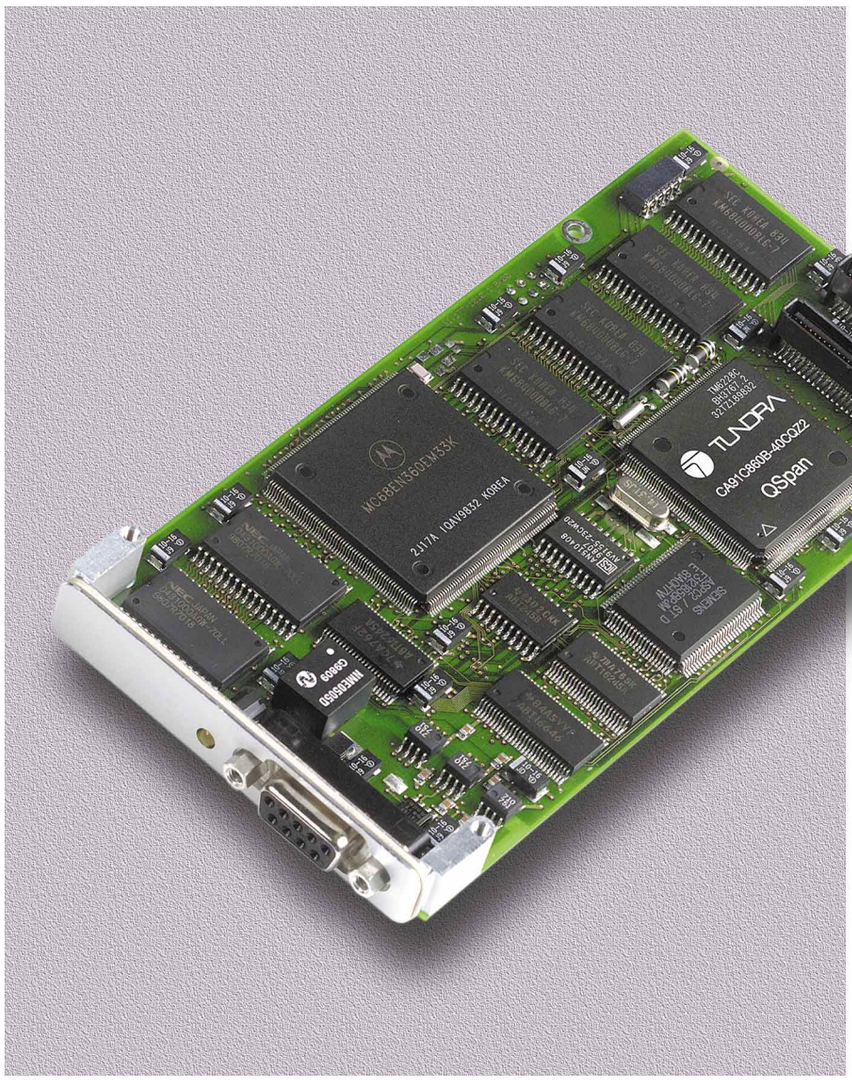
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NETWORKS
FIELDBUS

PMC251

Intelligent Plug-In PROFIBUS Controller for Fieldbus Applications



Complete PROFIBUS Communication

- 32-bit PMC module
- Powerful MC68360 processor for local PROFIBUS stack handling
- ASPC-2 PROFIBUS controller
- PROFIBUS FMS master/slave
- PROFIBUS DP master class 1 and 2
- 1 MByte on-board FLASH for local protocol handling
- Loadable protocol stacks
- PROFIBUS interface realized by 9-pin D-Sub connector
- Up to 12MBaud transfer rate
- Windows NT® driver
  VxWorks API

PROFI PROCESS FIELD BUS

An industrial PROFIBUS PMC module based on the advanced ASPC-2 PROFIBUS controller from Siemens and a powerful microcontroller for protocol stack handling.

CERTIFIED DIN ISO 9001 QUALITY SYSTEM
Reg. No. 0548 - 02

Modular Computers®

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Product Overview

PMC251

Built for ruggedness and system stability, PEP's PMC PROFIBUS controller complies fully to the EN50170 standard, remains vendor independent and, in addition, features an OLE for process control (OPC) server for integration into HMI or SCADA applications for example.

The heart of the PMC251 comprises a powerful microcontroller, the MC68360 and the ASPC-2 PROFIBUS controller, which provides a high-speed (up to 12 MBaud) PROFIBUS interface for FMS master and slave and DP master (class 1 and class 2) protocols.

While the ASPC-2 is responsible for PROFIBUS Layer 2 and most of the DP communication, the microcontroller handles the remaining protocol stack functions – especially in FMS mode. This intelligent concept ensures high data throughput and system performance while at the same time relieving the system CPU from these networking chores.

The corresponding Application Programming Interface (API) is available for Windows® NT and VxWorks®. Porting to other operating systems or kernels is possible through our Design & Engineering services.

PMC Interface

Compatible with P1386 specification v.2.0
32-bit/33 MHz
3.3 V/5.0 V compatible
Interrupt level INTA support

Characteristics

MC68360 microcontroller clocked at 25 MHz
Siemens ASPC-2 PROFIBUS controller
FMS master and slave, DP master (class 1 and 2)
1000 V optoisolation between the controller and fieldbus interface
1 MByte FLASH used by program code
2 MByte SRAM for communication tasks
256 kByte SRAM for communication between 68360 and ASPC-2

Software Support

Microsoft Windows® NT 4.0 driver
'C' Application Programming Interface
OPC server application
WindRiver VxWorks® API

Common

Frontpanel:	Standard 9-pin D-Sub PROFIBUS connector according to EN50170
Power Consumption:	5W (typ.) @ 5V DC
Dimensions:	149 mm x 74 mm
Temp. Ranges:	0ºC to +60ºC (standard); -25ºC to +75ºC (extended) -55ºC to +85ºC (storage)
Operating Humidity:	0% to 95% (non-condensing)
Weight:	100 g

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Publication Number AB 20178 DS-0199

Product	Description	Order No.
PMC251	Plug-in PROFIBUS FMS (master/slave), DP master (class 1 & 2) and FDL module with MC68360 and ASPC-2 controller	19126
KIT-PMC251	User's manual documentation in PDF format on 3.5" floppy disk	20071
WNT-CP351-API	Windows NT® software development package for FMS, DP and FDL applications	13124
MAN-CP351	Printed user's manual for the PMC251	19943
WNT-CP351-OPC	Windows NT® OPC server for DP applications	19145
VXW-PFB-351 WIN	VxWorks® development package for DP applications	19554

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