DP Slave Interface Board is available in charges of 50/100/200 units and will be shipped with user manual.



Technical Data

- PROFIBUS DP-V0, DP-V1
- Isolation between PROFIBUS and application min. 500VAC
- Diagnostic LED output (PROFIBUS)
- 2 line UART interface to application (min. 5V TTL / CMOS)
- Industrial operating temperature: -40°C to +85°C
- Supply +5V / 250mA typ.
- Standard DB9 female connector (PROFIBUS)
- Standard header for user interface
- Dimensions (mm): 40x40 (including all options: 75x40)

Optional

- Wide input voltage range power supply (7V to 35V)
- Slave address switches (1 - 126)
- Switchable termination resistors
- 3 free programmable GPIO Pins
- Phoenix terminal block for PROFIBUS interface
- Diag. LED output (application)
- RAM extension for DP-V1 functionality
- SPI Interface

Related Services and Products

- DPV0 FW-Stack
- Software interface DP-V0 / V1 Application

Order Information

No. 32002