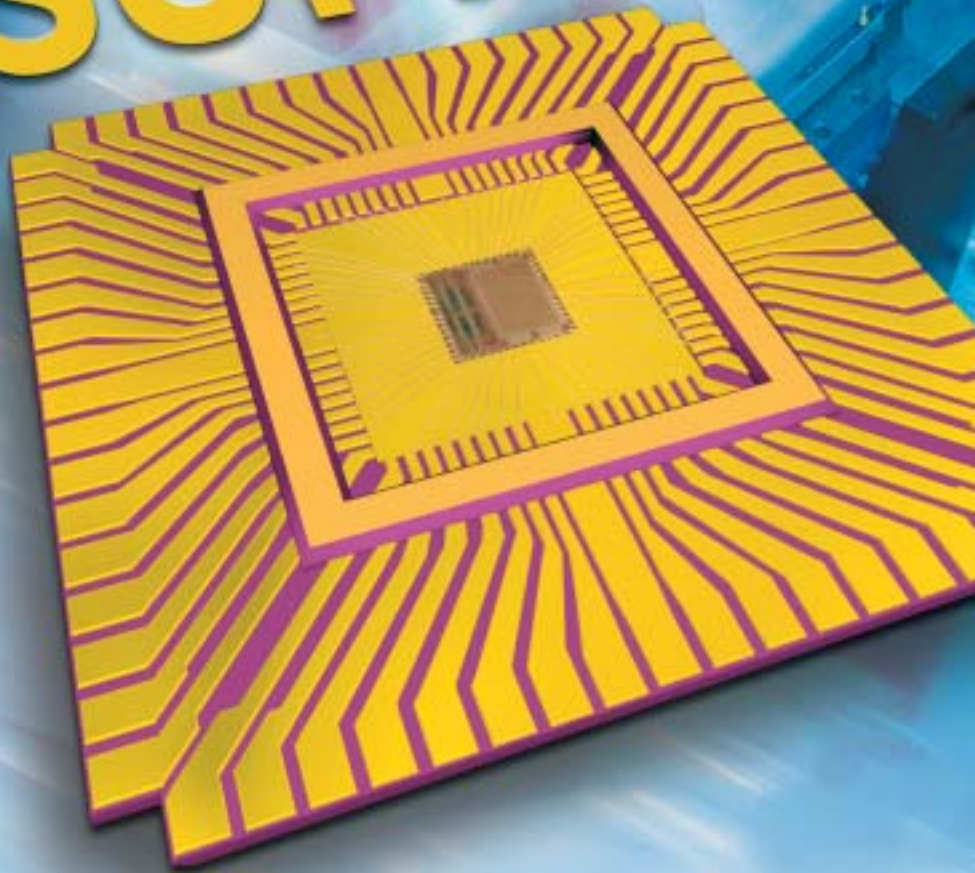


# INTERBUS

System Development

## INTERBUS Protocol Chip SUPI 4

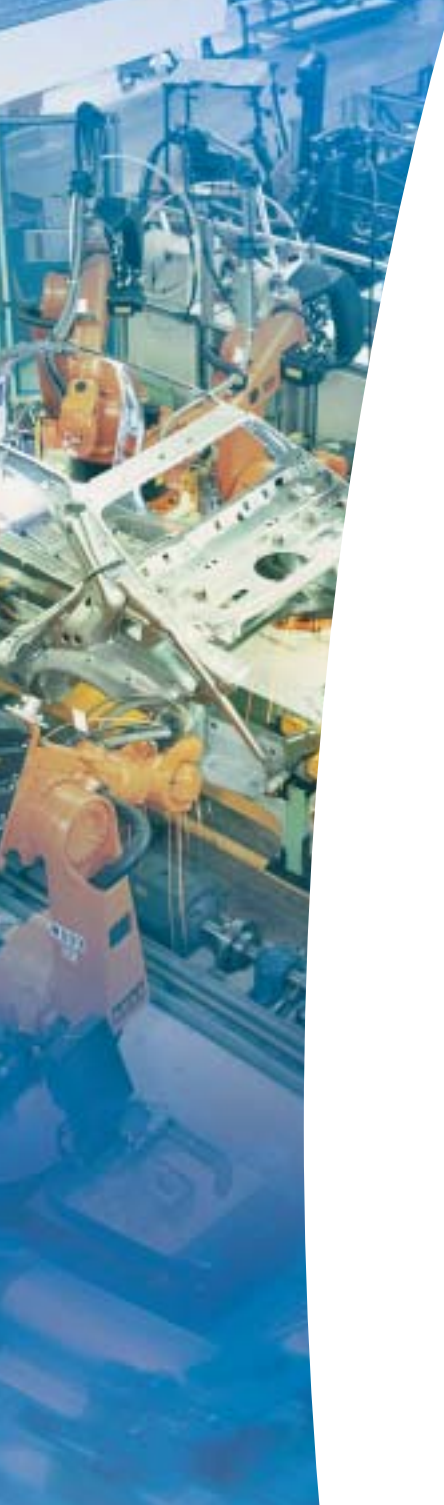


**Faster**

**More simple**

**Less expensive**





# INTERBUS slave protocol chip SUPI 4 – The Next Generation

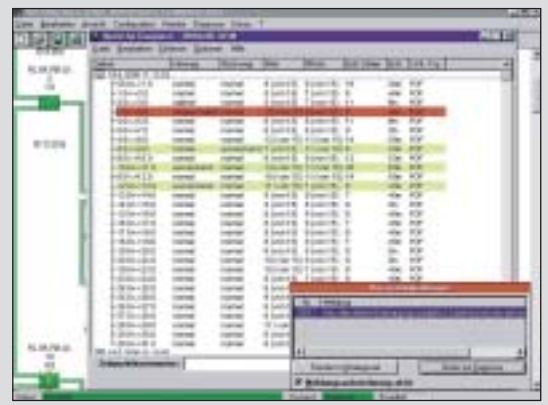
The demands on a fieldbus system are constantly increasing. Characteristics, such as high performance, realtime capability and comprehensive network diagnostics, for example, are expected to be available at as little cost as possible. On top of this, simple vertical integration of the fieldbuses in higher-level Ethernet-based automation systems such as Profinet is an absolute must. With the new protocol chip SUPI 4, the INTERBUS system is well armed to face this and any other challenge.

The next generation of the INTERBUS industrial standard has taken into account the future requirements of automation technology by adding new and improved system functions. This is the result of the intensive further development of the INTERBUS technology by the member companies of the INTERBUS Club. The implementation of the SUPI 4 protocol chip is proof that the technological potential of the INTERBUS systems has not yet been exhausted. The functions

that are now possible with the SUPI 4 will continue to provide the end user and device manufacturer with system characteristics that are of major importance in an ever faster changing automation world. In addition to support for new system features, the focus is on optimizing the interface technology. SUPI 4 makes INTERBUS interfaces even faster, even simpler and even less expensive to implement.

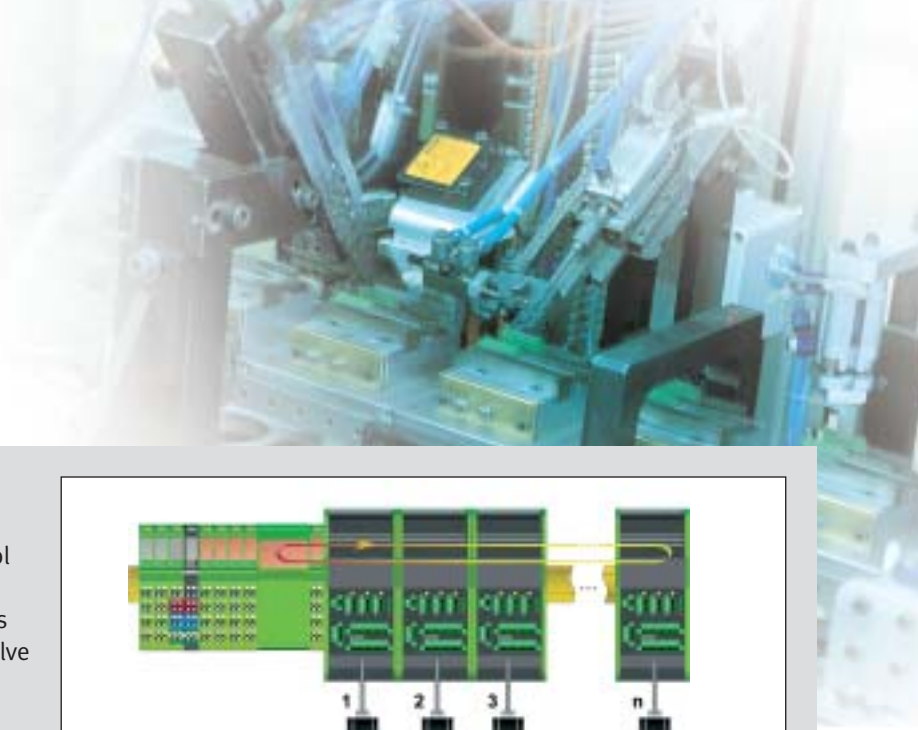
## Optimized system characteristics

The INTERBUS basic profile integrated in SUPI 4 extends and standardizes the identification, parameterizing and diagnostics of INTERBUS devices. Manufacturer information and technical or application-specific data can be stored in the device and saved so as to be remanent. Clear messages on the device status, an individual diagnosis and the identification of devices with the option of a plain text display are now standard features.



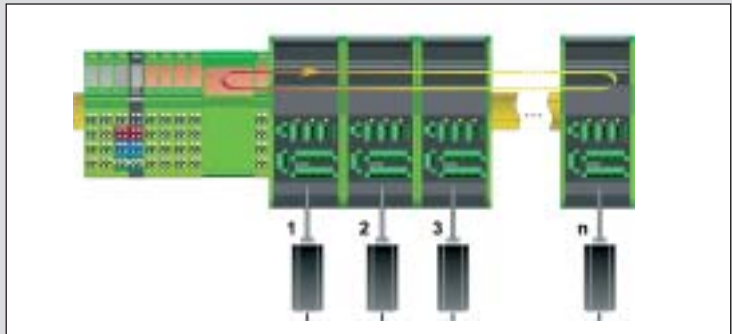
Diagnostics data can read out for a particular path together with evaluation of the quality of the optical transmission path





## Increased system reserves

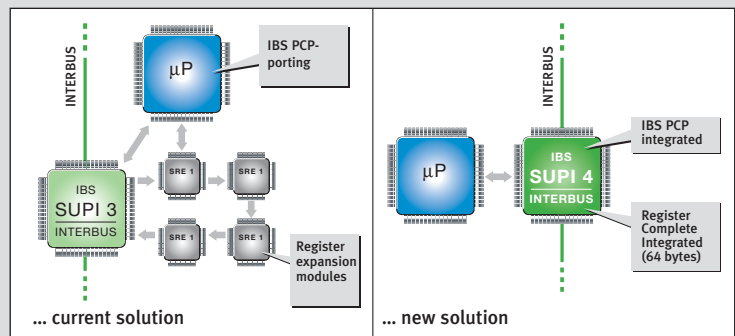
In order to support increasingly powerful control systems, the SUPI 4 allows application-specific transmission speeds of up to 16 mbps. It is thus possible to have very short reaction times to solve positioning and control tasks, which again extends the possibilities for deploying the INTERBUS system. The transmission speed is detected and set automatically. It is no longer necessary to preset the transmission speed.



INTERBUS segment with SUPI 4 devices as a fast system bus

## Low interface costs

Integration of the INTERBUS device interface is further simplified and reduced in costs, since many of the external components, such as serial shift register extensions will in future no longer be used. New features, such as the 3,3 V technology, optional visual control function, or the integrated PCP protocol reduce the space on the PCB, cut development and manufacturing costs for devices, and minimize error sources from the start of planning the design.

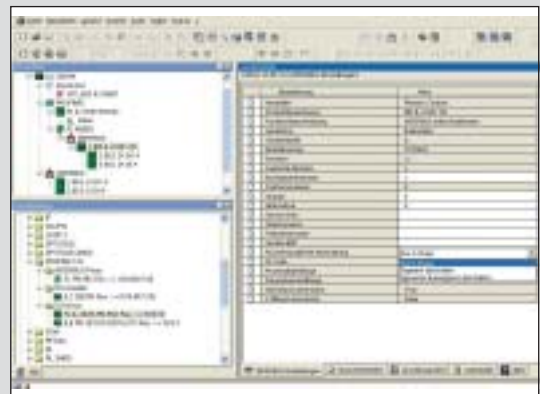


Future potential for savings with the use of the SUPI 4  
(example: Microprocessor connection to PCP, data width 24 words)

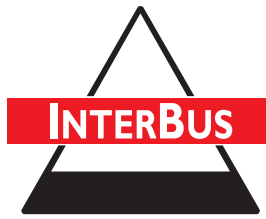
## Best Profinet integration



The INTERBUS basic profile integrated in the SUPI 4 allows INTERBUS devices in Profinet networks to be identified with manufacturer and device ID, order no., and other relevant data. Device parameters can be entered directly in the user interface of the Profinet programming system. Device-specific diagnostic messages can be displayed in the individual control system as a Profinet IO channel error. As a result of the basic profile, the user automatically receives the corresponding plain text messages.



The automation software PC Worx can be used to set up Profinet IO systems and put them into operation



**Best of Automation**

**Fax INTERBUS Club Deutschland e.V., Blomberg, Germany**

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**Please send me the following further information:**

- Brochure; "Basics, Standard INTERBUS System"
- Brochure; "Basics, INTERBUS Safety"
- Brochure; "Basics, Profinet"
- Application brochure; "INTERBUS & Applications"
  - Main focus:  Automotive
  - Building automation
  - Water/Waste water
  - Mechanical engineering
- INTERBUS Club magazine; "AUTOMATION Forum"
- Other: \_\_\_\_\_

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