

FOUNDATION FIELDBUS



**Your Source for Integrated,
Field-Proven Solutions...**

Interfaces



FF-IF-PCAT-H1

Technology

FF H1 and High Speed Ethernet (HSE)

→ Hardware, Software and Engineering Services



Round Board

Tools

FF Analyzer

→ Network analysis

Development Kits

→ Hardware, Software and Test tools



FOUNDATION Fieldbus is ready to meet your process automation needs. Softing is your partner for fieldbus solutions that deliver the benefits of FOUNDATION Fieldbus – open, multivendor interoperability and true distributed control. Our solutions for configuration, network analysis, I/O, control and PC interfaces get your application up and running fast.

To take advantage of FOUNDATION Fieldbus, start with Softing, because we are on the cutting edge of fieldbus product development — since the beginning, as one of the key contributors to FOUNDATION fieldbus and one of the first to get their software certified and registered. Today we are meeting the needs of the process industry with a full line of fieldbus products: boards, communication software, engineering tools, technical support, training and engineering services to help customers achieve their goal – products supporting FOUNDATION Fieldbus.

Get your devices fieldbus-ready without compromise, being interoperable, registered and flexible for future enhancements.



FF PRODUCTS

Portable protocol software for Link Master Devices FF-LM-SW

Softing's Link Master protocol software in ANSI-C supports the full range of data and management services contained in the Foundation Fieldbus specification. Its conformance to the specification has been approved by the rigid test procedure of the Fieldbus Foundation.

Thanks to built-in customization options this software assures rapid and straightforward integration of Fieldbus interfaces into all kinds of devices based on a wide scope of processors (e.g. NEC, Siemens, Motorola).

Using this software several powerful Fieldbus interfaces have been implemented. Licensing models include both, source code and object code licensing.

Portable protocol software for Basic Field Devices FF-BFD-SW

The Basic Field Device Software by Softing is a complete implementation according to the specification of Foundation Fieldbus. In addition, it incorporates a software interface to the Function Blocks proposed by the Fieldbus Foundation. With its highly efficient code, it is intended for the use with lo-end hardware (eg. Motorola 68HC11). That way costs for a device specific Fieldbus interface are kept to a minimum.

Integrated customization options render the implementation independent from a particular hardware architecture. Conformance of this software to the Fieldbus specification has been approved by the Fieldbus Foundation. Licensing options include source code as well as object code licensing.

A number of major vendors rely on this software for Fieldbus integration into process control components.

Development Kit FF-DEV-H1

Softing's Development Kit is first choice in effective integration support. It is made up of sophisticated components easing testing during Fieldbus integration. The bundle contains (see below for detailed descriptions of the individual components):

- Basic Field Device
- Busanalyzer
- Set of IEC-1158 cabling

FF-IF-BFD-H1 (Basic Field Device)

Softing's 'roundboard' is first choice when it comes to rapid prototypical integration of Foundation Fieldbus into process peripherals like sensors and actuators for example.

Executing very tight and highly efficient coding of the Foundation Fieldbus stack, a low-end microprocessor is sufficient to handle both, Fieldbus communication and communication to the field-device. The latter is accessed via a freely programmable serial interface emulating any device specific protocol (e.g. MODBUS, HART, etc). Within the firmware, an interface to Foundation Fieldbus's Function Blocks is available to ease implementation of a comprehensive application controlling the field device. Special attention has been put on low power consumption in order to allow operation within buspowered networks.

FF-Mon-H1

Softing's Bus Analyzer for Foundation Fieldbus is based on the FF-IF-PCAT-H1 hardware. It has been designed as a pure monitoring device that does not interfere with bus traffic. Its sophisticated firmware incorporates a comprehensive set of features to allow effective pinpoint analysis for both installation and maintenance of an FF network.

Its basic time-stamped recording function may be refined by versatile filter and triggering options in order to focus on frames relevant for a particular situation. Apart from displaying recorded frames as hex-data, DLL-, FAS-, or FMS-frames, the analyzer features continuous calculation of data and message rates.

Erroneous frames are detected and recorded automatically.

FF-IF-PCAT-H1 (Link Master)

Softing's Interface for integration of PCs into IEC1158-based Foundation Fieldbus networks. For low-level processing and medium access the interface relies on the FIND-1 ASIC from Yokogawa. The Foundation Fieldbus protocol stack is processed by a NEC V25+ communication processor. Softing's firmware features the full range of Link Master services proposed by the Fieldbus specification. It communicates with the host application by means of a 64K dual ported RAM. C-Code interface libraries are available for MS-DOS and Windows.

Figure: Basic Field Device

Figure: FF-Mon-H1

Please ask for more information and assistance



Softing GmbH
Industrial Communication
Richard-Reitzner-Allee 6
85540 Haar, Germany

Phone: +49 (89) 4 56 56-340
Fax: +49 (89) 4 56 56-399
www.softing.com
info.communication@softing.com