

BradCommunications<sup>™</sup>  $SST^{\mathbb{M}}$  DeviceNet<sup>™</sup> Interfaces provide high-performance control and the support required for your DeviceNet applications.

# 3rd Generation SST Interfaces

For Controlling and Monitoring DeviceNet Applications



#### Features

- High performance DeviceNet protocol executed on the card
- Diagnostic LEDs
- UCMM (Unconnected Message Manager) capable; Group 1, 2, and 3 dynamic explicit connections supported
- Provides simultaneous execution of Group 2 Client (Master) and Server (Slave) operation
- Supports all DeviceNet standard baud rates: 125, 250, and 500
   Khaud
- Supports Poll, Strobe, Change of State (COS) and Cyclic I/O messaging
- Supports fragmented Explicit and I/O messages
- Provides Client (Master) explicit messaging to slave devices

#### OS and Drivers Supported

- Microsoft Windows NT4 / 2000 / XP drivers
- The Console; a grouping of software tools including OPC server configuration and diagnostic tools
- Open, documented memory map interface with example C source code and Windows 32-bit DLLs for custom driver development



#### Overview

BradCommunications SST network interface cards are ideal for applications where high-performance control and reliability are required. Backed by superior support and service, BradCommunications network interfaces support a wide range of network protocols and bus formats.

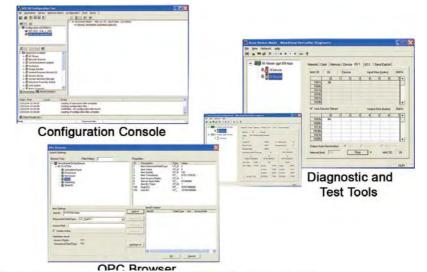
BradCommunications SST network interface cards for DeviceNet can be found in many applications including:

- Operator Interface
- Human-Machine Interface
- PC Control
- Device Development
- Network Diagnostics

BradCommunications SST network interface cards for DeviceNet undergo DeviceNet conformance testing and support DeviceNet specifications; including all DeviceNet standard baud rates, Poll, Strobe, Change of State (COS) and Cyclic I/O messaging.

## Software Tools

Software available for the SST DeviceNet Interface Cards enables fast integration of industrial communication into your application.





# SST<sup>™</sup> DeviceNet Interfaces



### Hardware Specifications

|                       | PCI   | PC/104  | VME   |  |
|-----------------------|---|---|---|--|
| Bus Interface         | 32-bit, 33 MHz, PCI universal 3.3/5V interface  | 16-bit PC/104 interface (compliant with   | 16-bit data, 24-bit address<br>(compliant with VME64  |  |
|                       | (compliant signaling with PCI v2.2)   | PC/104, spec 2.3)   | (VITA 1.1 1997))  |  |
| Processor             | 66 MHz ColdFire, per channel  |   |   |  |
| Memory                | 128 bytes for PCI configuration   | 128 bytes for PCI configuration 256 KB of shared RAM per channel  |   |  |
| Diagnostics           | Bi-color LEDs showing card status PCI: health, communication PC/104, VME: power, health, communication  |   |   |  |
| Interrupts            | Hardware Plug & Play<br>(32 Kbytes used per card)   | Software selectable level<br>IRQ 2/9,5,7,10,11,12,15;<br>standard TTL drive                                     | DIP switch selectable level IRQ 1-7   |  |
| Dimensions (LxW)      | Standard half-length  | 9.588 cm x 9.017 cm<br>(3.775 in x 3.550 in)  | 23.335 cm x 15.9995 cm<br>(9.187 in x 6.299 in)   |  |
| Consumption           | 5.2 W   | 5.0 W   | 2.5W per channel<br>1=2.5 W, 2=5 W, 4=10 W  |  |
| Typical Current Draw  | +5V, ± 5 % 1.03 A (2 channel)   | +5V, ± 5 %, 1000 mA 2 channel   | 500 mA per channel,<br>1=500 mA, 2=1 A, 4=2 A   |  |
| Voltage Requirements  | 5 V   |   |   |  |
| Addressing: Memory    | A 256 Kbytes window available per channel   | 256K in a window of 8K, 16K, 32K,<br>64K, 128K or 256K bytes<br>on even window boundary<br>between 512K and 1Mb | 256K in a window of 8K, 16K, 32K,<br>64K, 128K or 256K bytes<br>on even window boundary<br>between 0 and 16Mb |  |
| Addressing: I/O       | 8 bytes allocated per channel   | 8 bytes on any even 8-bit boundary<br>from 200h-2F8h or 600h-6F8h   | 16 bytes on any odd 16-bit<br>boundary from 0 to 0xfc00   |  |
| Operating Temperature | 0° C (32° F) up to +55° C (131° F)  |   |   |  |
| Storage Temperature   | -40° C (-40° F) up to +85 °C (185° F)   |   |   |  |
| Humidity              |   | 5% to 95% non-condensing  |   |  |
|                       | Networ  | k Specifications  |   |  |
| Protocol              | DeviceNet <sup>™</sup> Master – Group 2 Client, Group 2 only Client<br>DeviceNet Slave – Group 2 Server<br>CAN 2.0 B<br>Isolated CAN physical layer on each channel |   |   |  |
| Cable                 | Shielded twisted pair, compatible with target network   |   |   |  |
| Connector             | DeviceNet compliant 5-pin CAN connector   |   |   |  |
| External Power        | 11-24 VDC, 50 mA typical  |   |   |  |
| Isolation             | 500 V   |   |   |  |
| Data Rate             | Up to 1 Mbaud for CAN<br>125K, 250K and 500K baud for DeviceNet   |   |   |  |
| RoHS Compliant        | Yes   | Coming soon   | Coming soon   |  |

### Ordering Information

from Woodhead Industries

| Part Number              | Product Description   | Other Related Products |
|--------------------------|---|------------------------|
| SST-DN3-PCU-1            | DeviceNet card, Universal PCI bus (3.3V / 5V), 1 channel                      |                        |
| SST-DN3-PCU-2            | DeviceNet card, Universal PCI bus (3.3V / 5V), 2 channels                     | IP67 and IP20          |
| SST-DN3-104-1            | DeviceNet card, PC/104, 1 channel   | DeviceNet Switches     |
| SST-DN3-104-2            | DeviceNet card, PC/104, 2 channels  | Gateway Solutions      |
| SST-DN3-VME-1            | DeviceNet card, VME, 1 channel  | Cable Assemblies       |
| SST-DN3-VME-2            | DeviceNet card, VME, 2 channels   | Diagnostic Tools       |
| SST-DN3-VME-4            | DeviceNet card, VME, 4 channels   | Network Interfaces     |
| SST-DN3-DIA <sup>†</sup> | DeviceNet diagnostic tool   |                        |
| SST-DN3-CNF-U            | DeviceNet software console with USB key (includes network analyzer)           |                        |
| SST-DN3-CNF-P            | DeviceNet software console with parallel port key (includes network analyzer) |                        |
| SST-DN3-OPC              | OPC Data Server software (must purchase at least one SST- DN3-CNF)            |                        |

†Included with SST-DN3 interface cards

**Brad**Communications

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