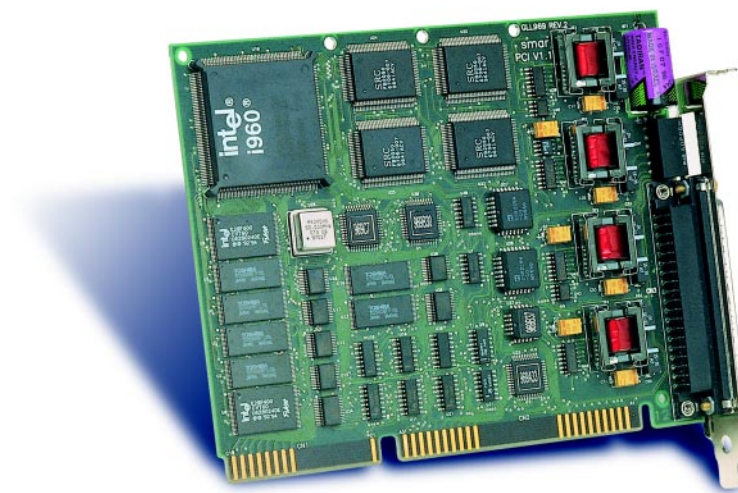


PCI

PROCESS CONTROL INTERFACE

The **PCI** is a high-performance Fieldbus interface that combines advanced process control with multi-channel communications management.

The **PCI V1.2** is a 16-bit ISA card designed to work inside industrial or commercial PCs. Featuring four Fieldbus H1 (31.25 Kbps) master channels and powered by a 32-bit RISK CPU, it can execute complex Function Blocks on-board. Directly connected to the PC bus, it provides a fast communication path between the Fieldbuses and PC applications



Power Hardware Architecture

The 32MIPS superscalar RISC CPU with the dual-port memory based architecture ensure high processing power to the **PCI**. All communication and process control tasks are internally executed, keeping the PC free to implement the best HMI.

Easy Installation & Expandability

The **PCI** can be easily installed on the ISA or EISA bus of any AT-compatible PC. A unique hardware design allows the installation of up to eight **PCI** cards (32 ports) on one PC bus, sharing the same I/O ports and interrupt line.

Process Supervision

Exploring advanced communication features of the Fieldbus protocol, the **PCI** can be used as an efficient supervision interface. The function block parameters of field devices can be monitored through the **PCI** supervision services. HMIs like supervisory systems and configurators, running on the host PC, can interface to the **PCIs**, keeping complete hardware and Fieldbus protocol transparency.

Advanced Process Control

Its processing power and connection to multiple Fieldbus ports make **PCI** the ideal device to execute complex function blocks.

Fieldbus Link Master

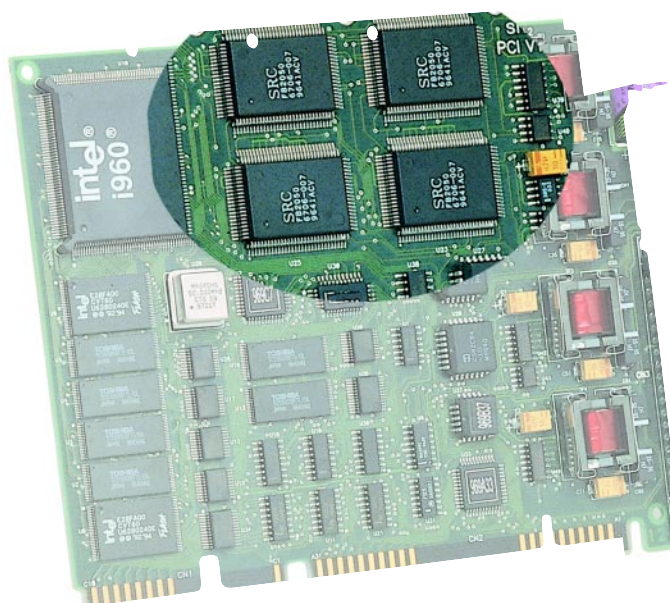
The **PCI** can manage each of its Fieldbus ports as a link master device.

Flexible Bridge

Its **PCI** open software architecture enables data sharing between independent Fieldbus ports. These communication buses can be connected to the same **PCI**, or to distinct **PCIs** in the same PC, or even to **PCIs** on distinct PCs, through the Ethernet network.

Upgradable Firmware

PCI's firmware (on-board executable program) remains in RAM or FLASH. As these memories are in-circuit programmable, the user can change the **PCI** firmware (upgrade software release, change protocol, etc.) without removing components - just run the FBTools utility and everything is done by software.



Technical Specifications

PC Bus	
Type	ISA (16-bit slot) or EISA
Hardware Interrupt	IRQ 5, 10, 11, 12 or 15
I/O Port Base	240H, 280H, 300H or 340H
I/O Access	16-bit
Dual-Port RAM	256KB, 16-bit

CPU	
Type	32-bit RISC
Sustained Performance	50 MIPS

Memory	
Code Area	1MB, 32-bit Flash Memory (Upgradable firmware)
Data Area	512KB–2048KB, 32-bit NVRAM (Data and configuration retention)

Fieldbus Interface	
Number of Ports	4, independent with DMA
Physical Layer Standard	ISA-S50.02-1992
Baud Rate	31.25Kbps (H1)
MAU Type	Passive (not bus powered)
Intrinsic Safety	NOT compliant
Isolation	500 VAC (each channel)
Connector	37-pin D-SUB, male

General	
Operating Conditions	0..50°C @ 5..90% RH
Nonoperating Conditions	-30..70°C @ 5..90% RH
Operating Voltage	+5V ±5%
Operating Current	1.2A (typ)

Physical Dimensions	
Standard	ISA 16-bit (short card)
External Dimensions	173.0 x 21.6 x 141.6mm (max) 6.85 x 0.85 x 5.57"

SC71

PCI CABLE

The DB37 male connector on the rear part of the [PCI](#) card carries all connections for the Fieldbus, which are made through the [SC71](#) cable. This makes connection and removal from Fieldbus very easy.

[SC71](#) Pin Description



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Specifications and information are subject to change without notice.
Up-to-date address information is available on our website.

web: www.smar.com/contactus.asp