

# PROFIBUS VME INTERFACE CARD

## Overview

The SST Profibus interface card connects your VME bus computer to Profibus DP, FMS client\*, and FDL.

## Applications

The SST Profibus VME interface card connects the following to Profibus:

- VME based programmable controllers
- VME based motion controllers
- VME based computers

## Features

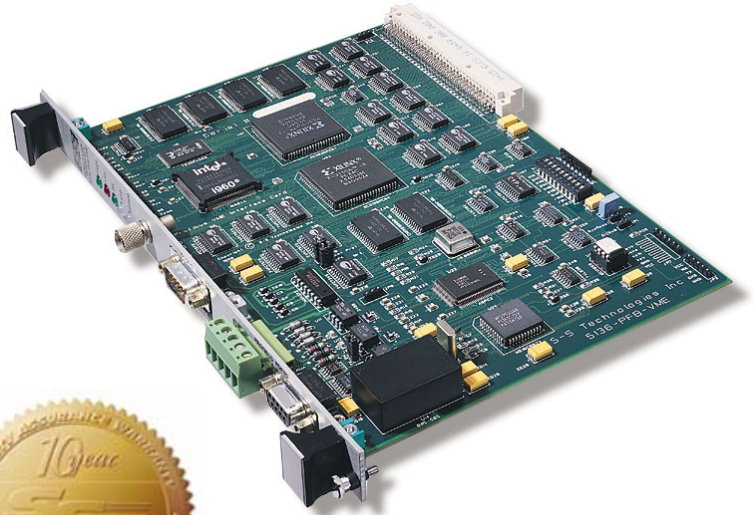
- Supports all standard Profibus baud rates: 9.6 Kbaud to 12 Mbaud
- Simultaneous operation of Profibus DP Master, DP Slave, FDL (layer 2), and FMS client\*
- Intel 32-bit i960 RISC processor utilized with 512 Kbytes of 32-bit local RAM
- 512 Kbytes of flash memory for storage of programs and configuration

## VME Specifications

- **Size:**
  - IEEE 1014, 6U height, P1 compatible
- **Capabilities:**
  - memory SD16, SADO24
  - registers SD08(O), SADO16
- **Addressing:**
  - standard: 256 Kbytes on any 256 Kbyte boundary or 16 Kbytes on any 16 Kbyte boundary
  - short: 8 bytes on any 1 Kbyte boundary
- **Interrupts:**
  - switch selected level 1-7
  - software set 8-bit status /ID
  - release on acknowledge (ROAK)

Available for  
SST Profibus Cards

- DP Configuration software
- Custom driver development software
- Sample code and Microsoft Windows 32-bit kernel drivers
- 10-year warranty
- Global Technical Support (24 hours, 7 days)



## Custom Driver Development

The Profibus VME card interfaces with the host processor through shared dual ported memory. A fully documented host memory interface is provided. The card does not require external libraries, which simplifies custom driver development in your chosen operating system. DOS example programs with C source are included with each card to assist you with your software development.

Extremely Fast Scan  
Rate for DP Master  
6000 I/O in 1 ms!



Network Interface Cards

[www.mySST.com](http://www.mySST.com)

## Hardware Specifications

- 24 Mhz Intel i960 RISC processor with 512 Kbytes of 32-bit local RAM
- 256 Kbytes shared 16-bit RAM, accessible from the host as 256 Kbytes or in 16 Kbyte pages
- 512 Kbytes sectored flash memory for storage of card firmware and configuration data
  - run programs from flash
  - store network parameters, DP master, DP slave, FMS client\* configurations in flash
- Siemens ASPC2 LAN controller for Profibus functions
- Standard Profibus 9-pin D-connector
- 5-pin Phoenix connector (no bus connector required in this case)
  - built-in termination can be added by making connections on the Phoenix connector
  - internally connected to 9-pin connector
- Serial port for downloading software modules and configuration data
  - don't need to download from the host computer
  - program modules and configurations into flash from the serial port
- Supports Profibus baud rates from 9.6 Kbaud to 12 Mbaud
- Hardware watchdog
- Optional host watchdog to shut down operation if host application fails
- Diagnostic LED gives instantaneous status of network errors, DP master, DP slave, FMS client\* and FDL
- CE compliant
- Operating temperature: 0 to 50C (32 to 122°F)
- Storage temperature: -25 to 70C (-13 to 158°F)
- Power requirements: maximum 950 mA at 5 V

\* supports FMS client services only, on a DEFINED, MASTER to MASTER ACYCLIC (MMAC) connection type

## Other Reference Materials

### Web Site

- [www.mysst.com/cards/profibus/pfb.htm](http://www.mysst.com/cards/profibus/pfb.htm)

### Data Sheets

- 6000 I/O in 1 mS
- Profibus Configuration and Diagnostic Software

## Related Profibus Products

- Network Interface Cards connect various computer bus formats to industrial networks
- Embedded Network Solutions provide OEMs and device manufacturers with connectivity to industrial networks
- Network Diagnostic and Configuration Software
- I/O Simulation Software provides control systems testing and operator training
- Network Gateways provide connectivity between two dissimilar networks; over 45 industrial network protocols currently supported
- PLC Network Modules connect programmable controllers to industrial networks and I/O devices
- Data Servers include OPC and DDE Servers

## Affiliations

- SST is an active member of Profibus International

## Ordering Information

- Order part number 5136-PFB-VME

## Also available from SST:

[www.mysst.com](http://www.mysst.com)  
Gateways  
PLC Modules  
Data Servers  
Interface Cards  
Embedded Solutions  
I/O Simulation Software  
Diagnostic and Configuration Software

EPFBVME August 2001

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